IN THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE BENCH, CHENNAI

ORIGINAL APPLICATION NO. 279 OF 2024

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU based on the news item in The Hindu dated 22.08.2024, titled '17 killed 20 injured in reactor blast at pharma company in Andhra Pradesh's Anakapalli'

Vs.

CPCB, Through its Member Secretary

New Delhi and Ors.. ...**Respondents**

REPLY AFFIDAVIT FILED ON BEHALF OF RESPONDENT NO. 6

Filed by:

Adv. G.M. SYED NURULLAH SHERIFF
Ph No. 9444015330

Adv. L. SURYAPRABHU
Ph No. 9884410559
Counsels for Respondent No. 6

IN THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE, CHENNAI BENCH

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PLACE:- CHENNAI

DATE:- 7.7.2025

Adv. G.M. SYED NURULLAH SHERIFF
Mob. No. 9444015330
Adv. L. SURYAPRABHU
Mob no. 9884410559
Counsels for Respondent No. 6

Dates and Events

- **27.01.1994:-** MoEFCC issued EIA Notification vide S.O. 60(E), making prior Environmental Clearance mandatory for certain projects.

- **13.02.2012**:- MoEFCC granted comprehensive Environment and CRZ clearance for APSEZ (including marine disposal pipeline) covering 2300 ha area.

- **07.02.2014: -** Consent to Establish (CTE) granted to the Respondent by APPCB – Order No. 327/PCB/CFE/RO-VSP/HO/2014.

- **28.02.2018: -** Consent to Operate (CTO) granted under RED Category – Order No. APPCB/VSP/VSP/327/HO/CFO/2018.

- **2018:-** Product mix changed; new CTE and CTO were applied for and obtained during the year.

- **07.04.2019**:- Commercial operations of the respondent's industrial unit commenced.

- **03.09.2020**:- Bio-Medical Waste Authorization issued by APPCB vide Order No. PCB/ROVSP/BMW/HCE-/2020-2026.

- **05.07.2023**: - Latest safety audit conducted.

- **21.08.2024**: - Reactor explosion incident at respondent's unit occurred around 2:20 PM due to MTBE solvent leak caused by human error.

- **22.08.2024: -** News item published in The Hindu titled "17 killed, 20 injured in reactor blast at pharma company in Andhra Pradesh's Anakapalli."

- **22.08.2024:-** Ex-gratia compensation of ₹1 crore each disbursed to families of deceased workers in the presence of Hon'ble CM of Andhra Pradesh.

- **23.08.2024:-** VOC monitoring conducted by APPCB at various locations; VOC values recorded were within permissible limits.

- **23.08.2024**:- APPCB's inspection report documenting wastewater collection from firefighting and its transfer to CETP.

- **02.09.2024:-** Proceedings issued by VSEZ/Development Commissioner under EC Act, 1923 (VSEZ/ADC(L)/EC/2024) acknowledging compensation to affected families.

- **25.05.2024:-** Latest CTO issued : APPCB /VSP / VSP/ 418/ HO/CTO /2024.

- **03.03.2025**:- Order issued to M/s. Atchutapuram Effluent Treatment Ltd (AETL) by APPCB regarding CETP (Phase I) 1.5 MLD.

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Reply Affidavit Filed On Behalf of Respondent No.6

IT IS MOST RESPECTFULLY SUBMITTED:

I, Devaki Vasudeva Rao, S/o. Shri Narayana Gupta Devaki, aged 53 years, resident of Flat No. 402, Plot No. 65, SM Residency, Road No. 2, Kakatiya Hills, Madhapur, Hyderabad, do hereby solemnly affirm and sincerely state as follows.

That I was appointed as the 'Administrator' of Respondent No. 6, Escientia Advanced Sciences Private Limited ("the Company") by the Hon'ble National Company Law Tribunal, Hyderabad Bench vide its Common Order dated 07.03.2025 in C.P. No. 45/241/HDB/2023, whereby the powers of the Board of the Company shall stand suspended until further orders and the Administrator shall take control of all the affairs and the management of the Company. It was also observed that the management

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For Escientia Advanced Sciences Pvt. Ltd.

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and administrative control during this period is vested with me in the capacity as an Administrator appointed by the Hon'ble NCLT and I'm competent in the capacity as the Administrator to file this affidavit on behalf of the Respondent No. 6 herein from the available records from the office.

That I am fully conversant with the facts and circumstances of this case from the records maintained in the office. I have read and understood the contents of the petition thereof and I have come down to Chennai on this date and as such I am authorized and competent to swear the present affidavit on behalf of 6th respondent herein.

I submit that I deny all the allegations/averments mentioned in the present Application filed by the Applicant except those that are specifically admitted herein the Counter Affidavit filed hereunder

1. It is most respectfully submitted that the 6th Respondent herein namely, Escientia Advanced Sciences Private Limited is a private limited company registered under the Companies Act, 2013 having its Registered Office in the state of Telangana. It is a Contract Manufacturing Organization that specializes in producing Active Pharmaceutical Ingredients (APIs) for pharmaceutical. Big pharma companies, Biotech firms, Generic drug manufacturers hire us to manufacture the raw active ingredients used in making finished drug products like tablets, capsules, or injectables. These APIs are the biologically active components that give a medicine its

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therapeutic effect. We develop or scale up chemical synthesis routes for API production, optimize manufacturing processes for cost, safety, and regulatory compliance. Manufacture APIs under Good Manufacturing Practice (GMP) guidelines, ensure high purity, consistency, and quality control. Provide data and documentation for regulatory filings (e.g., DMF – Drug Master File).

While manufacturing products, we comply with Indian health authorities like DCA and CDSCO and global health authorities like US FDA. We Conduct analytical testing to ensure API meets pharmacopeial and customer specifications. We maintain strong quality systems and validation processes. We manufacture APIs that are not commercially available or are difficult to synthesize. We support our customer for pharmaceutical R&D or clinical trials with tailor-made molecules.

The respondent herein has always conducted it's operations in accordance with the applicable Environmental laws and regulations, and with due regard to public safety and environmental sustainability.

The respondent company had five directors. The Articles of Association and the Memorandum of Association of the

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Company are enclosed herewith as **Annexure 1 and Annexure 2.**

2. It is further submitted that the plant of Escientia Advanced Sciences Private Limited is located at SEZ, Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Anakapalli, Visakhapatnam – 531 011, which is CMO company manufacturing Active Pharmaceutical ingredients and intermediates and the below mentioned drug substances are known as Active Pharmaceutical ingredients (API).

Sl. No	Name of the product
1	Darunavir Ethanoate
2	Donepezil Hydrochloride
3	Febuxostat
4	Fexofenadine Hydrochloride
5	Glipizide
6	Lanzoprazole
7	Levetiracetam
8	Rimegepant sulphate
9	Zavegepant Hydrochloride
10	R & D/Custom Synthesis Products

The name of the drug substances 1-9 are manufactured in the 6th respondent company termed as Active pharmaceutical

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ingredients which are used by the other industries to make the drug as their finished products. The 10th product category "R&D / Custom Synthesis" it permits us to produce products in small-scale generally limited to < 200 kg/month per product related to research and development or custom synthesis.

3. It is humbly submitted that the respondent holds all requisite statutory approvals, consents and clearances issued by the relevant authorities including the State pollution control board, Central pollution control board, and other competent regulatory bodies. It is further submitted that the respondent herein has always adhered strictly to all the environmental and safety norms and safety related statutory obligations and has operated it's industrial unit in full compliance with applicable legal requirements. It is also submitted that the respondent has always conducted it's operations in accordance with the applicable Environmental laws, with due regard to public safety and environmental sustainability. The respondent company is a RED category one and is located inside a SEZ zone.

4. It is most respectfully submitted that the respondent herein holds all requisite statutory approvals, all necessary licenses, consents, and permission from competent authorities including state pollution control board, Central pollution control board,

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and other competent regulatory bodies, including those under Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of Air (Prevention and Control of Pollution) Act, 1981 and Environment protection Act, 1986. The respondent has consistently complied with the conditions stipulated therein and regularly submitted reports, audits, and disclosures as mandated by law. It was always ensured by the respondent that the timely renewal and submission of compliance reports, audits, and certifications as prescribed by the law being in force was periodically done.

5. It is most respectfully submitted that all the statutory obligations in accordance with due process of law are compiled with, and all the rules and regulations related to the regulating bodies are strictly adhered to without any deviations whatsoever. It is humbly submitted under the powers conferred by the EP act of 1986 the MoEFcc Ministry had issued the EIA notification vide SO 60(E) dated 27.1.1994 mandating 32 categories of projects listed in schedule 1 to obtain prior environmental clearance. The EIA is a statutory requirement. Further the ministry had issued a notification no. S.O.1533(E) dated 14.9.2006 known as EIA notification 2006 in supersession of the earlier Notification no. S.O 60(E) dated 27.1.1994.

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6. It is most respectfully submitted under EIA notification 2006 the categorization of SEZ for environmental clearance is specified in the item 7(c) of the Schedule. According to this provision of law if at least one industry falls within a proposed industrial estate in category A the entire SEZ falls under category A. The entire industrial area is treated as category A regardless of its area. This clearly means that the presence of the category A industry with the SEZ necessitates that the entire SEZ obtains Environmental Clearance under the category A. It is further submitted in this regard, that an EC is taken by APIIC under category A, in this matter which has been enclosed herewith as **Annexure 3**.

It is respectfully submitted as per the EIA notification 2006 a Special economic zone shall fall under A category project if at least one industry in an industrial estate fall under category A irrespective of the area. If it is having an area greater than 500 hectares and housing at least one B category industry then also SEZ falls under the A Category. Therefore, if the SEZ in question fulfils the aforementioned criteria as per this schedule then the provisions of the EIA notification, 2006 shall be attracted accordingly.

In this case the respondent industry is located inside the SEZ which has a valid comprehensive EC including the CRZ clearance and the respondent industry is having a valid

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common EC under A category and acting in accordance with law. Individually the respondent herein need not receive an individual EC since the entire SEZ is holding the category A, EC clearance.

It is most respectfully submitted that under the schedule to EIA notification 2006 relating to the list of activities requiring prior environmental clearance these special economic zones are covered under entry 7c of EIA schedule. The relevant portion of EIA schedule is extracted hereunder for better appreciation and easy understanding:

	Project or Activity	**Category with threshold limit**		**Conditions if any**
		A	**B**	
(1)	**(2)**	**(3)**	**(4)**	**(5)**
7(c)	Industrial estates/ parks/complexes/ areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes.	If at least one industry in the proposed industrial estate falls under the Category A, entire industrial area shall be treated as Category A, irrespective of the area. Industrial estates with area greater than 500 ha. and housing at	Industrial estates housing at least one Category B industry and area <500 ha. Industrial estates of area> 500 ha. and not housing any industry belonging to Category A or B.	General as well as specific conditions shall apply. Note: 1.Industrial Estate of area below 500 ha. and not housing any industry of category 'A' or 'B' does not require clearance. 2.If the area is less than 500 ha. but contains building and construction projects > 20,000 sq. mtr. and or development area more than 50 ha it will be treated as activity listed

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		least one Category B industry.		at serial no. 8(a) or 8(b) in the Schedule, as the case may be.

7. It is further submitted that the MoEFcc, Govt of India F no. 29-379/2007- IA III vide their letter dated 13.2.2012 addressed to M/s. Andhra Pradesh Infrastructure Corporation Ltd with reference to the subject for Environment Clearance applied for a multi-product Andhra Pradesh SEZ at Achutapuram and Rambilli mandal, Anakapalli district, Andhra Pradesh along with the CRZ clearance for laying Marine disposal pipelines by the above said corporation. It was noted in that letter, that the project involves 2300 ha. Subsequently the land had been acquired for the project. The processing area in APSEZ occupies an Area of 5479 acres which comprises industrial plots, infrastructure facilities, logistics areas, common amenities and Green/ Open areas. The entire processing area of the APSEZ has been divided into five different industrial zones. A dedicated rail corridor connecting the logistics hub was also proposed. Water requirement for APSEZ was estimated at 100 MLD from the source of Yeluru left main canal. It is further submitted a common effluent treatment plant (CETP) of 31 MLD and provision for Guard Pond was also planned for the detention of treated waste water due for about 3.5 days. Based on the mathematical model studies a marine outfall system was also

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proposed to discharge the treated waste water from APSEZ in Bay of Bengal, and point of discharge is located at the distance of 3.5kms from shore. Sewage treatment plant of 7 MLD capacity was proposed in non-processing area and the sewage generated in processing area shall be sent to CETP for treatment and disposal. The proposal was appraised as per the prescribed procedure in the light of provisions under the EIA notification, 2006 and the Coastal regulatory Zone notification, 2011 on the basis of all the mandatory documents submitted like EIA, EMP, recommendation of State Coastal Zone Management Authority, the comprehensive EC along with the CRZ clearance was issued on **13.2.2012**.

8. It's is further submitted that the hazardous waste generated from APSEZ shall be sent to nearby Transport Storage Disposal Facility (TSDF) as a part of sustainable environmental management plan of APSEZ. It is proposed to maintain a dedicated TSDF in an area of 50 acres of land which could be operated for the period of 30 years outside the SEZ premises. Green belt/Green areas have developed at SEZ level in **860 acres**. The Andhra Pradesh coastal zone management authority had been recommended of a dedicated pipeline for discharge of treated effluent into the sea near Pudimadaka village. It is submitted that the Andhra Pradesh pollution control board has

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accorded, granted consent to the establishment of marine outfall.

9. I humbly submit that after due consideration of relevant documents submitted by the project proponents and additional clarification furnished in response to its observations the MoEFcc had recommended for grant of a comprehensive Environment and CRZ clearance for a SEZ project and accordingly the ministry accorded necessary environment and CRZ clearance strictly adhering to the provisions of the EIA notification, 2006 and it's subsequent amendments and CRZ notification, 2011. It is submitted our industry is inside the SEZ which has been formulated under strict compliance of all the norms as per the statutory obligations with strict enforcement of the same from time to time and hence the comprehensive EC was issued under A category by the MoEFcc, Government of India. As earlier mentioned once the EC has been obtained by the SEZ the entire area comes under A category and there is no individual requirement as such for each and every unit inside SEZ area to obtain separate EC and it's deemed to be obtained individually.

10. It is most respectfully submitted that the following statutory obligations are strictly followed and all the necessary licenses required to be taken are complied with regimentally in

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accordance with law. The following are the major statutory obligations to be followed by RED category industry which is given and has been annexed as **Annexure 4** for better appreciation of this Hon'ble Tribunal.

11. It is most respectfully submitted that all the rules and regulations prescribed for a Red category industry in common, stipulated by the Andhra Pradesh Pollution control board are scrupulously followed at any given time and there is not even an iota of any deviation or lacuna in complying with the environmental obligations as prescribed by the APPCB.

12. It is most respectfully submitted that we have a valid consent to establish obtained Order No.327/PCB/CFE/RO-VSP/HO/2014 Dated: 07/02/2014 and after the consent to establish mentioned above which was obtained, we had received the consent to operate by way of RED category consent and authorization Order no. APPCB/VSP/VSP/327/HO/CFO/2018 also dated 28.2.2018. It is further submitted that the consent to was granted for operation under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of Air (Prevention and Control of Pollution) Act, 1981 and amendments there off along with the authorization under Rule 6 of the hazardous and other waste, (Management and Transboundary, Movements) Rules 2016 and the rules and

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orders made there under. It is further submitted we are authorized to operate our industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys which are clearly shown as the outlets for the discharge of effluents for better understanding and appreciation our consent to operate has been annexed herewith as **Annexure – 5a and 5b.**

13. It is humbly submitted that in the year 2024 when there was a change in the product mix, we had applied for the consent to establish and after due inspections a valid CTO was obtained bearing the following nos. CTE CPM (Order No.327/APPCB/CTE/RO-VSP/HO/2014) & CTO CPM (Consent Order No: APPCB/VSP/VSP/418/HO/CTO/2024). In between we had earlier a change in product mix in 2018 also for which we had applied for CTE and in turn CTO was also granted in the year 2018. We have enclosed all the consent to establish and consent to operate along with the dates and events as **Annexures – 6a and 6b** for the kind perusal of this Hon'ble Tribunal.

14. It is humbly submitted that our industry has valid consent to operate and possess hazardous waste Authorization order under Red category and the latest consent order no. Being APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.5.2024 which

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being the latest one issued by the Andhra Pradesh pollution control board which is enclosed as Annexure 6b. Our industry has commenced it's operations after having observed meticulously all these statutory obligations commenced on 7.4.2019.

15. It is most respectfully submitted that the hazardous and other waste, (Management and Trans boundary, Movements) Rules 2016 has been strictly followed as per the legal provisions and obligations to the core as stipulated for the RED category industry to its best, and it is also acknowledged after due inspections by the competent authority who is Andhra Pradesh Pollution Control board by their periodical inspections after finding whether proper storage, transportation, treatment, and disposal of hazardous waste, as per the norms provided. The authorities used to inspect whether proper manifest system are maintained including proper records keeping periodically and proper returns and records are maintained.

16. It is respectfully submitted that our industry strictly follows the environment protection EP act and rules 1986 and their set required standards for compliance with effluent discharge and Air Emission standards always at any given time

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17. It is further submitted that we have installed pollution control devices like Scrubber system in place, Online VOC, pH monitoring system, Primary & Secondary condenser, Vent condensers, etc. including providing Green belt 22% of the whole area. DG sets, acoustic enclosures provided, all process vents connected to scrubber, Storm water drains with collection tank available and continuous Emission monitoring systems as per the mandate in adequate numbers are provided. It is further submitted that scientific handling and disposal of solid waste generated by the industrial activity of our plant is ensured to be disposed off scientifically in periodical manner as stipulated in laws.

18. It is most respectfully submitted that every year, annual environmental statements along with 6 months compliance reports, are submitted to competent authority APPCB.

19. It is most respectfully submitted that as per the rule 14 of Environment (protection) rules, 1986 every industry operating under the consent under section 25 of the Water (Prevention and control of pollution) act, 1974 and under section 21 of Air (Prevention and control of pollution) act, 1981 and with authorisation under the hazardous and other waste, (Management and Transboundary, Movements) Rules 2016 shall submit an environmental statement for the financial year

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ending every march 31st in form V with the concerned state pollution control board which is meticulously followed up every year and the latest one being form V submitted is enclosed as **Annexure- 7**.

20. It is humbly submitted that the bio medical waste generated is handled strictly in accordance with the bio medical waste (management and handling) Rules, 2016. The rules are strictly followed with reference to generation, collection, receipt, storing, transport and disposing of the Bio Medical waste, for which we have been issued with a bio medical waste Authorization by the APPCB vide it's order PCB/ROVSP/BMW/HCE-/2020-2026 dated 3.9.2020. The disposal of Bio Medical waste is disposed off with standards prescribed in Schedule V and the certificate of authorisation is annexed herewith as **Annexure- 8.**

21. It is most respectfully submitted that the Corporate Environmental Responsibility (CER) based on our EC conditions have been undertaken with CER activities as per the MoEFcc office memorandums and guidelines.

22. It is humbly submitted that there is online continuous monitoring and reporting is done to the APPCB, and installation of online continuous effluent and Volatile Organic Carbon,

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Scrubber pH monitoring with real time data transmission to APPCBs monitoring center. It is further submitted that in addition to this we maintain records regularly related to Emissions, Effluents, and waste management for inspection at any given time for reporting purposes. It is submitted periodical inspections are carried out by the competent authorities and the latest test report relating to the same is enclosed herewith as **Annexure- 9a.** We state that we always operate in an environmentally responsible manner maintaining compliance with both State and National governmental regulations as **Annexure 9b.**

23. It is respectfully submitted that the renewal of consent to operate and hazardous waste Authorization order stating consent was granted hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorization under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under. M/s. Atchutapuram Effluent Treatment Ltd (M/s. AETL), APSEZ 1.5 MLD CETP (Phase - 1) Atchutapuram, Anakapalli District. For easy reference the order dated 3.3.2025 is enclosed herewith issued by the Andhra

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Pradesh pollution control board, Vijayawada is enclosed herewith as **Annexure 10.**

24. It is humbly submitted that all the process vents are connected to Scrubbers. We have also provided primary and secondary condensers and we have also provided vent condensers to solvent storage tanks. We have enclosed the list of solvents and the flowchart depicting the process which is enclosed as **Annexure—11.**

25. It is respectfully submitted that we have reactor capacities ranging from 50 litres to 8000 liters in which we carry out the reaction and all these reactors of the small ones, to big ones, are working properly and certified periodically and we have enclosed the reactor preventive maintenance checklist and certificates as Annexures. We also have separate bulk solvent storage tanks 12 nos which are periodically inspected and certified and the latest certificates relating to them is enclosed as **Annexure- 12a and 12b.**

26. It is humbly submitted that further to the chemical processing the spent solvents are received in receivers which are also periodically inspected and at no given time any defect of whatsoever, has not occurred and the periodical testing reports, and the certificates relating to the same is enclosed as

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Annexure- 13. It is also submitted at no point of time, there had been excessive storage of solvents. All used solvents are sent to authorized APPCB recyclers, through Andhra Pradesh Environmental management corporation limited (APEMCL).

27. It is submitted that all the reactors, receivers are periodically tested as per the required standards by the third-party competent agencies. The pipelines connected to the same are also checked periodically by our industry personnel as per the preventive maintenance schedule which is enclosed as **Annexure 14.**

28. It is respectfully submitted stringent measures, and follow ups are taken by our industry to avoid any Fire/explosion in process area, Fire / explosion in bulk solvent storage / drum storage area, Fire, Dust explosion, Fire in QC Laboratory, Toxic gas release from neighboring industries, Spillage/Leakage in Tank Farm area, Electrical shock/Electrocution, Structural collapse. Despite this periodical safety audits are also conducted and one of the latest being, safety audit done was on 5.7.2023 the approvals and compliances are inspected thoroughly by the competent inspecting authorities, and agencies then and there, as per the mandate in law. We have also formulated an emergency preparedness and response plan is prepared and the latest on-site emergency preparedness and response plan is

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enclosed as **Annexure 15**. All the parameters required to be followed for this plan are vigilantly followed in case of any emergency, covering the entire area of operation in hazardous risk assessment, general emergency procedures, service support equipment, command and signal components of the communication systems, including in-house emergency response team. Periodical emergency plans revisions are made along with periodical emergency exercises conducted to keep the safety standards in high esteem. We have provided emergency response team members, emergency evacuation procedures, chemical spill emergency procedures, mitigation/ clean up procedures, are clearly demarked and special mock drills are done periodically in order to alert the entire system under the precautionary principle.

29. Suitable fire hydrant system with fire sprinklers, smoke detection system public addressing system, fire extinguishers, oxygen and LEL detectors, in process areas are all adequately provided and all fire emergency procedures including the relevant mitigation processes are available in place, in the industrial site. Flowcharts for emergency response, emergency escape route are available along with the components/ facilities in emergency control centers. On the whole, the emergency preparedness and response plan applies to the respondent employees, contractors and visitors on site. The epicenter of our

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emergency management policy is to operate without injuries, incidents and accidents which are avoidable. We act with caring, compassion, and concern to protect life, health and safety, of the environment, for the whole community and further to extend morally and ethically to endeavor to follow the relevant laws, and regulations in order to save lives, minimize property loss and economic damage, and to swiftly restore to the normal activities if any untoward thing happens.

30. It is further submitted that the disposal process of solid waste, semi solid waste, liquid waste are properly documented with relevant records and are disposed to APPCB authorised agencies through online manifest system periodically, as per the set standards prescribed by the competent authority.

31. It is humbly submitted that the respondent industry is having 280 employees, 145 contract workmen, which comes to 425 workers. It is also submitted that we have proper labor records as per the statutory requirements and all the skilled technical personnel are qualified to perform their respectful technical jobs and periodical training is also given to them in order to handle any eventualities if it happens within their ambit and scope. The respondent industry has four types of shifts, the first one being A shift which starts 6 AM in the morning ends at 2 PM, the next shift B starts 2 PM to 10 PM in the night the third one C shift

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starts 10 PM to 6 AM. Other than these three shifts of technical personnel's involvement, a common G shift is for all the administrative, and technical workers which starts at 9 AM and ends at 5.30 PM in the industry.

32. It is most respectfully submitted that unfortunately on 21.8.2024 an unfortunate accident took place within the premises of respondents industrial unit, due to a human error committed by a member of technical staff, who inadvertently deviated from the established standard operating procedure, despite extensive training and clear safety protocols, this isolated lapse occurred without any malicious intent but due to probable negligence of one of the staffs, despite all the reasonable safety measures being in place. In spite of all the above said safety precautions aforesaid, coupled with adequate training are available as per the set standards fixed by the statutory and regulatory bodies, this untoward incident happened, which was beyond the scope of the management, simply just due to one human error the accident occurred .

On 21st August 2024, at around 14:00 Hrs a Solvent Methyl tert-Butyl ether (MTBE) was being transferred from the Receiver VR-2225 (located second floor of suite-2) to the bulk storage tank MLST-3401 capacity 10 KL (Located outside of the plant).

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It is further submitted that two technical persons who were at ground floor suddenly observed solvent leakage at around 2:08pm from the first-floor suite-2 south technical area. Immediately noticing the same both the persons, mentioned above rushed to the first floor at around 2:10pm and witnessed some solvent leakage from the transfer line's flange. Immediately one of the persons mentioned above swiftly rushed to the 2nd floor at around 2:12 PM to inform the leakage to the production manager, and to the production in charge, instantly at the same time one other senior engineer also noticed the leakage and rushed to the suite-2 of second floor and cautioned about the solvent leakage to the production chemist. On hearing, immediately the production chemist swung into action. On the alarm given by the senior engineer, immediately stopped the solvent transferring by closing the bottom valve of the receiver, VR-225 which has a capacity of 500 litres to storage tank MLST- 3401. At around 2:15 PM and without wasting time he immediately stopped nitrogen supply to the receiver VR-2225. Inspite of all these immediate actions were taken in its full swing, without any time wasting, an explosion occurred at 2:20pm at the ground floor technical area.

That the unfortunate and unforeseen accident, was immediately brought to the notice of the relevant authorities and the respondent herein immediately Swung into action and took all

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urgent remedial steps, including medical aid, technical assessment and preventive actions. The said untoward accident was purely accidental in nature, and occurred due to the circumstances beyond the control of the respondent. Prompt remedial and containment actions were taken by the respondent in coordination with local authorities, and the accident was immediately reported to the concerned authorities. It is further submitted that the respondents reiterate, it's firm commitment to environmental protection and safety and further assures this Hon'ble tribunal, that all efforts are being made to strengthen further, with internal checks and training to eliminate the possibility of even any such occurrence in future by any human error.

33. I It is most respectfully submitted that to put it in a nutshell, the cause of the accident was purely due to human error, an employee who was in shift A, had observed that the solvent receiver of 500 ltr capacity was getting filled to its brim, and assuming that it might overflow, he immediately made arrangement to transfer the spent solvent from the receiver to the bulk spent solvent storage tank situated outside the production block. He connected the 500 Lt receiver through a pipe to the transfer the solvent to the bulk spent solvent storage tank using connecting a pipe. while transferring the solvent

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from the 500Lt receiver to the bulk spent solvent storage thank through SS pipe line other production people noticed that solvent was leaking through a stainless-steel flange joint (flange is used to connect two pieces of stainless-steel pipes) a flange joint. The spiled solvent percolated to the down floor though a cut-out duct provided for electrical cables travelling all the way from ground floor of the production building to the third floor for the production building and reached up-to the ground floor of the south end of the technical area. It is further submitted that next day after extinguishing the fire it was estimated that approximately around 200 litters of Methyl tert-Butyl Ether (MTBE), the chemical solvent was spilled out which is a high volatile chemical product, which vaporizes instantly and may converts into an explosive vapor cloud within no time. It is submitted that due to this human error of the above said employee, despite his training to handle this kind of eventualities, a highly explosive vapor cloud mixture was formed due to this solvent leakage leading to the unfortunate accident with a big thud making the calamity and loss of lives mentioned earlier.

34. It is further submitted that the cause of the accident was not a reactor blast, but rather a vapor cloud explosion. The incident was triggered due to human error, wherein methyl tertiary-butyl ether (MTBE) leaked from the flange joint of a stainless-steel

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spent solvent transfer line. As per information available in standard technical literature, MTBE forms an explosive mixture with air when its concentration ranges between 2.5% and 15% by volume. Being a non-polar, highly volatile solvent, MTBE is susceptible to ignition due to static charge accumulation, which can occur through friction within the vapor layer or other sources of electrostatic discharge due to which the unwanted accident took place. While the case being so, whatever happened was beyond the ambit and scope of the respondent industry.

It is humbly submitted that all the licenses required for a red category industry are available and the regulations are clearly always followed.

35. It is most respectfully submitted that the APPCB inspected the respondent factory premises immediately, and undertaken Volatile organic Carbon (VOC) monitoring outside the accident site with handy VOC meter as early as 3 PM onwards whereas the accident occurred around 2.15 PM which was hardly 45 minutes after the VOC was undertaken. The VOC was done at various locations in the respondent industry premises like security back gate (east side) then security main gate (north side) then drum storage area (west side) then Laurus unit- 2 road (south side), near production block. It is pertinent to note,

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that the range of VOC values monitored (ppm) was very much below the detectable limit of less than 0.1ppm. the technical experts of APPCB had observed that, the maximum VOC concentration was found 0.8 ppm near production block during monitoring at 3 PM, just 45 minutes after the accident happened. The VOC were also monitored outside the factory premises and the recordings of VOC concentration were found in the range of 0.3 ppm to 0.8 ppm which is very much below the detectable limit and the same is annexed herewith as **Annexure -16.**

36. It is most respectfully submitted that the APPCB officials observed in the report dated 23.8.2024 during the incident, a total of 8 fire engines were deployed to extinguish the fire. The water used in the firefighting operations was systematically collected in the storm water pit. From there, it was transferred to a sump, and subsequently, approximately 100 KL of firewater-contaminated runoff was pumped into an effluent storage tank located in factory's effluent treatment plant area. This contaminated water was then disposed of to AETL via an online manifest, ensuring proper and compliant handling of the effluent the annexures of the same has enclosed herewith as **Annexure – 17.**

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37. It is humbly submitted that all the precautions are followed, in the respondent industry and immediate action, was swung into after the unfortunate accident and further all the compliance were done as per the directions of the statutory authorities. No stone was unturned, at any given time to compromise on safety, and all safety precautions further to the accident which was taken by the respondent industrial establishment instantly.

38. It is most respectfully submitted that all the data emanated from the statutory authorities establishes, that all the air and pollution parameters, were very much below the detectable limit mostly and some are under the prescribed standard limit.

39. It is hereby humbly submitted that all the concerns raised, by the Hon'ble principal bench regarding to ascertain whether the respondent industry was complying with the environmental norms are answered to the best of the respondent's ability, to satisfy this Hon'ble Tribunal.

40. It is most respectfully submitted that the news item raised the substantial issue relating to the compliance of environmental norms, quoting negatively, like respondent industry was not complying, with the required environmental statutory norms is vehemently denied, and it is put forth before this Hon'ble tribunal that there was no compromise on safety precautions,

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and deviation in the statutory requirements followed at any given time, by the respondent industry.

41. It is respectfully submitted that while grading of pharma industry based on the compliance assessment, for prevention of fire, explosion and toxic release incidents, done by the Deputy chief inspector of factories, Vishakhapatnam, it is pleased to note that the respondent industry has been graded with a maximum score of 93.5 out of 100 maximum score, which shows grading A for the year 2023 on safety. It is further submitted that out of all the Pharma industry grading done based on the compliance assessment for the prevention of fire, explosion and toxic release incidents year 2023 the respondent industry has come under top 10 pharmaceutical industries of Andhra state, securing the 9th place out of 143 pharma industries, which exhibits clearly the safety standards adhered by the respondent herein. The grading tabular column is annexed herewith under as **Annexure- 18.**

42. It is most respectfully submitted that after the untoward accident happened, the next course of immediate action by the respondent industry was, to redress the grievances of the family of the victims, by compensating their invaluable loss and the respondent industry was keen, and concerned, into providing the financial compensation not only stipulated by the rules and

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regulations fixed in these kinds of the accidents, instead, the respondent industry, not waiting for the procedure established under law to be followed, to save time immediately, the next day itself i.e on 22.8.2024 in the presence of the Hon'ble Chief minister of Andhra Pradesh dispersed for all the 17 employee's family Rs. 1,00,00,000/-(Rupees One Crore) each who lost their lives, which is more than 6 folds as prescribed under the statutory and regulatory authority obligated payments. We would also like to submit that all injured persons were immediately provided medical attention at the company's cost from the day of the accident till they completely recovered. Furthermore, compensation was disbursed the very next day of accident to all injured persons, in accordance with the nature of injuries sustained i.e. ₹50,00,000/- (Rupees Fifty Lakhs) was paid to those who suffered major injuries and ₹25,00,000/- (Rupees Twenty-Five Lakhs) was paid to those with minor injuries. In this regard we would like to submit that we have enclosed the proceedings of the Commissioner for Employees' Compensation Act, 1923 and Development Commissioner, VSEZ, DUVVADA vide their proceedings No.VSEZ/ADC (L)/EC/2024 dated 2.9.2024 which is Annexed herewith as **Annexure No. 19**. It is further stated that the deceased and injured persons compensation list and compensation details which enclosed herewith as Annexure. For this Hon'ble

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tribunals perusal. The settlement was done under the employee compensation act as per the Section 10b of the Act.

43. In view of the above the respondent most respectfully prays that this Hon'ble tribunal may kindly be pleased to:

(a) to take on record that the respondent has fully complied with all statutory and Environmental obligations as mandated in law and has strictly adhered to the same always;

(b) To note that the unfortunate accident, occurred due to a human error by one of the technical staff which was beyond the ambit and scope, and direct control of the respondent;

(C) Pass such further orders as this Hon'ble tribunal may deem fit and proper in the interest of justice.

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For Escientia Advanced Sciences Pvt. Ltd.

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DEPONENT

VERIFICATION

I, Devaki Vasudeva Rao, the aforementioned Deponent do hereby declare on this 7th day of July, 2025 at Chennai that the contents of the affidavit are true to my knowledge and belief and no material has been concealed therefrom.

For Escientia Advanced Sciences Pvt. Ltd.

Authorised Signatory

DEPONENT

BEFORE ME:-

Escientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

PRABHAKARAN SD
MS 2131/2016
94/170, 3rd floor
Coral Merchant St
Mannady, CH-1

Annexure - 1

THE COMPANIES ACT, 2013

COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

OF

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Preliminary

The regulations contained in Table F in the First Schedule to the Companies Act, 2013 so far as they are applicable to a private company, shall apply to this Company, save in so far as they are expressly or by implication, excluded by the following articles.

Interpretation

I. (1) In these regulations -

(a) "the Act" means the Companies Act, 2013.

1) Unless the context otherwise requires, words or expressions contained in these regulations shall bear the same meaning as in the Act or any statutory modification thereof in force at the date at which these regulations become binding on the company.

2) The Regulations contained in Table "F" in the Schedule I to the Companies Act, 2013 shall apply to this Company so far as they are applicable to a private company save in so far as they are expressly or implicitly excluded by the following Articles.

3) The Company is a Private company within the meaning of sub-section (68) of Section 2 of the of the Companies Act, 2013 and accordingly;

i. The right to transfer shares is restricted in the manner and to the extent provided in these articles;

ii. The number of members of the company (exclusive of persons who are in the employment of the Company and persons who, having been formerly in the employment of the Company, were Members of the Company while in that employment and have continued to be Members after the employment ceased) is

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limited to fifty (50), provided that for the purpose of this Article, where two or more Persons jointly hold one (1) or more Shares, they shall be treated as a single Member;

iii. no invitation shall be issued to the public to subscribe for any Shares in or debentures of the Company; and

iv. the Company shall not invite or accept deposits from Persons other than its Members, Directors or their relatives;

Share capital and variation of rights

II. (1) Subject to the provisions of the Act and these Articles, the shares in the capital of the company shall be under the control of the Directors who may issue, allot or otherwise dispose of the same or any of them to such persons, in such proportion and on such terms and conditions and either at a premium or at par and at such time as they may from time to time think fit.

(2)The Company may issue Equity share capital with or without voting rights and with differential rights as to dividend, liquidation, voting or otherwise and Preference Share Capital and in accordance with these Articles, the Companies Act, 2013 and the Rules made thereunder and other applicable laws for the time being in force and in accordance with the shareholders agreement in which the Company may have entered into from time to time.

(3) The Authorised Capital of the Company shall be as specified in Clause V of Memorandum of Association of the Company.

2. (*i*) Every person whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided, --

(a) one certificate for all his shares without payment of any charges; or

(b) several certificates, each for one or more of his shares, upon payment of twenty rupees for each certificate after the first.

(ii) Every certificate shall specify the shares to which it relates and the amount paid-up thereon and shall be signed by two directors or by a director and the company secretary, wherever the company has appointed a company secretary.

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(iii) In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders.

3. (i) If any share certificate be worn out, defaced, mutilated or torn or if there be no further space on the back for endorsement of transfer, then upon production and surrender thereof to the company, a new certificate may be issued in lieu thereof, and if any certificate is lost or destroyed then upon proof thereof to the satisfaction of the company and on execution of such indemnity as the company deem adequate, a new certificate in lieu thereof shall be given. Every certificate under this Article shall be issued on payment of twenty rupees for each certificate.

(ii) The provisions of Articles (2) and (3) shall mutatis mutandis apply to debentures of the company.

4. Except as required by law, no person shall be recognised by the company as holding any share upon any trust, and the company shall not be bound by, or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share, or (except only as by these regulations or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.

5. (i) The company may exercise the powers of paying commissions in connection with its securities conferred by sub-section (6) of section 40, provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required by that section and rules made thereunder.

(ii) The rate or amount of commission shall not exceed the rate or amount prescribed in rules under sub-section (6) of section 40

(iii) The commission may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in the one way and partly in the other.

6. (i) If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class) may, subject to the provisions of section 48, and whether or not the company is being wound up, be varied with the consent in writing of the holders of three-fourths of the issued shares of that class or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

(ii) To every such separate meeting, the provisions of these regulations relating to general meetings shall *mutatis mutandis* apply, but so that the necessary quorum shall be at least two persons holding at least one- third of the issued shares of the class in question.

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*6A. Subject to the applicable provisions of the Act, the Board of Directors shall have the right to make a preferential offer of its securities and to issue such securities on a private placement basis in compliance with the provisions of the Act.

7. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu therewith.

8. Subject to the provisions of section 55, any preference shares may, with the sanction of an ordinary resolution, be issued on the terms that they are to be redeemed on such terms and in such manner as the company before the issue of shares may, by special resolution, determine.

Lien

9. (i) The company shall have a first and paramount lien –

(a) on every share (not being a fully paid share), for all monies (whether presently payable or not) called, or payable at a fixed time, in respect of that share; and

(b) on all shares (not being fully paid shares) standing registered in the name of a single person, for all monies presently payable by him or his estate to the company:

Provided that the Board of directors may at any time declare any share to be wholly or in part exempt from the provisions of this clause.

(ii) The company's lien, if any, on a share shall extend to all dividends payable and bonuses declared from time to time in respect of such securities.

10. The company may sell, in such manner as the Board thinks fit, any shares on which the company has a lien:

Provided that no sale shall be made –
(a) unless a sum in respect of which the lien exists is presently payable; or
(b) until the expiration of fourteen days after giving a notice in writing stating and demanding payment of such part of the amount in respect of which the lien exists as is presently payable, has been given to the registered holder for the time being of the share or the person entitled thereto by reason of his death or insolvency.

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11. (i) To give effect to any such sale, the Board may authorize some person to transfer the shares sold to the purchaser thereof.

(ii) The purchaser shall be registered as the holder of the shares comprised in any such transfer.

(iii) The purchaser shall not be bound to see the application of the purchase money, nor shall his title to the shares affected by any irregularity or invalidity in the proceedings in reference to the sale.

12. (i) The proceeds of the sale shall be received by the company and applied in payment of such part of the amount in respect of which the lien exists as is presently payable.

(ii) The residue, if any, shall, subject to a like lien for sums not presently payable as existed upon the securities before the sale, be paid to the person entitled to the shares at the date of the sale.

Calls on Shares

13. (i) The Board may, from time to time, make calls upon the members in respect of any monies unpaid on their shares (whether on account of the nominal value of the shares or by way of premium) and not by the conditions of allotment thereof made payable at fixed times:

Provided that no call shall exceed one-fourth of the nominal value of the share or be payable at less than one month from the date fixed for the payment of the last preceding call.

(ii) Each member shall, subject to receiving at least fourteen days' notice specifying the time or times and place of payment, pay to the company, at the time or times and place so specified, the amount called on his shares.

(iii) A call may be revoked or postponed at the discretion of the Board.

14. A call shall be deemed to have been made at the time when the resolution of the Board authorizing the call was passed and may be required to be paid by instalments.

15. The joint holders of a share shall be jointly and severally liable to pay all calls in respect thereof.

16. (i) If a sum called in respect of any securities is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest thereon, from the day appointed for payment thereof to the time of actual payment at ten per cent per annum or at such lower rate, if any, as the Board may determine.

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(ii) The Board shall be at liberty to waive payment of any such interest wholly or in part.

17. (i) Any sum which by the terms of issue of a share becomes payable on allotment or at any fixed date, whether on account of the nominal value of the share or by way of premium, shall, for the purposes of these regulations, be deemed to be a call duly made and payable on the date on which by the terms of issue such sum becomes payable.

(ii) In case of non-payment of such sum, all the relevant provisions of these regulations as to payment of interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.

18. The Board --

(a) may, if it thinks fit, receive from any member willing to advance the same, all or any part of the monies uncalled and unpaid upon any shares held by him; and

(b) upon all or any of the monies so advanced, may (until the same would, but for such advance, become presently payable) pay interest at such rate not exceeding, unless the company in general meeting shall otherwise direct, twelve per cent per annum, as may be agreed upon between the Board and the member paying the sum in advance.

Transfer of shares

19. (i) The instrument of transfer of any share in the company shall be executed by or on behalf of both the transferor and transferee.

(ii) The transferor shall be deemed to remain a holder of the share until the name of the transferee is entered in the register of members in respect thereof.

20. The Board may, subject to the right of appeal conferred by section 58 decline to register –

(a) the transfer of a share, not being a fully paid share, to a person of whom they do not approve; or

(b) any transfer of shares on which the company has a lien.

21. The Board may decline to recognize any instrument of transfer unless –

(a) the instrument of transfer is in the form as prescribed in rules made under sub-section (1) of section 56;

(b) the instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer; and

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(c) the instrument of transfer is in respect of only one class of shares.

22. On giving not less than seven days' previous notice in accordance with section 91 and rules made thereunder, the registration of transfers may be suspended at such times and for such periods as the Board may from time to time determine:

Provided that such registration shall not be suspended for more than thirty days at any one time or for more than forty-five days in the aggregate in any year.

Transmission of shares

23. (i) On the death of a member, the survivor or survivors where the member was a joint holder, and his nominee or nominees or legal representatives where he was a sole holder, shall be the only persons recognized by the company as having any title to his interest in the shares.

(ii) Nothing in clause (i) above shall release the estate of a deceased joint holder from any liability in respect of any share which had been jointly held by him with other persons.

24. (i) Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either --

(a) to be registered himself as holder of the share; or
(b) to make such transfer of the share as the deceased or insolvent member could have made.
(ii) The Board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.

25. (i) If the person so becoming entitled shall elect to be registered as holder of the share himself, he shall deliver or send to the company a notice in writing signed by him stating that he so elects.

(ii) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing a transfer of the share.

(iii) All the limitations, restrictions and provisions of these regulations relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice or transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice or transfer were a transfer signed by that member.

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26. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of the share, be entitled to exercise any right conferred by membership in relation to meetings of the company.

Provided that the Board may, at any time, give notice requiring any such person to elect either to be registered himself or to transfer the share, and if the notice is not complied with within ninety days, the Board may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the share, until the requirements of the notice have been complied with.

Forfeiture of shares

27. If a member fails to pay any call, or installment of a call, on the day appointed for payment thereof, the Board may, at any time thereafter during such time as any part of the call or installment remains unpaid, serve a notice on him requiring payment of so much of the call or installment as is unpaid, together with any interest which may have accrued.

28. The notice aforesaid shall --

(a) name a further day (not being earlier than the expiry of fourteen days from the date of service of the notice) on or before which the payment required by the notice is to be made; and

(b) state that, in the event of non-payment on or before the day so named, the shares in respect of which the call was made shall be liable to be forfeited.

29. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which the notice has been given may, at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect.

30. (i) A forfeited share may be sold or otherwise disposed of on such terms and in such manner as the Board thinks fit.

(ii) At any time before a sale or disposal as aforesaid, the Board may cancel the forfeiture on such terms as it thinks fit.

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31. (i) A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares, but shall, notwithstanding the forfeiture, remain liable to pay to the company all monies which, at the date of forfeiture, were presently payable by him to the company in respect of the shares.

(ii) The liability of such person shall cease if and when the company shall have received payment in full of all such monies in respect of the shares.

32. (i) A duly verified declaration in writing by a director, the manager or the secretary, of the Company, and that a share in the company has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share;

(ii) The company may receive the consideration, if any, given for the share on any sale or disposal thereof and may execute a transfer of the share in favour of the person to whom the share is sold or disposed of;

(iii) The transferee shall thereupon be registered as the holder of the share; and

(iv) The transferee shall not be bound to see to the application of the purchase money, if any, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale or disposal of the share.

33. The provisions of these regulations as to forfeiture shall apply in the case of nonpayment of any sum which, by the terms of issue of a share, becomes payable at a fixed time, whether on account of the nominal value of the share or by way of premium, as if the same had been payable by virtue of a call duly made and notified.

Alteration of Capital

34. The company may, from time to time, by ordinary resolution increase the share capital by such sum, to be divided into shares of such amount, as may be specified in the resolution.

35. i) Subject to the provisions of section 61, the company may, by ordinary resolution, --

(a) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;

(b) convert all or any of its fully paid-up shares into stock, and reconvert that stock into fully paid-up shares of any denomination;

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(c) sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the memorandum;

(d) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

(ii) Subject to the provisions of Section 62, the company may increase its subscribed capital by the issue of further shares, such shares shall be offered

a) to persons who, at the date of the offer, are holders of equity shares of the company in proportion, as nearly as circumstances admit, to the paid-up share capital on those shares;

b) employees under a scheme of employees' stock option, subject to special resolution passed by company and subject to such conditions as may be prescribed in the Companies Act and Rules made there under; or

c) to any persons, if it is authorized by a special resolution, whether or not those persons include the persons referred to in clause (a) or clause (b), either for cash or for a consideration other than cash, if the price of such shares is determined by the valuation report of a registered valuer subject to such conditions as may be prescribed Companies Act and Rules made there under..

(iii) Subject to the applicable provisions of the Act, the Board of Directors shall have the right to make a preferential offer of its securities and to issue such securities on a private placement basis in compliance with the provisions of the Act.

36. Where shares are converted into stock, --

(a) the holders of stock may transfer the same or any part thereof in the same manner as, and subject to the same regulations under which, the shares from which the stock arose might before the conversion have been transferred, or as near thereto as circumstances admit:

Provided that the Board may, from time to time, fix the minimum amount of stock transferable, so, however, that such minimum shall not exceed the nominal amount of the shares from which the stock arose.

(b) the holders of stock shall, according to the amount of stock held by them, have the same rights, privileges and advantages as regards dividends, voting at meetings of the company, and other matters, as if they held the shares from which the stock arose; but no such privilege or advantage (except participation in the dividends and profits of the company and in the assets on winding up) shall be conferred by an amount of stock which would not, if existing in shares, have conferred that privilege or advantage.

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(c) such of the regulations of the company as are applicable to paid-up shares shall apply to stock and the words "share" and "shareholder" in those regulations shall include "stock" and "stock-holder" respectively.

37. The company may, by special resolution, reduce in any manner and subject to, any incident authorized and consent required by law, -

(a) its share capital;
(b) any capital redemption reserve account; or
(c) any share premium account.

Capitalization of Profits

38. (i) The company in general meeting may, upon the recommendation of the Board, resolve

(a) that it is desirable to capitalize any part of the amount for the time being standing to the credit of any of the company's reserve accounts, or to the credit of the profit and loss account, or otherwise available for distribution; and

(b) that such sum be accordingly set free for distribution in the manner specified in clause (ii) amongst the members who would have been entitled thereto, if distributed by way of dividend and in the same proportions.

(ii) The sum aforesaid shall not be paid in cash but shall be applied, subject to the provision contained in clause (iii), either in or towards --

(A) paying up any amounts for the time being unpaid on any shares held by such members respectively;

(B) paying up in full, unissued shares of the company to be allotted and distributed, credited as fully paid-up, to and amongst such members in the proportions aforesaid;

(C) partly in the way specified in sub-clause (A) and partly in that specified in sub-clause (B);

(D) A securities premium account and a capital redemption reserve account may, for the purposes of this regulation, be applied in the paying up of unissued shares to be issued to members of the company as fully paid bonus shares.

(E) The Board shall give effect to the resolution passed by the company in pursuance of this regulation.

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39. (i) Whenever such a resolution as aforesaid shall have been passed, the Board shall --

(a) make all appropriations and applications of the undivided profits resolved to be capitalized thereby, and all allotments and issues of fully paid shares if any; and

(b) generally, do all acts and things required to give effect thereto.

(ii) The Board shall have power –

(a) to make such provisions, by the issue of fractional certificates or by payment in cash or otherwise as it thinks fit, for the case of shares becoming distributable in fractions; and

(b) to authorize any person to enter, on behalf of all the members entitled thereto, into an agreement with the company providing for the allotment to them respectively, credited as fully paid-up, of any further shares to which they may be entitled upon such capitalization, or as the case may require, for the payment by the company on their behalf, by the application thereto of their respective proportions of profits resolved to be capitalised, of the amount or any part of the amounts remaining unpaid on their existing shares;

(iii) Any agreement made under such authority shall be effective and binding on such members.

Buy- back of Shares

40. Notwithstanding anything contained in these articles but subject to the provisions of sections 68 to 70 and any other applicable provision of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.

General Meetings

41. All general meetings other than annual general meeting shall be called extraordinary general meeting.

42. (*i*) The Board may, whenever it thinks fit, call general meeting by giving notice as per the Companies Act, 2013

(*ii*) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.

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Proceedings at General Meetings

43. The quorum at meetings of the Shareholders shall comprise at least two (2) Shareholders, one (1) of whom shall be Mr. Kiran Reddy Pendri or his proxy, who shall have voting power either by show of hands or poll. If within one (1) hour from the time appointed for the holding of a general meeting, a quorum as set forth hereinabove is not present, the said general meeting shall stand adjourned to the next working day thereafter at the same time and venue as the original meeting. If at such adjourned meeting a quorum, as set out herein, is not present within one (1) hour from the time fixed for holding the adjourned meeting, the meeting shall stand adjourned to the same day in the next week, at the same time and venue. At no point in time shall a general meeting be quorate unless at least two (2) Shareholders (one (1) of whom shall be Mr. Kiran Reddy Pendri or his proxy) are present throughout the meeting.

44. Any resolution would be considered as passed at a general meeting only if all Shareholders present at a quorate meeting of the Shareholders have voted unanimously in favour of it.

45. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.

(ii) Save as otherwise provided herein, the quorum for the general meetings shall be two members present in person or in proxy and proxy need not be a member of the company.

46. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.

47. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.

48. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.

Adjournment of Meeting

49. (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.

(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

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(iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.

(iv) It shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

Voting Rights

50. Subject to any rights or restrictions for the time being attached to any class or classes of shares, --

(a) on a show of hands, every member present in person shall have one vote; and

(b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.

51. A member may exercise his vote at a meeting by electronic means in accordance with section 108 and shall vote only once.

52. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.
(ii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.

53. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.

54. Any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll.

55. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.

56. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.

(ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.

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Proxy

57. (i) The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarized copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed for the taking of the poll; and in default the instrument of proxy shall not be treated as valid.

(ii) A proxy need not be a member of the company and entitled to vote in the meeting.

58. An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105.

59. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

Board of Directors

60. (i) The number of Directors shall not be less than two and not more than fifteen.

(ii) Subject to the provisions of Sections 149 of the Companies Act 2013, the company by an ordinary resolution may increase or reduce the number of Directors.

(iii) The first Director(s) of the Company shall be;

(1) Kiran Reddy Pendri, and

(2) Yadagiri Reddy Pendri.

(iv)The office of a Director shall not be liable to be determined by rotation.

(v)Any person, whether a member of the company or not may be appointed as Director. No qualification by way of holding shares in the Capital of the company shall be required of any director.

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61. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day.

(ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them --

(a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or

(b) in connection with the business of the company.

62. The Board may pay all expenses incurred in getting up and registering the company.

63. The company may exercise the powers conferred on it by section 88 with regard to the keeping of a foreign register; and the Board may (subject to the provisions of that section) make and vary such regulations as it may think fit respecting the keeping of any such register.

64. All cheques, promissory notes, drafts, hundis, bills of exchange and other negotiable instruments, and all receipts for monies paid to the company, shall be signed, drawn, accepted, endorsed, or otherwise executed, as the case may be, by such person and in such manner as the Board shall from time to time by resolution determine.

65. Every director present at any meeting of the Board or of a committee thereof shall sign his name in a book to be kept for that purpose.

66. (i) Subject to the provisions of Section 149 read with sub section (1) of the Section 161 of the Companies Act, 2013, the Board at its meeting or by passing a resolution by circulation shall have the power from time to time, to appoint a person, other than a person who fails to get appointed as a director in a general meeting, as an additional Director, provided the number of the Directors and the additional directors together shall not at any time exceed the maximum strength fixed under these articles.

(ii)Such person shall hold office only up to the date of the next annual general meeting of the company but shall be eligible for appointment by the company as a director at that meeting subject to the provisions of the Act.

(iii)Except as otherwise provided by these Articles, all the Directors of the company shall have in all matter's equal rights and privileges and be subject to equal obligations and duties in respect of the affairs of the company.

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(iv)Casual Vacancy: The Board may fill any casual vacancy occurring in the Board of Directors. Any person so appointed shall hold office only up to the date up to which the Director in whose place he is appointed would have held office if the vacancy had not occurred as aforesaid.

Proceedings of the Board

67. At least nine (9) days' notice of each Board meeting shall be given to each Director unless, in any particular case, both the Directors otherwise agree in writing to a shorter notice period. A Board meeting may be convened by either Director. The notice of the meeting of the Board shall be accompanied by an agenda of the business to be transacted at that meeting. Any items, which are not provided for in the agenda and/or for which relevant papers have not been circulated with the notice of the meeting, shall not be discussed at a meeting of the Board, unless both the Directors present at the meeting agree to the same.

68. The quorum for a meeting of the Board shall consist of both Directors present throughout the meeting. If within one (1) hour from the time appointed for the holding of a meeting of the Board, a quorum as set forth hereinabove is not present, the meeting of the Board shall stand adjourned to the next working day thereafter at the same time and venue as the original meeting. If at such adjourned meeting a quorum, as set out herein, is not present within one (1) hour from the time fixed for holding the adjourned meeting, the meeting shall stand adjourned to the same day in the next week, at the same time and venue. At no point in time shall a Board meeting be quorate unless both Directors are present throughout the meeting.

69. Each Director shall have one (1) vote on the Board and all decisions of the Board, including in respect of a resolution by circulation, shall be taken only if both Directors have voted in favour of it.

70. The Board shall appoint one (1) of the Directors as the Chairman on a rotational basis for a period of twelve (12) months and the Chairmanship shall rotate each term. For the first twelve (12) months from incorporation, the Board shall appoint Mr. Kiran Reddy Pendri as Chairman. Thereafter, the other Director shall be appointed as the Chairman on the Board for a period of twelve (12) months. The Chairman shall not have a casting vote.

71. The Board shall meet as often as may be necessary to discharge its duties but in any case no less frequently than holding at least one (1) meeting every three (3) calendar months. To the extent permitted by, and in accordance with the Act, the Directors may participate in Board meetings by telephone or video conferencing or any other means of contemporaneous communication.

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72. The minutes of the Board shall be circulated within thirty (30) days of the date of the meeting of the Board. At the beginning of each meeting of the Board, the Board minutes of the previous meeting shall be approved if agreed to by both Directors.

73. A resolution by circulation must be circulated to all Directors (to such addresses, whether in India or elsewhere, as may be specified by each Director to the Company) in draft form, together with the relevant papers, if any, to all the Directors and approved by the Directors in accordance with the provisions of the Act and shall be as valid and effectual as if it had been passed at a meeting of Directors duly convened and constituted.

74. Subject to the provisions of the Act, the Board/Directors shall also have the right to delegate any of their powers to such managers, agents, committees of the Board or other Persons as it/they may deem fit and may at their own discretion revoke such powers.

75. Without limiting the generality of the powers of the Board as contained in Article 48 hereof, the Board shall have the power to make, sign, vary or discharge all contracts in the name of, or on behalf or on account of the Company and shall also have the power to draw, accept or endorse in the name of, or on behalf or on account of the Company all bills of exchange, promissory notes, cheques, other like instruments, drafts and other Government papers and instruments that shall be necessary, proper or expedient and the same shall be deemed to be under the authority and direction of the Company except only such of them as by the Act are expressly directed to be exercised by Members in the general meeting.

Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer

76. Subject to the provisions of the Act, --

(i) A chief executive officer, manager, company secretary or chief financial officer may be appointed by the Board for such term, at such remuneration and upon such conditions as it may think fit; and any chief executive officer, manager, company secretary or chief financial officer so appointed may be removed by means of a resolution of the Board;

(ii) A director may be appointed as chief executive officer, manager, company secretary or chief financial officer.

77. A provision of the Act or these regulations requiring or authorizing a thing to be done by or to a director and chief executive officer, manager, company secretary or chief financial officer shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of, chief executive officer, manager, company secretary or chief financial officer.

The Seal

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78. (i) The The Board shall provide for the safe custody of the Seal. The Seal shall not be affixed to any instrument except by the authority of resolution of the Board and except in the presence of at least one (1) Director and that one (1) Director shall sign every instrument to which the Seal is so affixed in his presence. The Share certificate will, however, be signed and sealed in accordance with the Companies (Issue of Shares Certificates) Rules, 1960.

Dividends and Reserve

79. The company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the Board.

80. Subject to the provisions of section 123, the Board may from time to time pay to the members such interim dividends as appear to it to be justified by the profits of the company.

81. (i) The Board may, before recommending any dividend, set aside out of the profits of the company such sums as it thinks fit as a reserve or reserves which shall, at the discretion of the Board, be applicable for any purpose to which the profits of the company may be properly applied, including provision for meeting contingencies or for equalizing dividends; and pending such application, may, at the like discretion, either be employed in the business of the company or be invested in such investments (other than shares of the company) as the Board may, from time to time, thinks fit. out of the profits of the company such sums as it thinks fit as a reserve or reserves.

(ii) The Board may also carry forward any profits which it may consider necessary not to divide, without setting them aside as a reserve.

82. (i) Subject to the rights of persons, if any, entitled to shares with special rights as to dividends, all dividends shall be declared and paid according to the amounts paid or credited as paid on the shares in respect whereof the dividend is paid, but if and so long as nothing is paid upon any of the shares in the company, dividends may be declared and paid according to the amounts of the shares.

(ii) No amount paid or credited as paid on a share in advance of calls shall be treated for the purposes of this regulation as paid on the share.

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(iii) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the shares during any portion or portions of the period in respect of which the dividend is paid; but if any share is issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for dividend accordingly.

83. The Board may deduct from any dividend payable to any member all sums of money, if any, presently payable by him to the company on account of calls or otherwise in relation to the shares of the company.

84. (i) Any dividend, interest or other monies payable in cash in respect of shares may be paid by cheque or warrant sent through the post directed to the registered address of the holder or, in the case of joint holders, to the registered address of that one of the joint holders who is first named on the register of members, or to such person and to such address as the holder or joint holders may in writing direct.

(ii) Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.

85. Any one of two or more joint holders of a share may give effective receipts for any dividends, bonuses or other monies payable in respect of such share.

86. Notice of any dividend that may have been declared shall be given to the persons entitled to share therein in the manner mentioned in the Act.

87. No dividend shall bear interest against the company.

Accounts

88. (i) The Board shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations, the accounts and books of the company, or any of them, shall be open to the inspection of members not being directors.

(ii) No member (not being a director) shall have any right of inspecting any account or book or document of the company except as conferred by law or authorized by the Board or by the company in general meeting.

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Winding Up

89. Subject to the provisions of Chapter XX of the Act and rules made thereunder --

(i) If the company shall be wound up, the liquidator may, with the sanction of a special resolution of the company and any other sanction required by the Act, divide amongst the members, in specie or kind, the whole or any part of the assets of the company, whether they shall consist of property of the same kind or not.

(ii) For the purpose aforesaid, the liquidator may set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members.

(iii) The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the contributories if he considers necessary, but so that no member shall be compelled to accept any shares or other securities whereon there is any liability.

Indemnity

90. Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

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Sl. No	Names, Addresses, Description and Occupation of subscribers	Signature , Name, Address, description and occupation of witness
1)	Name: KIRAN REDDY PENDRI Father's name: YADAGIRI REDDY PENDRI Date of Birth : 13/08/1988 Address: 54 ASPEN DRIVE SOUTH GLASTONBURY CONNECTICUT 06073 UNITED STATES OF AMERICA OCCUPATION: BUSINESS SIGNATURE: CAMPED AT HYDERABAD	P.S.Prahlad (P.SURYA PRAKASH) R&A Associates, Flat no.101, Sapthagiri Residency, 1-10-98/A Chikkadpally, Hyderabad-16. Occupation: Company Secretary in Practice C.P.No.11142
2)	Name: Swarnalatha Mannam Fathers Name: Krishna Reddy Mannam Date of Birth: 26/08/1978 Adress: 12-11-1696 Amber Nagar Hyderabad Andhra Pradesh India 500044 occupation: Business Signature: M.Swarnalata	

Place: HYDERABAD
Date: 14 FEBRUARY 2013

Annexure - 2

MEMORANDUM OF ASSOCIATION

OF

Escientia Advanced Sciences Private Limited

I. The name of the Company is Escientia Advanced Sciences Private Limited.

II. The Registered Office of the Company will be situated in the State of Telangana.

III. (a) The objects to be pursued by the company on its incorporation are:

To carry on the business of providing outsourced development and manufacturing services to life sciences-based innovator companies.

(b) Matters which are necessary for furtherance of the objects specified in clause 3(a) are: —

1. To manufacture active pharmaceutical ingredients and finished dosage forms for clients, located in India and abroad, engaged in marketing pharmaceutical, biopharmaceutical and biotechnology products.

2. To produce, or assist in the production, including by making raw materials, of, drugs and medicines, medical preparations, indigenous and allopathic in general and particularly produce and prepare biological and non-biological drugs, injectables and tablets of all kinds, serum, vaccines, tinctures, extracts, lotions, syrups both medicated and non-medicated, other chemical products and to set up pharmaceutical laboratories, workshops, research institutes and necessary structures and organizations and to work as pharmaceutical and chemical manufacturers generally.

3. To buy, sell, manufacture, repair, alter and exchange, refine, manipulate, let on hire, import, export, and deal in all kinds of substances, articles, apparatus, plant, machinery, appliances, tools, commodities and things which may be required for the purposes of the business of the Company or commonly supplied or dealt in by persons engaged in any such businesses, or which may seem capable of being profitably dealt with in connection with any of the said business.

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4. To establish, provide, maintain and conduct or otherwise subsidise, research laboratories and experimental workshops for scientific and technical research and experiments and to undertake and carry on all scientific and technical research, experiments and tests of all kinds and to promote studies and research, both scientific and technical investigation and invention by providing, subsidising, endowing or assisting laboratories, workshops, libraries, lectures, meetings and conferences and by providing the remuneration to scientific and technical professors and teachers and by providing for the award, scholarships, prizes, grants and bursaries to students or independent students or otherwise and to encourage, promote and award studies, researches, investigations, experiments, tests and inventions of any kind that may be considered to be related to or likely to assist any of the businesses which the Company is authorised to carry on.

5. To establish, maintain, operate, provide, manage, supervise, arrange, lease, license, take in exchange, hire or otherwise, whether directly or indirectly, purchase or import, acquire any immovable property or movable property including all necessary services, facilities, conveniences, equipment and any rights or privileges which the Company may think necessary or convenient for the purposes of its business, particularly any land, buildings, easements, machinery and plant.

6. To build, erect, construct, maintain, and/or alter on any lands held by the Company, any factories, godowns, offices, works, or other buildings, structures or erections whatsoever, necessary or convenient for the purposes of the Company and to insure and to keep insured the same.

7. To sell, dispose, exchange or transfer any business, property, right or undertaking of the Company or any part thereof for any consideration which the Company may deem fit to accept and in particular for shares, debentures, debentures stocks, bonds or securities of any other company or companies for the purpose of its or their acquiring all or any of the property, rights or liabilities of the Company.

8. To acquire and undertake the whole or any part of the business, undertaking, property and liabilities of any person carrying on any business which the Company is authorised to carry on or possession of property suitable for the purpose of the objects of the Company.

9. To establish subsidiary companies, amalgamate with, or enter into partnership, or arrangements for sharing of profits, joint ventures, or co-operation with, any person or company carrying on, engaged in, or proposing to carry on or engage in any business or any branch of business or transaction which the Company is authorised to carry on or engage in, or which is capable of being conducted so as directly or indirectly to benefit the Company; and to take or otherwise acquire and hold shares, or other interests in any such person or company; and to enter into any arrangements with such subsidiary for taking the profits and bearing the losses of any business or branch of business so carried on, or for financing any such subsidiary company or guaranteeing its liabilities, or to make any other arrangement which may seem desirable with reference to any business or branch of business so carried on including power at any time and either temporarily or permanently to close any such business or branch of business.

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10. To subscribe, underwrite, acquire, take up and hold shares, debenture-stocks, bonds, obligations and other securities issued or guaranteed by any company constituted or carrying on business in India or in any foreign country; and debentures, debenture stocks, bonds, obligations and other securities issued or guaranteed by any government, sovereign ruler, commissioner, public body or authority, supreme, municipal, local or otherwise, whether in India or in any foreign country.

11. To take, or otherwise acquire, and hold shares, in any other Company having objects altogether or in part similar to those of this Company or carrying on any business capable of being conducted so as directly or indirectly to benefit this Company.

12. To carry on any other trade or business, whether manufacturing or otherwise, which may seem to the Company capable of being conveniently carried on in connection with the business herein mentioned or calculated directly or indirectly to enhance the value of or render profitable any of the Company's property or rights.

13. To promote any company or companies for the purpose of acquiring all or any of the property, rights and liabilities of this Company, or for any other purpose which may seem directly or indirectly calculated to benefit this Company.

14. To apply for, purchase or otherwise acquire any patent, patent right, brevet inventions, copyright, trademarks, formulae, license, lease, concessions, conferring any exclusive or limited right to use or other information as to any invention which may seem capable of being used for any of the purposes of the Company or the acquisition of which may directly or indirectly benefit the Company; and to use, exercise, develop or grant licenses in respect of the property, rights, or information so acquired.

15. To apply for tender, purchase, or otherwise acquire any contracts or sub-contracts and enter into contracts, agreements and arrangements with any other company, firm, person or governmental entity for the carrying out by such other company, firm, person or governmental entity on behalf of the Company of the objects for which the Company is formed.

16. To provide for the welfare of employees or ex-employees of the Company and the wives, widows, families or dependants of such persons by building or contributing to the building of houses, dwellings or chawls or by grants of money, pensions, allowances, gratuities. bonus or other payments or by creating and from time to time subscribing or contributing to provident and other funds, institutions and trusts and by providing or subscribing or contributing towards places of instruction and recreation, hospitals and dispensaries, medical and other attendance and assistance as the Company shall think fit.

Escientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

Yadagiri R. Reddy

17. To establish or support or aid in the establishment and support of associations, institutions, funds, trusts, and conveniences for the benefit of past or present employees or directors of the Company or the dependants of such persons; to grant pensions and allowances; to make payments towards insurance.

18. Subject to the provisions of the Companies Act, 2013, to make donations to any persons or institutions, either of cash or any other assets, as may be thought (directly or indirectly) conducive to any of the Company's objects or otherwise expedient, and also to subscribe, contribute, or otherwise assist or guarantee money for charitable, scientific, religious, benevolent, national, public, cultural, educational or other institutions or subjects or for any exhibition or for any public objects.

19. To undertake and execute any trust the undertaking of which may seem to the Company desirable and either gratuitously or otherwise.

20. To finance, lend, advance money or give credit to any person or company in the ordinary course of business; to give guarantee or indemnify for the payment of money or the performance of contracts or obligations by any person in the ordinary course of business; to take or hold mortgages, liens and charges or secure or undertake in any way the repayment of moneys lent or advanced to, or the liabilities incurred by any person in the ordinary course of business subject to the provisions of the Companies Act, 2013 or any statutory modification or re-enactments thereof.

21. To lend money to such persons or companies and on such terms as deem expedient and in particular to customers and others having dealings with the Company; and to guarantee the performance of contracts by any such persons or companies.

22. To borrow or secure money in such manner as the Company may think fit or to make repayment of any debt, liability, perform any contract entered into or the issue of debentures, perpetual or otherwise, charged upon all or any of the Company's property (both present and future), including its uncalled capital; and to purchase, redeem, or pay off any such securities.

23. To open and operate any type of bank accounts with any bank or banks and to draw and endorse cheques and to withdraw moneys from such accounts.

24. To draw, make, accept, endorse, discount, execute, issue, negotiate, assign and otherwise deal with cheques, drafts, promissory notes, hundies, bills of exchange, bills of lading and other negotiable or transferable instruments.

25. Subject to applicable law, to issue or allot fully or partly paid shares in the capital of the Company, in payments or part payment of any movable or immovable property purchased or otherwise acquired by the Company or any services rendered to the Company.

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26. Subject to the provisions of the Companies Act, 2013 to place, reserve or distribute as bonus shares among the members or otherwise to apply as the Company may, from time to time, think fit, all moneys received by way of premium on shares or debentures issued at a premium by the Company and pay moneys received in respect of forfeited shares and moneys arising from the sale by the Company of forfeited shares.

27. To invest money of the Company, not immediately required in such manner as may, from time to time, be thought fit subject to provisions of the Companies Act, 2013.

28. To adopt such means of making known and advertising the business and products of the Company as may be expedient, and in particular by advertising in the press, public places and theatres, by radio, by television, by circulars, by purchase and exhibition or works of art or interest, by publication of books, pamphlets, bulletins or periodicals, by organising or participating in exhibitions, and by granting prizes, rewards and donations.

29. To procure recognition of the Company in any country or place outside India.

30. To arrange for the marketing, distribution and service channels in India and abroad and sale of the products and by-products of the Company and purchase, import of raw materials, goods and articles as are necessary for carrying on the business of the Company and, for that purpose, either to establish its own shops, agencies, or marketing organisations or to appoint selling or buying agents or distributors or both (whether individuals, firms or bodies corporate) in any place in or outside India on such terms and conditions of their appointment as the Company may decide and to pay remuneration to such selling or buying agents or distributors or both by way of such commission or in such other manner as the Company may deem fit.

31. To produce gas and generate electricity necessary for the purposes of the business of the Company and to process all products resulting from or ancillary to such production.

32. To purchase, charter, hire, build, or otherwise acquire vehicles of any or every sort of description for use on or under land or water or in the air and to employ the same in the carriage of merchandise of all kinds or passengers and to carry on the business of owners of trucks, trams, lorries, motor cars and of ship-owners and owners of aircraft in all or any of their respective branches.

33. To insure any of the properties, undertakings, contracts, personnel, risk or obligations of the Company in any manner whatsoever.

34. To refer any questions, disputes or differences arising between the Company and any other person (other than a Director of the Company) in connection with or in respect of any matter relating to the business or affairs of the Company to arbitration in such manner, and in accordance with such rules, and upon such terms as the Company and such other person may mutually agree, or as otherwise agreed and to institute legal proceedings or defend any proceedings and to appoint advocates, consultants or advisors in this behalf.

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35. To enter into negotiation or collaboration, technical, financial or otherwise, with any person or Government for obtaining any grant, license, formulae, other rights and benefits, technical information, know-how and expert advice for the production, manufacture and export or sale of all types of goods which the Company is authorised to produce or to deal in.

36. To apply for, promote, and obtain any order, agreement, regulation, other authorisation or enactment, or enter into any arrangement with any Government or authority whether municipal, local or otherwise or any person, that may seem conducive to the Company's objects or any of them; and to obtain from any such Government or authority any rights, privileges and concessions which the Company may think it desirable to obtain; and to carry out, exercise and comply with any such arrangement, rights, privileges and concessions.

37. To do all things necessary, suitable or proper for the accomplishment of any of the purpose or the attainment of any of the objects or the furtherance of any of the powers herewith set forth, either alone or in association with other corporate bodies, firms, or individuals, and to do every other act or acts, thing or things, incidental or appurtenant to or growing out of or connected with the aforesaid business or powers or any part or parts thereof.

38. To acquire, build, carry out, equip, maintain, alter, replace, pull down, improve, develop, manage, work, control and superintend any electric light and gas works and power plant, telephones and any markets, reservoirs, water works, tanks, bridges, villages, roads, ways, tramways, railways, canals, aqueducts, water-courses, dykes, drains, wharves, furnaces, crushing works, hydraulic works, workshops, factories, warehouse, sheds, dwellings, offices, shops, stores, buildings, pipe lines, pumping stations, wireless installations, aerodromes and other works and conveniences which may seem directly or indirectly conducive to any of the main objects of the Company and to contribute, subsidise or otherwise invest funds by taking part in any operations.

39. To act as stockist, commission agents, manufacturing representatives of agents, selling and purchasing agents, distributors, brokers, trustees, attorneys and generally to undertake and carry out agency work of any kind whatsoever for any other company, firm, corporation, person or institution.

40. To purchase, sell, develop, take in exchange or lease hire or otherwise acquire, whether for investment or sale, any real or personal estate including lands, businesses, buildings, factories, mills, houses, cottages, shops, depots, warehouses, machinery, plant, stock in trade, mineral rights, concessions, privileges, licenses, easements or interests in or with respect to any property whatsoever for the purpose of the Company in consideration for a gross sum or rent or partly in one way and partly in the other for any other consideration and to carry on business as proprietors of flats and buildings and to let on lease or otherwise apartments therein and to provide for the conveniences commonly provided in flats, suites and residential and business quarters.

41. To control, manage, finance, subsidise, co-ordinate or otherwise assist any company or companies, including subsidiaries, in which the Company has a direct or indirect financial interest, to provide secretarial, administrative, technical, commercial and other services and facilities of all kinds for any such company or companies and to make payments by way of subvention or otherwise and any other arrangements which may seem desirable with respect to any business or operations of or generally with respect to any such company or companies.

Yadagiri R. Pendri

Scientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

42. To form, incorporate or promote any company or companies in India having amongst its or their objects the acquisition of all or any of the assets or control, management or development of any company or any other objects or object which in the opinion of the Company could or might directly or indirectly assist the Company in the management of its business or the development of its properties or otherwise prove advantageous to the Company and to pay all or any of the costs and expenses incurred in connection with any such promotion or incorporation and to remunerate any person or company in, or any manner it shall think fit for services rendered or to be rendered in obtaining subscriptions for or placing or assisting to place or to obtain, or guaranteeing the subscription of or the placing of any shares in the capital of the Company or any bonds, debentures, obligations, or securities of the Company or any bonds, debentures, obligations or securities of any other company held or owned by the Company or in which the Company may have an interest or in or about the formation or promotion of the Company or the conduct of its business or in or about the promotion or formation of any other company in which the Company may have an interest.

43. To carry on business as engineers and consultants in all its branches, including in pharmaceuticals, life sciences, medicinal and chemical sectors, and also as contractors for any person or persons

44. To undertake and execute job orders of all kinds and description.

45. To create any depreciation fund, reserve, reserve fund, sinking fund, insurance fund, or any special or other fund whether for repayment of redeemable preference shares, redemption of debenture stock, for dividends, or for repairing, improving, extending and maintaining any part of the property of the Company.

46. To train or pay for training in India or abroad of any of Company's employees or officers or any candidate in the interest of or in furtherance of the Company's objects and establish training or research facilities for providing training to the Company's employees.

47. To pay out of the funds of the Company all or any expenses which the Company may lawfully pay for services rendered for formation and registration of the Company or for promotion of any other company by it subject to the Companies Act, 2013.

48. To distribute any of the property of the Company amongst the members in specie or kind, subject to the provisions of the Company Act, 2013, in the event of winding up.

49. Generally to do all such other things as are incidental or conducive to the attainment of the above objects.

IV. The liability of the member(s) is limited, and this liability is limited to the amount unpaid, if any, on the shares held by them.

V. The Authorized Share Capital of the Company is 22,00,00,000/- (Rupees Twenty -Two Crore Only) divided into 2,20,00,000 (Two Crore Twenty Lakhs Only) Equity Shares of Rs. 10/- (Rupees Ten Only) each.

Yadagiri R. Pendyala

Escientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

VI. We, the several persons, whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association, and we respectively agree to take the number of shares in the capital of the company set against our respective names:—

Yadagiri R. Pandey

Scientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

We, the several persons whose names and addresses are subscribed hereunder are desirous of being formed into a company not for profit in pursuance of this Memorandum of Association :-

Sl.No	Names, Addresses, Description and Occupation of subscribers	No. of Equity shares taken by each subscriber.	Signature, Name, Address, description and occupation of witness
1)	Name: KIRAN REDDY PENDRI Date of Birth: 13/08/88 Address: 54 ASPEN DRIVE SOUTH GLASTONBURY CONNECTICUT 06073 UNITED STATES OF AMERICA Occupation: BUSINESS Signature: KKPendri Father's name: YADAGIRI REDDY PENDRI CAMPED AT HYDERABAD	9999 (NINE THOUSAND NINE HUNDRED AND NINETY-NINE) EQUITY SHARES OF Rs. 10/- (RUPEES TEN ONLY) EACH	P.S. Prahlad (P. SURYA PRAKASH) R&A Associates Plot no. 101, Sapthagiri Residency 1-10-98/A, Chikkadpally Begumpet, Hyderabad - 16. occupation: Company Secretary in Practice CP No. 11142
2)	Name: Swarnalatha Mannam Date of Birth: 26/08/1978 Adress: 12-11-1676 Amber nagar Hyderabad Andhra Pradesh India 500044 occupation: Business Signature: M. Swarnalatha Father's name: Krishna Reddy Mannam	1 (one) equity Share of Rs. 10/- (Rupees Ten only) each	
	Total	10,000 EQUITY SHARES OF Rs. 10/- each	

Place: HYDERABAD
Date: 14 FEBRUARY 2013

Annexure - 3

APIIC : HYD.
14 FEB 2012
E.D-S PESHI

F.No.21-379/2007-IA.III
Government of India
Ministry of Environment & Forests

INWARD
A.P.I.I.C Ltd.
15 FEB 2012
CE - I Peshi

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 13th February, 2012

To
M/s Andhra Pradesh Industrial Infrastructure Corporation Ltd.
Parisrama Bhavanam, 6th floor, 5-9-58-B,
Fateh Maidan Road, Hyderabad – 500 004
Andhra Pradesh

Subject: Environment Clearance for Multiproduct Andhra Pradesh SEZ at Achutapuram and Rambilli Mandals, Visakhapatnam District, Andhra Pradesh and CRZ Clearance for laying Marine disposal pipeline by M/s. Andhra Pradesh Industrial Infrastructure Corporation Ltd – Reg.

Dear Sirs,

This has reference to your application No. 173/CGM(P)/ Projects/EIA/06 dated 13.03.2007 and letter No. 8471/CZMA/2010 dated 30.07.2011 from the Special Chief Secretary, Environment Forests, Science and Technology Department, Government of Andhra Pradesh, seeking prior Environmental and CRZ Clearance for the above project under the EIA Notification, 2006 and Coastal Regulation Zone Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 and the Coastal Regulation Zone Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP, recommendation of the State Coastal Zone Management Authority and the additional clarifications furnished in response to the observations of the Expert Committee constituted by the competent authority in its meetings held on 5th-6th April, 2011 and awarded "Silver" grading to the project.

2. It is, interalia, noted that the project involves the area is 5,683 acres (2300 hectares) and the land has been acquired completely for the project. The site coordinates are 17° 29' 23" N and 17° 32' 47.5" N and 80° 56' 58" E and 80° 00' 57" E and it is about 40 km south-west of Visakhapatnam City and 3.0 km south of Atchutapuram. The processing area in APSEZ occupies an area of 5479 acres and comprises of industrial plots, infrastructure facilities, logistics areas, common amenities and green/open areas etc. Entire processing area of APSEZ has been divided into five different Industrial Zones. The remaining 204 acres has been identified as non processing area and comprises of township and social infrastructure facilities such as educational and medical facilities.

In order to ensure adequate circulation within the SEZ, the internal roads with a Right of Way (RoW) of 55m, 50m, 45m, 40m, 30m and 15 m are

proposed. A dedicated rail corridor connecting the Logistics hub is also proposed. Water requirement for APSEZ is estimated at 100 MLD which will be sourced from Yeluru Left Main Canal and a 60 MLD desalination plant is being planned considering the ultimate demand of fully developed SEZ. Power requirement for APSEZ is 500 MW which will be sourced from APTRANSCO's 132 kV feeder line near Atchutapuram and captive power plant (500 MW) is proposed in APSEZ to facilitate uninterrupted power supply. A common effluent treatment plant (CETP) of 31 MLD and provision for guard pond is planned for the detention of treated wastewater for about 3.5 days. Based on mathematical model studies, a marine outfall system is proposed to discharge the treated wastewater from APSEZ at (-) 19 m CD in Bay of Bengal and point of discharge is located at a distance of about ~3.5 km from shore. Sewage Treatment Plant (STP) of 7.0 MLD capacity is proposed in Non-processing area and sewage generated in processing area shall be sent to CETP for treatment and disposal. Hazardous waste generated from APSEZ shall be sent to nearby Transport Storage Disposal Facility (TSDF). As a part of sustainable environmental management plan of APSEZ, it is proposed to maintain a dedicated TSDF in an area of 50 acres of land, which can be operated for a period of 30 years outside SEZ premises. Greenbelt/Green Areas proposed to be developed at SEZ level is 860 acres.

3. National Institute of Oceanography (NIO) demarcated HTL, LTL and CRZ area. As per the NIO report, SEZ site is located outside the CRZ area i.e. about one kilometer from the HTL of open sea and 100 m away from Pudimadaka creek. The land fall point is located at latitude 17°29' 57"N and longitude 83°0'30". The location of Marine outfall is at latitude17°29'11"N and longitude 83°02'18". The Andhra Pradesh Coastal Zone Management Authority has recommended the laying of dedicated pipeline for discharge of treated effluent into sea near Pudimadaka village of Parawada Mandal in Visakhapatnam District vide letter no. 8471/CZMA/2010 dated 30.07.2011. Andhra Pradesh Pollution Control Board has granted Consent to Establishment of Marine outfall (NOC) vide letter No. PCB/CFE/RO-VSP/HO/2011/ 2455 dated 10.11.2011.

4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environment and CRZ Clearance for the project mentioned above. Accordingly, the Ministry hereby accord necessary Environment and CRZ Clearance for the above project as per the provisions of Environmental Impact Assessment Notification – 2006 and its subsequent amendments and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:

PART A - SPECIFIC CONDITIONS

I. Construction Phase

(i) "Consent for Establishment" for the SEZ shall be obtained from Andhra Pradesh Pollution Control Board under Air and Water Act

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and a copy shall be submitted to the Ministry before start of any construction work at the site.

(ii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(iii) A First Aid Room will be provided in the project both during construction and operation of the project.

(iv) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

(v) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(vi) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.

(vii) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.

(viii) Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Andhra Pradesh Pollution Control Board.

(ix) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

(x) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

(xi) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

(xii) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/APPCB.

(xiii) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).

(xiv) Ready mixed concrete must be used in building construction.

(xv) Storm water control and its re-use as per CGWB and BIS standards for various applications.

(xvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xvii) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.

(xviii) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.

(xix) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

(xx) Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.

(xxi) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

(xxii) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

(xxiii) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.

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(xxiv) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.

(xxv) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

II. Operation Phase

(i) The SEZ PP i.e. APIIC while issuing the allotment letter to individual member units shall specifically mention the allowable maximum quantity of water usage and effluent generated by each member unit.

(ii) The member units shall provide above ground tanks for storage of effluent for monitoring the characteristics of effluent before taking into the CETP for further treatment.

(iii) The environmental monitoring and compliance mechanism as submitted to MoEF shall be complied. The same shall be specifically mentioned in the allotment letter issued to individual member units by the Project proponent.

(iv) The PP shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.

(v) The outfall location shall be 3.5 km from the land fall point at 19 m CD and regular monitoring of dispersion of the effluent shall be carried out to ensure no adverse impact to the neighbouring eco-sensitive environments.

(vi) There shall be no disturbance to the sand dunes. The pipeline shall laid using advanced method viz Horizontal Directional Drilling (HDD) so as to avoid disturbance to the sand dunes.

(vii) Periodic monitoring of coastal water shall be carried out at outfall location.

(viii) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

(ix) The installation of the Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from ETP and STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused

treated effluent shall conform to the norms and standards of the Andhra Pradesh Pollution Control Board. Necessary measures should be made to mitigate the odour problem from ETP and STP.

(x) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

(xi) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Andhra Pradesh Pollution Control Board.

(xii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

(xiii) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.

(xiv) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

(xv) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.

(xvi) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.

(xvii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

(xviii) A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.

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(xix) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.

(xx) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.

(xxi) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

PART – B. GENERAL CONDITIONS

i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.

ii) Six monthly monitoring reports should be submitted to the Ministry and it's Regional Office, Bangaluru.

5. 5% of the total project cost shall be earmarked towards the corporate social responsibility (CSR and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured accordingly in a time bound manner.

6. Officials from the Regional Office of MOEF, Bangaluru who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bangaluru.

7 In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

10. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

11. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Andhra Pradesh Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangaluru.

12. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

15. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(Lalit Kapur)
Director (IA-III)

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Copy to:

(1) The Secretary, Department of Environment, Government of Andhra Pradesh, Secretariat, Hyderabad.
(2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110 032.
(3) The Member Secretary, Andhra Pradesh Pollution Control Board, Hyderabad.
(4) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangaluru – 560 034.
(5) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
(6) Guard file.

(Lalit Kapur)
Director (IA-III)

Annexure - 4

STATUTORY OBLIGATIONS

S. No	Name of the Legal/Statutory Acts/ Rules
1.	Factories Act, 1948
2.	Andhra Pradesh State Factory Rules, 1950
3.	Manufacture Storage & Import of Hazardous Chemicals Rules, 1989
4.	Petroleum Act, 1934 & Rules 2002
5.	The Inflammable Substance Act-1952
6.	Gas Cylinders Rules, 2004
7.	Indian Boiler's Act, 1923 and Regulations 1950
8.	Central Motor Vehicles Act, 1988 & AP Motor Vehicle Rules, 1989
9.	The Explosives Act 1884, and rules 2008
10.	The Fatal Accidents Act, 1855 as amended up to 1986
11.	The Electricity Act, 2003 and the Indian Electricity Rules, 2005
12.	The Static and Mobile Pressure Vessels (Unfired) Rules 1981
13.	Water (Prevention and Control of Pollution) Act, 1974 & Rules 1975
14.	Water (Prevention and Control of Pollution) Cess Act, 1977 & Rules
15.	Air (Prevention and Control of Pollution) Act, 1981 & Rules
16.	Environment Protection Act, 1986 & Rules
17.	The Hazardous Waste (Management, Handling and Transboundary, Movement) Rules, 2008 & 2016
18.	Noise Pollution Control Rules 2000
19.	The Batteries (Management and Handling) Rules, 2001
20.	Bio-Medical Waste Management Rules, 2016
21.	E-Waste (Management) Rules, 2016
22.	The Public Liability Insurance Act, 1991
23.	Andhra Pradesh Fire Service Act-1999

Annexure - 5a

OFFICE OF THE DEVELOPMENT COMMISSIONER
Andhra Pradesh Special Economic Zone :: Atchutapuram, Visakhapatnam
Administrative Office :: 9th Floor, UDYOG BHAWAN, Siripuram, Visakhapatnam - 530 003
Phone / Fax: 0891 – 2558678, 2591371

No.2 (17)/APSEZ/2013 Dated:27.02.2014

To

M/s Escentia Advanced Sciences Pvt Ltd
APSEZ, Atchutapuram,
Visakhapatnam

Sir,

Sub: PCB-CFE-Consent for Establishment (CFE)Order- Regarding.

** * **

1. AP PCB Hyderabad Consent for Establishment (CFE) Order No.327/PCB/CFE/RO-VSP/HO/2014 dated 07.02.2014 in original is sent herewith for your further action.

2. Please acknowledge receipt.

Yours faithfully,

27/2/14

(G. GOVINDA RAO)
Asst Development Commissioner.

Encls: As mentioned above

ANDHRA PRADESH POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A - 3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018

Phone: 23887500
Fax: 040 – 23815631
Website :www.appcb.ap.nic.in

REGD.POST WITH ACK.DUE

CONSENT ORDER FOR ESTABLISHMENT

Order No.327/PCB/CFE/RO-VSP/HO/2014 **Dt. 07.02.2014**

Sub: PCB – CFE - **M/s. Escientia Advanced Sciences Pvt. Ltd., Plot No.11, 11 A, 12 & 12 A, APSEZ, Krishnampalem (V) Rambilli (M), Visakhaptatnam District** – Consent for Establishment of the Board under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

Ref: 1) Industry's application received through SWCC from the Development Commissioner, APSEZ on 4.11.2013 and Addl. Information received on 18.11.2013.
2) R.O's inspection report dt.13.12.2013.
3) CFE Committee meeting held on 20.01.2014.
4) Industry submitted clarification on 22.01.2014.

1. In the reference 1st cited, an application was submitted to the Board seeking Consent for Establishment (CFE) to produce the following products with installed capacities as mentioned below, with a project cost of Rs.78.0 Crores.

Sl. No.	Products	Capacity (Kg/day)	No.of stages to be manu-factured	Starting Raw Material & Molecular Formula for product	Quantity of Starting Raw Material (Kg/day)
	Phase -I				
1.	Atazanavir Sulphate	300	4	(2S)-2-amino-3,3-dimethylbutanoic acid	179.9
2.	Darunavir Ethanolate	300	4	DNV-II intermediate	372.4
3.	Donepezil Hydrochloride	300	2	5,6 Dimethoxy-1-inadanone	261.7
4.	Febuxostat	300	2	Ethyl-2-(3-cyano-4-isobutoxyphenyl)-4-methyl-5-thiazolecarboxylate	463.8
5.	Fexofenadine Hydrochloride	300	6	2-[4-(4-chloro-1-oxobutyl)phenyl]-2-methylpropanoic acid (BW-08)	361.6
6.	Glipizide	300	4	5-Methyl-2-pyrazine carboxylic acid (5-MPCA)	262.5
7.	Lanzoprazole	300	4	2-Chloro-3-methyl-4-(2,2,3-trifluoroethoxy) Pyridine HCl	461.7
8.	Levetiracetam	400	2	(2S)-2-aminobutanamide HCl	412

9.	R & D / Custom Synthesis Products	100	--	--	
	Total	**2600**			
	Phase -II				
10.	Abacavir Sulphate	200	4	Pyrimidinyl formamide	301.6
11.	Atorvastatin Calcium	100	3	Cyano compound	318.2
12.	Clopidogrel Bisulfate	100	5	2-Chlorophenyl acetic acid	119.2
13.	Duloxetine Hydrochloride	50	5	DTP-Hydrochloride	228.6
14.	Efavirenz	200	3	PMB Amino alcohol	241
15.	Emtricitabine	50	5	L-methyglyoxlate hydrate	256.8
16.	Festerodine Fumerate	50	4	Methyl paraben / Methyl 4-Hydroxy benzoate	62.5
17.	Lopinavir	50	6	Enaminone	321.7
18.	Pioglitazone Hydrochloride	50	4	4-(2-(-Ethyl-2 Pyridine)Ethoxy) Nitrobenzene	179.8
19.	Rabeprazole Sodium	100	3	Chloro compound	325.1
20.	Raltegavir Potassium	100	3	RLT-II	138.7
21.	Ranolazine	200	5	2,6 xylidiene	119.9
22.	Ritonavir	200	3	BDH-succinate salt	223.1
23.	Telmisartan	200	2	Bienzimidazole	168.4
24.	Tenofovir dispproxil Fumarate	100	3	Adenine	38.2
25.	R & D / Custom Synthesis Products	100	--	--	
	Total	**1850**			

2. As per the application, the above activity is to be located at Plot No.11, 11 A, 12 & 12 A, APSEZ, Krishnampalem (V) Rambilli (M), Visakhaptatnam District in an area of 40 Acres or 1,61,880 Sq.m.

3. The above site was inspected by the Environmental Engineer and Asst. Environmental Engineer-I, Regional office, Visakhapatnam, A.P Pollution Control Board on 19.11.2013 and observed that the site is surrounded by

North : APIIC Road followed by APIIC vacant industrial plot

South : APIIC Road followed by vacant plot & water tank

East : M//s. Vasant Chemicals Pvt. Ltd.

West : M/s. Sundaram Alloys Ltd.

4. The Board, after careful scrutiny of the application and verification report of Regional Officer, hereby issues **CONSENT FOR ESTABLISHMENT** to your activity Under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**

5. This Consent Order now issued is subject to the conditions mentioned in Schedule 'A' and Schedule 'B'.

6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

Encl: Schedule 'A'
Schedule `B'

Sd/-
MEMBER SECRETARY

To,
M/s. Escientia Advanced Sciences Pvt., Ltd.,
101, Saptagiri Residency, 1-10-98/A,
Chikoti Gardens, Begumpet, Hyderabad – 500 016.

/// T.C.F.B.O///

JOINT CHIEF ENVIRONMENTAL ENGINEER(CFE)

SCHEDULE - A

1. Progress on implementation of the project shall be reported to the concerned Regional Office, A.P. Pollution Control Board once in six months.

2. Separate energy meters shall be provided for Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed.

3. The proponent shall obtain Consents for Operation (CFO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the activity.

4. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec.27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions by the Board.

5. The consent of the Board shall be exhibited in the factory premises at a conspicuous place for the information of the inspecting officers of different departments.

6. Compensation is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.

7. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas. The industry shall maintain a good housekeeping. All pipe valves, sewers, drains shall be leak proof. Dyke walls shall be constructed around storage of chemicals.

8. Rain Water Harvesting (RWH) structure (s) shall be established on the plant site. The proponent shall ensure that effluent shall not enter the Rain Water harvesting structure.

9. The rules and regulations notified by Ministry of Law and Justice, GOI, regarding the Public Liability Insurance Act, 1991 shall be followed.

10. **This order is valid for period of 5 years from the date of issue.**

SCHEDULE – B

Water:

1. The source of water is APSEZ supply, and the maximum permitted fresh water consumption 109.75 KLD for Phase-I & 191.82 KLD.

Sl. No.	Purpose	Quantity		
		PHASE - I	PHASE - II	TOTAL
1.	Process (Including R & D)	94.75 KLD	184.82 KLD	279.57 KLD
2.	Washings	10.0 KLD	20.0 KLD	30.0 KLD
3.	Scrubber	10.0 KLD + 5.0 KLD (Recycled)	15.0 KLD + 5.0 KLD (Recycled)	25.0 KLD + 10.0 KLD (Recycled)
4.	Boiler Feed	45.0 KLD	90.0 KLD	135.0 KLD
5.	Rejects from Boiler treatment	10.0 KLD	24.0 KLD	34.0 KLD

6.	Cooling Tower	70.0 KLD + 127.0 KLD (Recycled)	100.0 KLD + 240.0 KLD (Recycled)	170.0 KLD + 367 KLD (Recycled)
7.	Gardening	13.0 KLD (Recycled)	27.0 KLD (Recycled)	40.0 KLD (Recycled)
8.	Domestic	15.0 KLD	30.0 KLD	45.0 KLD
	Total	**254.75 KLD**	**463.82 KLD**	**718.57 KLD**
	Recycled	**145.0 KLD**	**272.0 KLD**	**417.0 KLD**

2. The maximum Waste Water Generation (KLD) shall not exceed the following:

Sl. No.	Source	Phase – I		Phase – II		Total (Phase I & II)	
		*HTDS	LTDS	*HTDS	LTDS	*HTDS	LTDS
1.	Process	99.86	--	192.68	--	292.54	--
2.	Washings	10.0	--	20.0	--	30.0	--
3.	Scrubber water	15.0	--	20.0	--	35.0	--
4.	DM Rejects	10.0	--	24.0	--	34.0	--
5.	Boiler Blow down	--	5.0		12.0	--	17.0
6.	Cooling tower blow downs	--	8.0		18.0	--	26.0
7.	Domestic & Canteen	--	13.0		27.0	--	40.0
	Total	**134.86**	**26.0**	**256.68**	**57.0**	**391.54**	**83.0**
	Grand total	**160.86**		**313.68**		**474.54**	
	* Considering TDS > 5000 mg/l as HTDS as reported in EMP.						

Treatment & disposal:

Sl. No	Effluent source	Treatment facilities	Mode of final disposal
1.	HTDS & HCOD effluents	Equalization tank, Neutralization, Settling tank, Stripper, MEE & ATFD	• Shall be stripped off for organics recovery. • Stripper condensate to distillate for separation of organic compounds followed by disposal to cement plants for co-processing & distilled effluents shall be routed to ETP. • Stripped effluents for forced evaporation in MEE followed by ATFD. • Condensate from MEE shall be routed to Biological ETP • ATFD salts to TSDF.
2.	LTDS effluents including utilities blow down	Biological ETP & RO system	• Treated effluents from ETP shall be filtered in the RO Plant. • RO permeate to reuse and RO reject to MEE & ATFD for forced evaporation.
3.	Domestic effluents	STP	Reused for gardening

The Capacities of ZLD Systems for both Phases shall be as mentioned below:

	ZLD facilities	Phase – I	Phase – II
		Capacity (KLD)	
1.	Stripper	135	260
2.	Multi Effect Evaporator	220	400

3.	Agitated Thin Film Dryer	25	50
4.	Biological Treatment Plant	250	420
5.	Reverse Osmosis Plant	250	420

3. The Effluent Treatment Plant (ETP) shall be constructed and commissioned along with the commissioning of the activity. All the units of the ETP shall be impervious to prevent ground water pollution. The ETP units shall be constructed above the ground level.

4. The ZLD system consisting of stripper, MEE & ATFD and RO system and Effluent Treatment Plant (ETP) shall be operated regularly. All the units of the ZLD system shall be impervious to prevent ground water pollution. The units of ZLD system shall be constructed above the ground level.

5. Effluents shall not be discharged onland or into any water bodies under any circumstances and **zero liquid discharge system shall be maintained**. Provisions shall be made for storage of primary treated trade effluents for one day in separate collection tanks constructed above ground level in case of any emergency and shall be treated within one day. The collection tank shall be impervious with proper lining to prevent ground water pollution.

6. During transfer of materials, spillages shall be avoided and garland drains shall be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.

7. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.

   a) Industrial cooling, boiler feed.
   b) Domestic purposes.
   c) Processing, whereby water gets polluted and pollutants are easily bio-degradable.
   d) Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.

8. **The industry shall provide flow meters with totalisers to assess the effluent generated for stream-wise and treated effluents recycled in the plant for each purposes.**

Air:

9. The Air pollution Control equipment shall be installed along with the commissioning of the activity and shall comply with the following for controlling air pollution.

Sl. No	Details of Stack	Phase – I			Phase – II	
		Stack 1 & 2	Stack – 3	Stack 4 to 7	Stack – 8	Stack 9 to 12
a)	Attached to:	Boilers 2 Nos. (Phase – 1)	Thermic fluid heater	D.G. Sets	Boilers (Standby & expansions)	D.G. Sets
b)	Capacity	2 X 4 TPH	30,00,000 K. Cal/hr	4 X 1250 KVA	1 X12 TPH	4 X 1250 KVA
c)	Fuel form :	Furnace Oil	Furnace Oil	HSD	Coal	HSD
d)	Quantity:	300 Ltr/hr	400 Ltr/hr	500 Ltr/hr	3500 Kg/hr	500 Ltr/hr
e)	Stack height:	50	30		32	30
f)	Diameter	500	500	150	1000	150

g)	Control Equipment:	--	--	Acoustic enclosures	Cyclone separator followed by Bag filter	Acoustic enclosures
h)	Conc. Of Particulate matter	<115 mg/Nm^3	<115 mg/Nm^3		<115 mg/Nm^3	

10. The industry shall provide dedicated scrubbers to the process vents to control the process emissions. The industry shall provide online pH measuring facility with auto recording system to the scrubbers provided to treat the process emissions.

11. The industry shall implement adequate measures for control all fugitive emissions from the plant.

12. **The proponent shall ensure compliance of the National Ambient Air quality standards notified by MoEF, GoI vide notification No. GSR. 826 (E), dated. 16.11.2009 during construction and regular operational phase of the project**

13. The proponent shall not use odour causing substances such as Mercaptan or cause odour nuisance in the surroundings.

14. The industry shall not send the used /spent solvents to the recyclers and shall process them at their own solvent recovery plant within the plant premises. Solvents shall be recovered to the maximum extent possible and shall be reused.

15. The evaporation losses in solvents are to be controlled by taking the following measures:

    i) Chilled brine circulation shall be carried out to effectively reduce the solvent losses into the atmosphere.
    ii) Transfer of solvents shall be done by using pumps instead of manual handling.
    iii) Closed centrifuges shall be used so as to reduce the solvent losses drastically.

    iv) The reactor vents shall be connected with primary & secondary condensers to prevent escaping of solvent vapour emissions into atmosphere.
    v) All the solvent storage tanks shall be connected with vent condensers to prevent escaping of solvent vapour emissions into atmosphere.

16. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.

17. The generator shall be installed in a closed area with a silencer and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.

Solid Waste:

18. The proponent has furnished the list of the following by-products from the proposed list of product. There shall not be any new pollution load at on-site of the premises result in from reception, handling and disposal of these by-products / waste streams at source of the industry. The proponent shall maintain log registers on quantity of waste generation and details of end use of the waste disposed.

Sl. No.	Products	By product	Quantity Kg/day	
			Phase I	Phase II
1.	Atazanavir sulphate	Triethylamine HCl	312.7	--
2.	Glipizide	Triethylamine HCl	141.0	--
3.	Abacavir sulphate	Barium tartarate	--	382.0
4.	Atorvastatin calcium	Diketo Compound	--	234.1
		Total	**453.7**	**616.1**

19. The proponent shall comply with the following

Sl. No.	Name of the solid waste	Quantity			Method of Disposal
		Phase - I	Phase- II	Total	
1.	Process organic residue	2840 Kg/day	6118 Kg/day	8958 Kg/day	Shall be disposed to TSDF / Cement Industries for incineration
2.	Process inorganic residue	864 Kg/day	0.2 Kg/day	864.2 Kg/day	Shall be disposed to TSDF
3.	Solvent Residue	2708 Kg/day	4535 Kg/day	7243 Kg/day	Shall be disposed to TSDF/Cement industries for co-incineration
4.	Spent carbon	162 Kg/day	310 Kg/day	472 Kg/day	Shall be disposed to TSDF
5.	Spent catalyst	160 Kg/day	333 Kg/day	493 Kg/day	Shall be disposed to authorized recyclers
6.	Spent solvents	97.85 KL/day	152 KL/day	249.85 KL/day	----
7.	Mixed solvents	10.87 KL/day	16.85 KL/day	27.72 KL/day	Shall be disposed to TSDF / Cement Industries for co-incineration.
8.	Evaporation salts	2.8 TPD	5.8 TPD	9.6 TPD	Shall be sent to TSDF
9.	Stripper Distillate	11.2 KL/day	21.3 KL/day	32.5 KL/day	Shall be sent to cement industries for co-incineration
10.	Chemical sludge / tank bottom sludge / ETP – STP Sludge/ Distillation Bottom residue from cleaning activities	950 Kg/day	3900 Kg/day	4850 Kg/day	Shall be disposed to TSDF
11.	Ash from boiler	--	32.6 TPD	32.6 TPD	Shall be disposed to brick manufacturers
12.	Waste / used spent oil	10 KL/month	10 KL/month	20 KL/month	Shall be disposed to authorized recyclers

13.	Discarded containers / barrels / liners contaminated with hazardous wastes or chemicals	500 nos/year	700 nos/year	1200 nos/year	Shall be disposed to authorized agencies
14.	Used Batteries	50 nos/year	50 nos/year	100 nos/year	Shall be disposed to authorized recyclers

20. The proponent shall place the chemical drums and / or any drums in a shed provided with concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system.

21. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank.

22. The following rules and regulations notified by the MoE&F, GoI shall be implemented.

    a) Hazardous waste (Management, Handling and Transboundary Movement) Rules, 2008.

    b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.

    c) Batteries (Management & Handling) Rules, 2010.

    d) E-Waste (Management & Handling) Rules, 2012.

Other Conditions:

23. **The industry shall allocate a minimum of 1% of its project cost of Rs.78 crores towards CSR activities during construction period and 0.20% of the project cost per year during operational period for 10 years.**

24. Green belt of adequate width and density shall be developed along the boundary of the industry with minimum area of 20% of total area as stipulated in CFE order of APSEZ. Green belt development shall be started along with the construction.

25. **The industry shall maintain records on source of intermediates for each product-wise and the consolidated records shall be submitted to R.O., Visakhapatnam for every month along with invoice copies of the intermediates outsourced.**

26. The industry shall ensure that solvent recovery efficiency for each stream of solvent shall be minimum 95% after implementation of change of product mix.

27. **The industry shall provide continuous online VOC monitoring system and shall be networked to APPCB for website display.**

28. System of leak detection and repair of pump / pipeline shall be installed in the plant and immediate response team shall be identified for preventive maintenance.

29. The proponent shall ensure that there shall not be any change in the process technology, source of raw material and scope of working without prior approval from the Board.

30. The proponent shall comply with all the directions issued by the Board from time to time.

31. Concealing the factual data or submission of false information/ fabricated data and failure to comply with any of the conditions mentioned in this order and attract action under the provisions of relevant pollution control Acts.

32. The Board reserves its right to modify above conditions or stipulate new / additional conditions and to take action including revoke of this order in the interest of environment protection.

33. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules,1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

Sd/-
MEMBER SECRETARY

To,
M/s. Escientia Advanced Sciences Pvt., Ltd.,
101, Saptagiri Residency, 1-10-98/A,
Chikoti Gardens, Begumpet, Hyderabad – 500 016.

/// T.C.F.B.O///

JOINT CHIEF ENVIRONMENTAL ENGINEER(CFE)

Annexure - 5b

ANDHRA PRADESH POLLUTION CONTROL BOARD
D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavaari Street, Kasturibaipet, Vijayawada - 520 010
Phone. No.0866-2436217, Website : www.appcb.ap.nic.in

RED CATEGORY
CONSENT & AUTHORIZATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VSP/VSP/327/HO/CFO/2018- **Date: 28.02.2018**

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A,
APSEZ, Atchutapuram & Rambilli (M),
Visakhaptatnam District
E-mail: Kiran.reddy.pendri@gmail.com

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

(i) Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1	**HTDS** - Process -87.86 KLD + Washings -10.0 KLD Scrubber water – 15.0 KLD	112.86 KLD	The industry shall send the pretreated effluent to MEE of CETP, JN pharmacity, till the CETP Atchutapuram is commissioned. **The industry should reduce the production to limit the treated effluent quantity whenever the CETP, JN pharmacity receives effluent more than its capacity.**
2	**LTDS** DM & Water plant rejects – 10.0 KLD + Boiler blow down – 7.0 KLD + Cooling tower blow down – 18.0 KLD + Domestic & Canteen – 13.0 KLD	48.0 KLD	The industry shall send the pretreated effluent to CETP, JN pharmacity, till the CETP Atchutapuram is commissioned. **The industry should reduce the production to limit the treated effluent quantity whenever the CETP, JN pharmacity receives effluent more than its capacity.**

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow
1.	Attached to 1 x 3.5 TPH Oil fired boiler	-
2.	Attached to 2 x 1500 KVA DG sets	-

iii) HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 6 (2)]:

M/s. Escientia Advanced Sciences Pvt., Ltd., Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Visakhaptatnam District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

- **HAZARDOUS WASTES WITH DISPOSAL OPTION:**

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option
1.	Process Organic residue	28.1 of Schedule – I	2840 Kg/day	Shall be disposed to TSDF for co-processing / Cement Industries for incineration
2.	Process inorganic residue	28.1 of Schedule - I	864 Kg/day	Shall be disposed to TSDF for secured land filling.
3.	Spent carbon	28.3 of Schedule - I	162 Kg/day	Shall be disposed to TSDF/ Cement Industries for incineration
4.	ETP Sludge	35.3 of Schedule - I	10 Kg/day	Shall be disposed to TSDF for secured land filling

- **HAZARDOUS WASTES WITH RECYCLING OPTION:**

S.No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Method of disposal
1.	Discarded containers / barrels / liners contaminated with hazardous wastes or chemicals	33.1 of Schedule-I	500 nos/year	To authorized agencies
2.	Waste / used spent oil	5.1 of Schedule-I	6 KL/Annum	Shall be disposed to authorized recyclers
3.	Spent solvents	28.6 of Schedule-I	97.85 KL/day	Shall be disposed to authorized recyclers
4.	Spent catalyst		160 Kg/day	Shall be disposed to authorized recyclers
5.	Mixed solvents	28.6 of schedule I	10.87 KL/day	Shall be disposed to authorized recyclers
6.	STP Sludge	35.3 of schedule I	2 Kg/day	To be used as manure

This consent order is valid for manufacturing the following products along with quantities indicated only:

S. No.	Name of the Products	Quantity in Kg/day	No of Stages	Starting raw material	Quantity (Kg/day)
		Phase I			
1.	Atazanavir Sulphate	300	4	(2S)-2-amino-3,3-dimethylbutanoic acid	179.9
2.	Darunavir Ethanolate	300	4	DNV – II – intermediate	372.4
3.	Donepezil Hydrochloride	300	2	5,6 Dimethoxy-1-inadanone	261.7
4.	Febuxostat	300	2	Ethyl-2-(3-cyano-4-isobutoxyphenyl)-4-methyl-5-thiazolecarboxylate	463.8
5.	Fexofenadine Hydrochloride	300	6	2-([4-(4-chloro-1-oxobutyl)phenyl]-2-methylpropanoic acid (BW-08)	361.6

6.	Glipizide	300	4	5-methyl-2-pyrazine carboxylic acid (5-MPCA)	262.5
7.	Lanzoprazole	300	4	2-Chloro-3-methyl-4-(2,2,2-trifluoroethoxy) Pyridine HCl	461.7
8.	Levetiracetam	400	2	(2S)-2-aminobutanamide HCL	412
9.	R & D/Custom Synthesis Products	100	Various	Various	----
	Total	**2600**			

By products

Sl. No.	Products	By product	Quantity in Kg/day
			Phase I
1.	Atazanavir sulphate	Triethylamine HCl	312.7
2.	Glipizide	Triethylamine HCl	141.0
		Total	**453.7**

This order is subject to the provisions of `the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the **31st day of December, 2018.**

B S S Prasad
Digitally signed by B S S Prasad
DN: c=IN, o=Member Secretary, A.P. Pollution Control Board, ou=E.F.S. & T., cn=B S S Prasad, postalCode=500018, st=ANDHRA PRADESH
Date: 2018.02.28 15:12:39 +05'30'

MEMBER SECRETARY

To

M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A,
APSEZ, Atchutapuram & Rambilli (M),
Visakhaptatnam District

Copy to :

1. The JCEE, Zonal Office, **Visakhapatnam** for information and necessary action.
2. The **JCEE, Unit-II,** APPCB, **Vijayawada** for information.
3. The **JCEE (HWM)**, APPCB, **Vijayawada** for information.
4. The Environmental Engineer, Regional Office, **Visakhapatnam** for information and necessary action.

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.

5. Not withstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
9. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

SCHEDULE-B

WATER POLLUTION:

1. The LTDS effluents sent to CETP, Pharmacity shall not contain constituents in excess of the tolerance limits mentioned below, as per their MoU with M/s Ramky Pharma City.

Outlet	Parameter	Concentration in mg/l
2*	pH	6.50 – 8.50
	Temperature ^{o}C	< $45^{0}C$
	TDS	12,000 mg/l
	TSS	600 mg/l
	BOD	3,000 mg/l
	COD	8,000 mg/l
	Oil and Grease	20 mg/l
	Chromium Hexavalent (as Cr+6)	2 mg/l
	Chromium (total) (as Cr)	2 mg/l
	Ammonical Nitrogen (as N)	30 mg/l
	Cyanide (as CN)	0.20 mg/l
	Lead (as Pb)	1 mg/l
	Nickel (as Ni)	3 mg/l
	Zinc (as Zn)	15 mg/l
	Arsenic (as As)	0.20 mg/l
	Mercury (as Hg)	0.01 g/l

(* The industry shall segregate the HTDS and LTDS effluent streams and the effluents which are not meeting the above standards shall be treated as HTDS effluents and shall be sent MEE of Pharmacity for evaporation.).

2. The source of water is APIIC Supply. The following is the permitted water consumption:

Sl. No.	Purpose	Quantity (KLD)
1	Industrial cooling, boiler feed.	**190.0 KLD (127.0 KLD recirculation)**
2	Domestic & Gardening purposes	**28.0 KLD (13.0 KLD recirculation)**
3	Process, whereby water gets polluted and pollutants are easily bio degradable.	--
4	Processing, whereby water gets polluted and the pollutants are not easily bio – degradable.	**129.75**

	Total	**347.75 KLD (207.75 fresh water+140 recycled)**

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above for Cess assessment purpose.

3. The industry shall send the pre-treated effluents to the CETP, JN Pharma city till the CETP, Atchutapuram SEZ is commissioned. The industry should reduce the production to limit the treated effluent quantity whenever the CETP, JN Pharmacity receives effluents more than its capacity.
4. The industry shall provide containers detoxification facility. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank.
5. The industry shall provide multi-stage scrubbers to the process vents to control the process emissions. The industry shall provide online pH measuring facility with auto recording system to the scrubbers provided to treat the process emissions.
6. The evaporation losses in solvents shall be controlled by taking the following measures:
   i. Chilled brine circulation to effectively reduce the solvent losses into the atmosphere.
   ii. Transfer of solvents by using pumps and closed conveyance instead of manual handling.
   iii. Closed centrifuges be used due to which solvent losses are reduced drastically.
   iv. The reactor vents connected with primary & secondary condensers to catch the solvent vapours.
   v. All the solvent storage tanks are connected with vent condensers to prevent solvent vapours.

AIR POLLUTION:

7. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	Emission Standards
1	Particulate Matter	115 mg/Nm^3

8. The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10μm) - 100 μg/ m3; PM2.5 (Particulate Matter size less than 2.5 μm) - 60 μg/ m3; SO2 - 80 μg/ m3; NOx - 80 μg/m3, outside the factory premises at the periphery of the industry.

   Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

   Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
   Night time (10 PM to 6 AM) - 70 dB (A)

9. The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.

GENERAL:

10. The industry shall not start its operations till the completion of civil works and shall inform to the Board before they start its operations.
11. The industry shall stop operations in case the CETP, JN Pharmacity receives effluents equivalent to permitted capacity of the CETP.
12. The industry shall provide digital flow meters with recording facility and camera focusing the flow meters shall be placed and shall be connected to CPCB website.
13. The industry shall provide VOC meter with recording facility.
14. The industry shall provide container detoxification facility.
15. The industry shall provide online pH meter with recorder to the scrubber and VOC meter with recorder.
16. The industry shall install flow meters for HTDS and LTDS effluents and shall install web cameras as per the CPCB directions and provide connectivity to CPCB / APPCB server immediately.
17. The industry shall provide storm water collection system for the first flush during rainy season and the contaminated storm water shall be sent to CETP for treatment.
18. The industry shall not manufacture any product, other than those mentioned in this order.

19. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
20. The industry shall maintain log books on the following:
    i. Hydraulic loads of effluent generation
    ii. Characteristics of effluents
    iii. Quantity of effluents generated
    iv. Furnish consolidated daily records on the above periodically once in **three months** to the RO.
21. The industry shall comply with CPCB directions dated 05.02.2014 / 02.03.2015 and guidelines issued regarding online monitoring systems issued from time to time.
22. The industry shall maintain separate power consumption records pertaining to pollution control equipment.
23. The industry shall take all safety measures and provide firefighting equipment in the plant.
24. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
    a. Daily production details (ER-1 Central Excise Returns).
    b. Quantity of Effluents generated, treated, recycled/reused and disposed to CETP.
    c. Log Books for pollution control systems.
    d. Characteristics of effluents and emissions.
    e. Hazardous/non hazardous solid waste generated and disposed.
    f. Inspection book.
    g. Manifest copies of effluents / hazardous waste.
25. The industry shall comply with all the conditions stipulated in the CFE order dated 07.02.2014 and CFE (Amendment) order dated 25.02.2018.
26. The industry shall develop green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry.
27. Any other directions / circulars / notices issued by CPCB, MoEF&CC and APPCB shall be followed from time to time.

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
4. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
5. The industry shall maintain proper records for Hazardous & other wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 6 (5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof.
6. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

B S S Prasad

Digitally signed by B S S Prasad
DN: c=IN, o=Member Secretary, A.P. Pollution Control Board, ou=E.F.S. & T., cn=B S S Prasad, postalCode=500018, st=ANDHRA PRADESH
Date: 2018.02.28 15:13:18 +05'30'

MEMBER SECRETARY

To

M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A,
APSEZ, Atchutapuram & Rambilli (M),
Visakhaptatnam District

Annexure - 6a

ANDHRA PRADESH POLLUTION CONTROL BOARD
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony,
Autonagar, Vijayawada- 520007.
Website: www.pcb.ap.gov.in

CONSENT TO ESTABLISH ORDER

Order No.327/APPCB/CTE/RO-VSP/HO/2014 **Dt: 23/04/2024**

Sub: APPCB – CTE - **M/s. Escientia Advanced Sciences Pvt., Ltd., Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District -** Consent to Establish (CTE) of the Board for **Change of Product Mix** under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

Ref:
1. CTO order dt.09.01.2024.
2. Industry's CTE(CPM) application received through APOCMMS on 11.03.2024.
3. Z.O inspection report dt.08.04.2024.
4. CTE Committee meeting held on 12.04.2024.
5. Industry's lr.dt.12.04.2024.

1. **M/s. Escientia Advanced Sciences Pvt., Ltd.,** vide reference 2nd cited, submitted an application to the Board seeking Consent to Establish (CTE) for **CHANGE OF PRODUCT MIX** to produce the following products with installed capacities as mentioned below, with a project cost of Rs.261.80Cr.

As per CTO Order dt.09.01.2024:

S. No.	Name of the Products	Quantity (Kg/day) Phase I
1.	Atazanavir Sulphate	300
2.	Darunavir Ethanolate	300
3.	Donepezil Hydrochloride	300
4.	Febuxostat	300
5.	Fexofenadine Hydrochloride	300
6.	Glipizide	300
7.	Lanzoprazole	300
8.	Levetiracetam	400
9.	R & D/Custom Synthesis Products	100
	Total	**2600 (Kg/day)**

By products:

S. No.	Products	By product	Quantity (Kg/day) Phase I
1.	Atazanavir sulphate	Triethylamine HCl	312.7
2.	Glipizide	Triethylamine HCl	141.0
		Total	453.7

After CTE (CPM):

S. No.	Name of the Products	Quantity (Kg/day)	No of Stages	Starting raw material	Quantity (Kg/day)
1.	Darunavir Ethanolate	300	4	DNV – II – intermediate	372.4
2.	Donepezil Hydrochloride	300	2	5,6 Dimethoxy-1-inadanone	261.7
3.	Febuxostat	300	2	Ethyl-2-(3-cyano-4-isobutoxyphenyl)-4-methyl-5-thiazolecarboxylate	463.8
4.	Fexofenadine Hydrochloride	300	6	2-([4-(4-chloro-1-oxobutyl)phenyl]-2-methylpropanoic acid (BW-08)	361.6
5.	Glipizide	300	4	5-methyl-2-pyrazine carboxylic acid (5-MPCA)	262.5
6.	Lanzoprazole	300	4	2-Chloro-3-methyl-4-(2,2,2-trifluoroethoxy) Pyridine HCl	461.7
7.	Levetiracetam	400	2	(2S)-2-aminobutanamide HCL	412
8.	Rimegepant sulphate	210.0	4	(2S)-2-amino-3,3- dimethyl butanoic acid	65.7
9.	Zavegepant Hydrochloride	90.0	2	1-Benzyl Piperidine-4-Carbaldehyde Adduct	94.50
10.	R & D/Custom Synthesis Products	100			
	Total	**2600 (Kg/day)**			

By products:

S. No.	Products	By product	Quantity (Kg/day) Phase I
1.	Rimegepant Sulphate	Triethylamine HCl	312.6
2.	Glipizide	Triethylamine HCl	141.0
		Total	**453.6**

2. As per the application, the above activity is to be located in the existing premises located at Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District, in an area of 40 acres.

3. The above site was inspected by the Senior Environmental Engineer, Zonal Office: Visakhapatnam & Environmental Engineer, Regional Office: Visakhapatnam, A.P Pollution Control Board on 03.04.2024 and observed that the site is surrounded by

North : Road
South : M/s Laurus Labs unit II
East : M/s. Vasant Chemicals Pvt Ltd.,
West : M/s. Sundaram Alloys Ltd.,

4. The Board, after careful scrutiny of the application, verification report of Zonal Officer, and recommendations of the CTE Committee, hereby issues **CONSENT TO ESTABLISH FOR**

CHANGE OF PRODUCT MIX to the project under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**

5. This Consent order issued is subject to the conditions mentioned in the Annexure.

6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

7. **This order is valid for period of 7 years from the date of issue.**

Encl: Annexure

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M), Anakapalli District
Email: Kiran.reddy.pendri@gmail.com

Copy to: 1. The JCEE, Z.O: Visakhapatnam for information and necessary action.
2. The EE, R.O: Visakhapatnam for information and necessary action.

Annexure

1. The proponent shall obtain Consent to Operate (CTO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the trail runs.

2. The applicant shall provide separate energy meters for Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed. An alternative electric power source sufficient to operate all pollution control systems shall be provided.

3. The industry shall construct separate storm water drains and provide rain water harvesting structures. No effluents shall be discharged in to the storm water drains.

Water:

4. **The source of water is APIIC and the maximum permitted water consumption is as following:**

S. No.	Purpose	**Quantity as per CTO Order dt.09.01.2024 (KLD)**	**Quantity after CTE (CPM) (KLD)**
1.	Process	94.75	82.38
2.	Washings	10.0	10.0
3.	Scrubber	15.0	15.0
4.	Boiler Feed	45.0	45.0
5.	DM Plant / Softener rejects	10.0	10.0
6.	Cooling tower	18.0 + 127.0 (recirculation)	145
7.	Domestic	15.0	15.0
8.	Gardening	13.0 (recycled water)	13.0
	Total	**347.75 (207.75 fresh water + 140 recycled)**	**335.38**

Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned above.

5. **The maximum waste water generation shall not exceed the following:**

S. No	**Source**	**Quantity as per CTO Order dt.09.01.2024 (KLD)**			**Quantity after CTE (CPM) (KLD)**		
		HTDS	**LTDS**	**TOTAL**	**HTDS**	**LTDS**	**TOTAL**
1.	Process	87.86	--	87.86	87.84	--	87.84
2.	Washings	10.00	--	10	10.00	--	10
3.	Boiler blowdown	--	7.0	7	--	7.0	7
4.	Cooling Tower blowdown	--	18.0	18	--	18.0	18
5.	DM Plant regeneration	--	10.00	10	--	10.00	10
6.	Scrubber	15.00	--	15	15.00	--	15

7.	Domestic	--	13.00	13	--	13.00	13
	Total	**112.86**	**48**	**160.86**	**112.84**	**48**	**160.84**

Treatment & disposal:

Source of effluent	Treatment	Mode of final disposal
HTDS & HCOD effluent	Equalization tank & Neutralization	To M/s. AETL (CETP of Atchutapuram) for further treatment
LTDS effluent including utilities blow down	Equalization tank & Neutralization	To M/s. AETL (CETP of Atchutapuram) for further treatment and disposal.
Domestic waste water	Septic tank	Overflow to the CETP along with LTDS effluent

After CTE (CPM): No change

6. Effluents shall not be discharged on land or into any water bodies or aquifers under any circumstances.

7. The industry shall provide magnetic flow meters with totalisers at the outlet of the unit.

8. The industry shall properly operate and maintain online real time monitoring system along with web camera facilities and shall ensure that it is connected to APPCB / CPCB websites as per CPCB directions.

9. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas. All pipe valves, sewers, drains shall be leak proof.

10. **The LTDS and HTDS effluents shall be stored in above ground level collection tanks separately. The industry shall provide hoods over the effluent storage tanks, and the vents shall be connected to scrubbers**.

11. The industry shall provide tank in tank system for effluent collection at production blocks. Free board shall be maintained in the tanks to prevent spillages.

12. The industry shall construct rain water runoff tank for collection and storage of first flush storm water. The industry shall maintain dry condition outside drains in un-rainy season.

Air:

13. The Air pollution Control equipment shall be installed along with the commissioning of the activity and shall comply with the following for controlling air pollution:

As per CTO Order dt.09.01.2024:

S. No.	Details of Stack	Stack 1	Stack 2	Stacks 3 & 4
a.	Attached to:	Oil fired Boiler	Oil fired Boiler	DG Set
b.	Capacity	3.5 TPH	2.0 TPH (standby)	2 X 1500 KVA
c.	Fuel form:	HSD	HSD	HSD
d.	Stack Height	Common stack of height 42 m		30 m each
e.	Control Equipment	---	---	Acoustic enclosures and silences
f.	Conc. of particulate matter	100 mg/Nm^3		--

After CTE (CPM): Not proposed any Boiler / DG Set

14. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.

15. The industry shall properly operate and maintain the monitoring system to all the stacks / vents in the plant. Regular monitoring shall be carried out and report shall be submitted to the Regional officer.

16. The industry shall properly operate and maintain multi-stage scrubbers to the process vents to control the process emissions. The industry shall ensure that online pH measuring facility with auto recording system is connected to the scrubbers.

17. The industry shall properly operate and maintain VOC monitoring system with auto recording facility.

18. The industry shall implement adequate measures to control all fugitive emissions from the plant.

19. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MoEF, GoI vide notification No. GSR. 826 (E), dated. 16.11.2009 during construction and regular operational phase of the project at the periphery.

    The generator shall be installed in a closed area with a silencer and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.

20. The proponent shall not use or generate odour causing substances or Mercaptans and cause odour nuisance in the surroundings.

21. The industry shall send the used / spent solvents to the recyclers (or) process them at their own solvent recovery facility within the premises.

22. The evaporation losses in solvents shall be controlled by taking the following measures:

i. Chilled brine circulation shall be carried out to effectively reduce the solvent losses into the atmosphere.
ii. Transfer of solvents shall be done by using pumps instead of manual handling.
iii. Closed centrifuges shall be used to reduce solvent losses.
iv. All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
v. The reactor vents shall be connected with primary & secondary condensers to prevent escaping of solvent vapour emissions into atmosphere.

Solid / Hazardous waste:

23. **The industry shall comply with the following for disposal of Solid waste:**

S. No	Name of the Hazardous waste	Quantity after CTE (CPM)	Disposal Option
1.	Process organic residue	2778.9 Kg/day	Shall be routed through APEMC to preprocessors / cement industries for coprocessing / TSDF
2.	Spent carbon	178.9 Kg/day	
3.	Process inorganic residue	891.10 Kg/day	Shall be routed through APEMC to TSDF for secured land filling.
4.	ETP Sludge	10Kg/day	
5.	Spent Mixed Solvents (colored)	10 KLD	Shall be routed through M/s. APEMC so as to send to preprocessors / Cement industries for co-processing (as utilizable waste)
6.	Filtration bags	500 Kgs/Month	
7.	Discarded containers/ barrels/liners contaminated with hazardous wastes or chemicals	500 nos/month	Shall be routed through APEMC to TSDF for detoxification and disposal (or) After complete detoxification, to authorized agencies / recyclers
8.	Waste / used spent oil	6KL/Annum	Shall be disposed to authorized recyclers through APEMC
9.	Spent solvents	97.85KL/day	Shall be recovered within the premises in their SRS unit / disposed to authorized SRS units through APEMC
10.	Spent catalyst	176.9 Kg/day	Shall be disposed to authorized recyclers / return to suppliers through APEMC
11.	Mixed solvents	10.87KL/day	Shall be disposed to authorized SRS units / Cement industries for co-processing through APEMC
12.	Lead Acid Batteries	50 Nos/month	Shall be routed through APEMC to dealers on buy back system
13.	E – waste	2000 Kg/year	Authorized collection centers / recyclers / dismantler / disposal facility

14.	Used tube lights	100 nos/month	through APEMC
15.	Paper, cotton waste & packing material i.e., wood, carton, ropes etc.,	2TPM	Sale to outside agencies / recyclers
16.	Ply wood boxes, tins	2TPM	
17.	Coal Ash	---	TSDF to use as stabilizing agent / Brick manufacturers
18.	Thermo coal waste	100 kgs/month	Shall be routed through M/s. APEMC, so as to send to TSDF, Parawada for incineration. (as Incinerable waste)
19.	Pharma dust from clean rooms, Pharma rooms, AHUs, and floor Sweeping	100 kgs/month	
20.	Discarded resins	2000 Kgs/month	
21.	Insulation waste a) Nitrile Rubber	1000 kgs/month	
22.	Discarded personal protective equipment (General waste)	100 kgs/day	
23.	Off specification & discarded products / raw materials/ intermediates / lab chemicals	250 kgs/day	Shall be routed through M/s. APEMCL so as to send to preprocessors / Cement industries for co-processing (as utilizable waste)& Incinerable waste
24.	HEPA filters / oil filters / paint tins	100 kgs/day	
25.	Insulation waste - Glass wool	500 kgs/month	Shall be routed through M/s. APEMCL so as to send to (as Landfill waste)
26.	Laboratory vials	100 kgs/month	
27.	Spill contaminant Waste	5 kg/day	
28.	container liners	2000 kgs/month	Shall be routed through M/s. APEMC so as to dispose to outside agencies after detoxification
29.	Empty glass bottles	500 Nos/month	
30.	STP sludge	2 kg/day	Shall be routed through APEMC TSDF, Parawada for secured land filling.

24. The proponent shall place the chemical drums and / or any drums in a shed provided with concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system. The industry shall provide containers

detoxification facility. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank.

25. The following rules and regulations notified by the MoEF&CC, GoI shall be implemented.

a) Regulation of Persistent Organic Pollutants Rules, 2018.
b) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
c) Plastic Waste Management Rules, 2016.
d) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
e) Fly Ash Notification, 2016.
f) Batteries (Management & Handling) Rules, 2010.
g) E-Waste (Management) Rules, 2016.
h) Construction and Demolition waste Management Rules, 2016.
i) Solid Waste Management Rules, 2016.
j) The Public Liability Insurance Act, 1991 and its amendments thereof.

Other Conditions:

26. **The industry shall not to use Furnace Oil as fuel for the Boilers, shall be used LSD/HSD.**

27. "The industry shall comply with the industry specific standards with respect to emissions tank farm vents stipulated by the MoEF&CC, GoI, New Delhi vide Notification GSR541(E), dt.06.08.2021."

S. No.	***Details of process emissions***	***Emission Control system***	***Emission Standard***
1.	HCl	Multi stage scrubbers in series.	35 mg/Nm^3
2.	NH_3		30 mg/Nm^3
3.	Chlorine		15 mg/Nm^3
4.	Benzene		5 mg/Nm^3
5.	Toluene		100 mg/Nm^3
6.	Acetonitrile		1000 mg/Nm^3
7.	Dichloromethane		200 mg/Nm^3
8.	Xylene		100 mg/Nm^3
9.	Acetone		2000 mg/Nm^3

28. The industry shall display online data outside the main factory gate on quantity and nature of hazardous chemicals being used in the plant, water & air emissions and solid waste generated within the factory premises, as per Hon'ble Supreme Court order.

29. **The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved**

by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.

30. **The industry shall submit a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.**

31. **The industry shall submit risk assessment report covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.**

32. **The industry shall obtain PESO clearance & policy under PLI Act before applying for CTO of the Board.**

33. The industry shall inventorize the storage quantities of hazardous chemicals (raw materials), products, as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.

34. The industry shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the industry shall extend training to the working personnels while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.

35. The industry shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office. The industry shall install fluorescent Wind Vane at the highest point in the industry premises.

36. **The industry shall comply with the Technical suggestions at Chapter No. 7.3 & 7.4 for Hazardous Chemical handling industries by High Power Committee (HPC) of Govt. of Andhra Pradesh. The HPC report is available at www.ap.gov.in.**

37. The industry shall utilize DG power for captive consumption only & power shall not be supplied to grid and shall follow the amendments issued by MoEF & CC/CPCB from time to time on DG sets in respect of conditions & standards.

38. Thick green belt shall be maintained all along the boundary & vacant spaces with tall growing trees with good canopy and it shall not be less than 22% of the total area.

39. **The industry shall submit compliance to the conditions stipulated in the CTE orders to the concerned Regional Officer of APPCB every six months and**

shall upload the same at APPCB website viz., https://pcb.ap.gov.in/UI/Submission_Compliance_of_EC_CTE_CTO_Direction.aspx **.**

40. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Regional Office and Zonal Office of the Board.

41. Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.

42. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec. 27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions.

43. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules,1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M), Anakapalli District.

Digitally Signed by B Sreedhar Ias
Date: 23-04-2024 11:19:18
Reason: Approved

Annexure - 6b

ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

RED CATEGORY
CONSENT TO OPERATE & HAZARDOUS WASTE AUTHORIZATION ORDER

Consent Order No: APPCB/VSP/VSP/418/HO/CTO/2024 Date: 25/05/2024

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorization under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s. Escientia Advanced Sciences Pvt., Ltd., (Change of Product Mix)
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M),
Anakapalli District
Email: Kiran.reddy.pendri@gmail.com

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i. **Outlets for discharge of effluents:**

Outlet No.	Outlet Description	Max Daily Discharge KLD	Point of Disposal
1.	HTDS & HCOD Effluents Process -87.84 KLD + Washings -10.0 KLD Scrubber water – 15.0 KLD	112.84	The industry shall send the pre-treated effluent to MEE of CETP, Atchutapuram through APEMC for treatment.
2.	LTDS DM & Water plant rejects – 10.0 KLD + Boiler blow down – 7.0 KLD + Cooling tower blow down – 18.0 KLD	35.0	The industry shall send the pre-treated effluent to CETP, Atchutapuram through APEMC for final treatment and disposal.
3.	Domestic	13.0	The over flow from the septic tank shall be sent to the CETP, Atchutapuram along with LTDS effluent through APEMC.
	Total	**160.84 KLD**	

ii. **Emissions from chimneys:**

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow
1.	Attached to 3.5 TPH Oil fired Boiler	---
2.	Attached to 2.0 TPH Oil fired Boiler	---

	(standby)	
3.	Attached to 2 X 1500 KVA DG Set	---
4.	Process Emissions	---

iii. **Hazardous Waste Authorization (Form – II) [See Rule 6 (2)]:**

M/s. Escientia Advanced Sciences Pvt., Ltd., Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

- **Hazardous Wastes with Disposal Option:**

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option
1.	Process organic residue	28.1 of Schedule–I	2778.9 Kg/day	Shall be routed through APEMC to preprocessors / cement industries for co-processing / TSDF.
2.	Spent carbon	28.3 of Schedule–I	178.9 Kg/day	
3.	Process inorganic residue	28.1 of Schedule–I	891.10 Kg/day	Shall be routed through APEMC to TSDF for secured land filling.
4.	ETP Sludge	35.3 of Schedule-I	10 Kg/day	
5.	Spent Mixed Solvents (colored)	28.6 of Schedule–I	10 KLD	Shall be routed through M/s. APEMC so as to send to pre-processors / Cement industries for co-processing (as utilizable waste).
6.	Filtration bags	33.1 of Schedule–I	500 Kgs/Month	

- **Hazardous Wastes with Recycle Option:**

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option
1.	Discarded containers/ barrels/liners contaminated with hazardous wastes or chemicals	33.1 of Schedule–I	500 nos/month	Shall be routed through APEMC to TSDF for detoxification and disposal (or) After complete detoxification, to authorized agencies/ recyclers.
2.	Waste / used spent oil	5.1 of Schedule–I	6 KL/Annum	Shall be disposed to authorized recyclers through APEMC.
3.	Spent solvents	28.6 of Schedule–I	97.85 KL/day	Shall be recovered within the premises in their SRS unit/ disposed to authorized SRS units through APEMC.
4.	Spent catalyst	28.2 of Schedule–I	176.9 Kg/day	Shall be return to suppliers.

5.	Mixed solvents	28.6 of Schedule–I	10.87 KL/day	Shall be disposed to authorized SRS units / Cement industries for co- processing through APEMC.
6.	Thermo coal waste	33.2 of Schedule–I	100 kgs/month	Shall be routed through M/s. APEMC, so as to send to TSDF, Parawada for incineration. (as Incinerable waste) .
7.	Pharma dust from clean rooms, Pharma rooms, AHUs, and floor Sweeping	33.2 of Schedule–I	100 kgs/month	
8.	Discarded resins	33.2 of Schedule–I	2000 Kgs/month	
9.	Insulation waste a) Nitrile Rubber	33.2 of Schedule–I	500 kgs/month	
10.	Discarded personal protective equipment (General waste)	33.2 of Schedule–I	100 kgs/day	
11.	Off specification & discarded products / raw materials/ intermediates / lab chemicals	28.4 of Schedule–I	250 kgs/day	Shall be routed through M/s. APEMCL so as to send to pre-processors / Cement industries for co-processing (as utilizable waste) & Incinerable waste.
12.	HEPA filters / oil filters / paint tins	33.2 of Schedule–I	100 kgs/day	
13.	Insulation waste - Glass wool	33.2 of Schedule–I	500 kgs/month	Shall be routed through M/s. APEMCL so as to send to (as Landfill waste).
14.	Laboratory vials	--	100 kgs/month	
15.	Spill contaminant Waste	33.2 of Schedule–I	5 kg/day	
16.	container liners	33.1 of Schedule–I	2000 kgs/month	Shall be routed through M/s. APEMC so as to dispose to outside agencies after detoxification.
17.	Empty glass bottles	--	500 Nos/month	
18.	Used Lead Acid Batteries	17.4 of Schedule-1	50 Nos/month	Shall be returned to dealers on buy back policy / authorized recyclers through APEMC as per Battery Waste Management Rules, 2022.

This consent order is valid for manufacture the following products along with quantities indicated only:

S.No.	Name of the Products	Quantity in Kg/day	No of Stages	Starting raw material	Quantity (Kg/day)
1.	Darunavir Ethanolate	300	4	DNV – II – intermediate	372.4
2.	Donepezil Hydrochloride	300	2	5,6 Dimethoxy-1-inadanone	261.7
3.	Febuxostat	300	2	Ethyl-2-(3-cyano-4-isobutoxyphenyl)-4-methyl-5-thiazolecarboxylate	463.8
4.	Fexofenadine Hydrochloride	300	6	2-([4-(4-chloro-1-oxobutyl)phenyl]-2-methylpropanoic acid (BW-08)	361.6
5.	Glipizide	300	4	5-methyl-2-pyrazine carboxylic acid (5-MPCA)	262.5
6.	Lanzoprazole	300	4	2-Chloro-3-methyl-4-(2,2,2-trifluoroethoxy) Pyridine HCl	461.7
7.	Levetiracetam	400	2	(2S)-2-aminobutanamide HCL	412
8.	Rimegepant sulphate	210.0	4	(2S)-2-amino-3,3- dimethyl butanoic acid	65.7
9.	Zavegepant Hydrochloride	90.0	2	1-Benzyl Piperidine-4-Carbaldehyde Adduct	94.50
10.	R & D/Custom Synthesis Products	100			
	Total	**2600**			

By-Products:

Sl. No.	Products	By product	Quantity in Kg/day
			Phase I
1.	Rimegepant Sulphate	Triethylamine HCl*	312.6
2.	Glipizide	Triethylamine HCl*	141.0
		Total	**453.6**

***** The industry shall reuse the Tri-ethyl-amine HCl within the industry.

The industry shall submit disposal (sale) details of the above by-products every month to the Regional Office, Visakhapatnam & Zonal Office, Visakhapatnam. In case the by-products cannot be sold in the market due to any reasons and same shall be treated as waste and disposed as per the norms.

This order is subject to the provisions of `the Acts' and the Rules' and orders made there under and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent to operate & Hazardous Waste Authorization shall be valid for a period ending with the **31st day of December, 2028.**

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M),
Anakapalli District.
Email: Kiran.reddy.pendri@gmail.com

Copy to:

1. The JCEE, Zonal Office, **Visakhapatnam** for information and necessary action.
2. The EE, Regional Office, **Visakhapatnam** for information and necessary action.

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
4. The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
5. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
6. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board.
7. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
8. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority

constituted under Section 28 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

9. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
10. The industry may explore the possibility of tapping the solar energy for their energy requirements.
11. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE-B

The issue of CTO&HWA (CPM) to the industry was placed in the Consent Management Committee meeting held on 16.05.2024. The industry shall comply with the following conditions.

1. The industry shall provide vent condensers to solvent storage tanks, by 30.06.2024.
2. The industry shall provide hood with scrubber on the top of the effluent storage tanks by, 31.07.2024.
3. The industry shall reuse the Tri-ethyl-amine HCl within the industry.
4. The industry shall not produce prohibited drugs in the R&D unit.

Water Pollution:

5. The source of water is **APIIC Supply**. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

S. No.	Purpose	Quantity (KLD)
1.	Process	82.38
2.	Washings	10.0
3.	Scrubber	15.0
4.	Boiler Feed	45.0
5.	DM Plant / Softener rejects	10.0
6.	Cooling tower	145
7.	Domestic	15.0
8.	Gardening	13.0
	Total	**335.38**

Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned above.

6. The LTDS effluents sent to CETP, shall not contain constituents in excess of the tolerance limits mentioned below, as per their MoU:

Outlet	Parameters	Concentration in mg/l
2	pH	6.50 – 8.50
	Temperature ^{0}C	< 45^0 C
	TDS	12,000 mg/l

	TSS	600 mg/l
	BOD	3,000 mg/l
	COD	8,000 mg/l
	Oil and Grease	20 mg/l
	Chromium Hexavalent (as Cr^{+6})	2 mg/l
	Chromium (total) as Cr)	2 mg/l
	Ammonical Nitrogen (as N)	30 mg/l
	Cynide (as CN)	0.20 mg/l
	Lead (as Pb)	1 mg/l
	Nickel (as Ni)	3 mg/l
	Zinc (as Zn)	15 mg/l
	Arsenic (as As)	0.20 mg/l
	Mercury (as Hg)	0.01 mg/l

***The industry shall segregate the HTDS and LTDS effluent streams and the effluents which are not meeting the above standards shall be treated as HTDS effluents and shall be sent CETP of AETL for evaporation.**

7. The industry shall maintain Electro Magnetic flow meters with totalisers for water consumption, effluent generation mentioned in this Order.
8. The industry shall maintain HDPE tanks / tank in tank in the effluent collection tank (both locations at block and common collection point). Free space shall be maintained around the HDPE tanks / Tank in Tank to observe leakages if any.
9. The industry shall maintain proper manifest system for effluent transported to CETP and maintain the records and submit the details of quantity of High TDS and Low TDS effluents sent to CETP of AETL every month to the RO, Visakhapatnam.
10. The industry shall properly operate and maintain online real time monitoring system along with web camera facilities and shall ensure that it is connected to APPCB / CPCB websites as per CPCB directions dt. 05.02.2014 / 02.03.2015.
11. Effluents shall not be discharged on land or any water bodies or aquifers or outside under any circumstances.
12. Floor washings shall be admitted into effluent collection system only and shall not be allowed to find their way into storm water drains or open areas. All pipe valves, sewers, drains shall be leak proof.
13. The LTDS and HTDS effluents shall be stored in above ground level collection tanks separately. The industry shall provide hoods over the effluent storage tanks, and the vents shall be connected to scrubbers.
14. The industry shall provide containers detoxification facility. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank after characterization.
15. The industry shall provide tank in tank system for effluent collection at production blocks. Free board shall be maintained in the tanks to prevent spillages.
16. Storm water shall not be allowed to mix with scrubber water and / or floor washings. Storm water shall be channelized through separate drains passing through a HDPE lined pit having capacity of 10 minutes (hourly average) of rainfall.
17. The industry shall maintain rainwater runoff tank with pump for collection and storage of first flush contaminated storm water and the same shall be sent to CETP for further treatment.
18. The industry shall maintain dry condition outside drains in non-rainy season.

Air Pollution:

19. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	Emission Standards (mg/Nm^3)
1 & 2	Particulate matter	100
4	HCl	35
	NH_3	30
	Sulphuric acid mist	50
	Chlorine	15
Tank farm vents	HCl	35
	NH_3	30
	Chlorine	15
	Benzene	5
	Toluene	100
	Acetonitrile	1000
	Dichloromethane	200
	Xylene	100
	Acetone	2000

20. The industry shall comply with ambient air quality standards of PM10(Particulate Matter size less than 10mm) - 100 mg/ m3; PM2.5(Particulate Matter size less than 2.5mm) -60 mg/ m3; SO2 - 80 mg/ m3; NOx - 80 mg/m3, outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)

Night time (10 PM to 6 AM) - 70 dB (A).

21. The industry shall provide a sampling port with removable dummy of not less than 15cm diameter in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15AMP 250 V plug point shall be provided on the platform.

22. The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.804 (E), dated 03.11.2022 under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.

23. The industry shall comply with the noise limits for DG sets (upto 1000 KVA) as per G.S.R.520 (E), dated 01.07.2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules.

24. The industry shall properly operate the multi stage scrubbers for scrubbing of process emissions. The industry shall maintain pH meters for scrubbers and connect to APPCB website. Scrubbed liquid shall be recycled as far as possible and finally sent to CETP for further treatment.

25. The industry shall ensure that online pH measuring facility with auto recording system is connected to the scrubbers.

26. The industry shall implement adequate measures to control all fugitive emissions from the plant.
27. The industry shall send the used / spent solvents to the recyclers (or) process them at their own solvent recovery facility within the premises.
28. The evaporation losses in solvents shall be controlled by taking the following measures:

i. Chilled brine circulation to effectively reduce the solvent losses into the atmosphere.
ii. Transfer of solvents by using pumps and closed conveyance instead of manual handling.
iii. Closed centrifuges are used due to which solvent losses are reduced drastically.
iv. The reactor vents connected with primary & secondary condensers to catch the solvent vapours.
v. All the solvent storage tanks are connected with vent condensers to prevent solvent vapours.

29. The industry shall not use odour causing substances such as Mercaptan or cause odour nuisance in the surroundings.
30. The industry shall maintain VOC meter with auto recording facility and same connected to APPCB website.

General:

31. The industry shall not manufacture new products and not exceed the consented capacity without CTE/CTO of the Board.
32. The effluent discharged and emissions shall comply with the tolerance limits mentioned in MoEF notification dated 09.07.2009 prescribed for Pharmaceutical (Manufacturing and Formulation) industry and G.S.R. 541(E) dt. 06.08.2021 for Bulk Drug and Formulation (Pharmaceutical).
33. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
34. The industry shall store hazardous waste in closed sheds with dyke wall leachate collection sump.
35. The industry shall not dispose any non-hazardous waste outside the industry premises. The industry shall dispose other non-hazardous wastes as per the disposal option specified below:

S. No	Name of the Non-Hazardous waste	Quantity	Method of Disposal
1.	E – waste	2000 Kg/year	Authorized collection centers / recyclers / dismantler / disposal facility.
2.	Used tube lights	100 nos/month	
3.	Paper, cotton waste & packing material i.e., wood, carton, ropes etc.,	2TPM	Sale to outside agencies / recyclers.
4.	Ply wood boxes, tins	2TPM	
5.	Coal Ash	---	TSDF to use as stabilizing agent / Brick manufacturers.

36. The industry shall provide hood on the top of the effluent storage tanks and vent connected to scrubber.
37. The following rules and regulations notified by the MoEF& CC, GoI shall be implemented.

a. Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
b. Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
c. Fly Ash Notification, 2016.
d. Batteries (Management & Handling) Rules, 2010.
e. E-Waste (Management) Rules, 2016.
f. Construction and Demolition waste Management Rules, 2016.
g. Bio-medical Waste Management Rules, 2016

38. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:

a. Daily production details.
b. Quantity of Effluents generated, treated, recycled/reused and disposed to CETP.
c. Log Books for pollution control systems.
d. Characteristics of effluents and emissions.
e. Hazardous/non-hazardous solid waste generated and disposed.
f. Inspection book.
g. Manifest copies of effluents / hazardous waste.

39. The industry shall maintain good housekeeping within the plant premises.
40. The industry shall comply with the SoP issued by CPCB for Solvent Recovery units dated 22.03.2021. The total cumulative losses of solvents shall not be more than 5% of the solvent on annual basis from storage inventory.
41. Green belt of adequate width and density shall be maintained along the boundary of the industry with minimum area of 22% of total area.
42. The industry shall comply with SoPs issued by CPCB time to time for all the wastes.
43. The industry shall maintain valid PLI policy which includes Environmental Relief Fund (ERF) and submit copy to RO, Visakhapatnam on yearly base.
44. The industry shall comply with the Regulation of Persistent Organic Pollutants Rules, 2018 notified by the MOEF&CC Notification vide G.S.R. 207 (E) dated 30.05.2018. As per the notification, the following 7 chemicals are prohibited to manufacturer, trade, use, import and export:
45. The industry shall comply with the Regulation of Persistent Organic Pollutants Rules, 2018 notified by the MOEF&CC Notification vide G.S.R. 207 (E) dated 30.05.2018. As per the notification, the following 7 chemicals are prohibited to manufacturer, trade, use, import and export:

i. Chlordecone,
ii. Hexabromobiphenyl,
iii. Hexabromodiphenyl ether and heptabromodiphenyl ether (commercial octa-BDE),
iv. Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial penta-BDE),
v. Pentachlorobenzene,
vi. Hexabromocyclododecane and
vii. Hexachlorobutadine.

46. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Board.

47. The industry shall maintain digital display boards at publicly visible places at the main gate indicating the products manufactured Vs permitted quantities, treated effluent concentrations Vs discharge standards, stack emission & AAQ concentrations Vs standards, hazardous waste generation, disposed, stock Vs permitted quantities and validity of CTO; and exhibit the CTO order at a prominent place in the factory premises, as per Hon'ble Supreme Court order.
48. The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent to Establishment (CTE) and Consent to Operation (CTO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.
49. The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.
50. Any other directions / circulars / notices / guidelines issued by CPCB, MoEF&CC and APPCB shall be followed from time to time.
51. The industry shall comply with the conditions stipulated in the CTE order dated 23.04.2024.
52. The Board reserves its right to modify above conditions or stipulate any further conditions and to take action including revoke of this order in the interest of protection of public health and environment.

Special conditions:

52. The industry shall not to use Furnace Oil as fuel for the Boilers, shall be used LSD/HSD.
53. The industry shall operate with valid NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.
54. The industry shall operate with valid PESO permission.
55. The industry shall comply with the technical suggestions at Chapter No. 7.3 & 7.4 for Hazardous Chemical handling industries by High Power Committee (HPC) of Govt. of Andhra Pradesh. The HPC report is available at www.ap.gov.in.
56. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.
57. The industry shall extend training to the working personnel for the prevention of accidents and necessary antidotes to ensure safety, as per the MSIHC Rules, 1989.
58. The industry shall carryout calibration of safety equipment and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office.
59. The industry shall install fluorescent Wind Vane at the highest point in the industry premises.
60. The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.
61. The industry shall submit the copy of the safety audit report and On-Site / Off Site

Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORIZATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the Hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”.
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. An application for the renewal of an authorization shall be made as laid down under these Rules.
9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
10. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
11. The authorized person shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
12. The authorized person shall store Used /Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buy back basis.
13. The authorized person shall maintain 7 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
14. The authorized person shall maintain proper records for Hazardous & other wastes stated in Authorization in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 6 (5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016

and amendments thereof by June 30th for the period ensuring 31st March of the year.

15. The authorized person shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B &C of this Order on half yearly basis to Board office and concerned Regional office.

B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB

To
M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M),
Anakapalli District
Email: Kiran.reddy.pendri@gmail.com

Digitally Signed by B Sreedhar Ias
Date: 25-05-2024 09:15:07
Reason: Approved

Annexure - 7

escientia

Escientia Advanced Sciences Private Limited
Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram,
Anakapalli - 531 011, Andhra Pradesh, INDIA.
Telephone : +91 8924 665000
Facsimile : +91 8924 665299
Website : www.escientia.com

23rd Sep 2024,

Visakhapatnam.

To,

The Member Secretary

AP Pollution Control Board

APIIC colony road, Guru Nanak colony,

Vijayawada, Andhra Pradesh.

Subject: Submission of "**Environment statement**" – Reg

Dear sir,

Reference to the above subject, we are here with submitting the Environmental Statement (Form-V) for the year 2023-2024.

Request to kindly acknowledge the receipt of report.

Thanking you

Yours Faithfully

For ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

23/09/2024

AUTHORIZED SIGNATORY.

Escientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

CC: APPCB, Regional office, Visakhapatnam

Encl: Form V (Environmental Statement)

Control Board 24.9.24 Regional Office, Visakhapatnam

Environmental Statement (FORM –V)

For the Year 2023 – 2024

Escientia Advanced Sciences Private Limited Plot No 11,11A, 12&12A, APSEZ, Atchuthapuram, Anakapalli-531011.

ENVIRONMENTAL STATEMENT 2023 - 2024	FORM - V

FORM- V
(See rule 14)
Environmental Statement for the financial year ending the 31 st March 2024

PART- A

(i)	*Name and address of the owner Occupier of the Industry, operation or process*	Kiran Pendri M/s. Escientia Advanced Sciences Private Limited Plot No. 11, 11A, 12, &12A, APSEZ Atchuthapuram, Anakapalli-531011.
(ii)	*Industry category Primary - (STC code) Secondary - (SIC Code)*	APIs Manufacturing
(iii)	*Production Capacity – Units*	2600 Kg/Day
(iv)	*Actual Production: – Units*	30.04 Kg/Day
(v)	*Year of Establishment*	April 2019 (Manufacturing activity started)
(vi)	*Date of the last Environment Statement Submitted*	20.09.2024

ENVIRONMENTAL STATEMENT 2023 - 2024	FORM - V

Name of Products	*Process water consumption per unit of product output.*	
	During the previous financial Year 2022 – 2023 Liters/Day	*During the Current financial Year 2023 – 2024 Liters/Day*
Rimegepant sulphate (RGP)	5.82	6.81
Zavegapant hydrochloride (IPD)	3.56	2.04

ii) Raw Material Consumption

**Name of raw materials*	*Name of products*	*Consumption of raw material per Unit of output*	
		During the previous financial Year 2022 – 2023	*During the Current financial Year 2023 – 2024*
2 (S)-2-amino-3,3-dimethyl butanoic acid	Rimegepant sulphate	75.93	324.46
Methyl chloroformate		15.1	64.52
Sodium hydroxide		36.82	157.33
Ethyl Acetate		6.88	29.43
n-Heptane		3.32	14.19
Tert-butyl 2-(4-(pyridine-2-yl) benzyl) Hydrazine carboxylate		14.32	61.2
t-Butyl (1S)1-(2R)-Oxiran-2-yl)2-phenylethyl) Carbamate		27.39	117.07
Iso propyl alcohol		1.06	4.55
FCP		24.71	105.58
Hydrochloric acid		66.62	284.69
1H-Benzotriazole-1-ol		24.99	106.79
N-(3-(dimethoxy amino) propyl) N-ethyl carbodiimide		130.7	558.501
Triethylamine		184	786.19

ENVIRONMENTAL STATEMENT 2023 - 2024	FORM - V

PART - C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

Pollutants	*Quantity of pollutants discharged (mass/day)*	*concentration of pollutants in discharges (mass/volume)*	*Percentage of variation from prescribed standards with reasons*
a) Water	--	See Annexure – 1	--
b) Air	--		--

PART – D

Hazardous Wastes

(As specified under Hazardous Waste Management and Handling Rules, 2016)

Hazardous Waste	*Total Quantity (Kg.)*	
	During the previous financial Year 2022 – 2023	*During the Current financial Year 2023 – 2024*
a. From process	See Annexure – 2	See Annexure – 2
b. From pollution control facilities.	--	--

PART – E

Solid Wastes

Solid Wastes	*Total Quantity (Kg.)*	
	During the previous financial Year 2022 – 2023	*During the Current financial Year 2023– 2024*
a. From process	See Annexure-3	See Annexure-3
b. From pollution control facilities.	--	--
c. (1) Quantity recycled or re- utilized within the unit	--	--
(2) Sold	--	--

ENVIRONMENTAL STATEMENT 2023 - 2024	FORM - V

PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

❖ The evaporation losses in solvents are controlled by taking the following measures:

- Pumps are being used for solvents handling instead of manual handling.
- Closed centrifuge, ANFD, operations to reduce solvent losses.
- Insulation provided to the solvent storage tanks and breather valves provided to the vents based on the boiling point of solvents.
- Primary and Secondary condensers provided to the reactor vents to avoid escaping of solvent vapor emissions into atmosphere.

❖ As an ISO 14001:2015 certified organization we take immense environmental programs for protecting the Environment as well as natural resources as mentioned below:

- use of APIIC water and no groundwater abstraction.
- Secondary RO water system reject water is being recycled for firefighting water storage
- LED lights are used maximum possible in all areas of the building and streetlights to reduce electrical energy conservation.
- Boiler fuel converted from furnace oil to HSD to reduce carbon footprint.

]

Escientia Advanced Sciences Pvt Ltd.,
Atchuthupuram, APSEZ, Anakapalli-531021

Ambient Air Quality (AAQ)						
Month	Area	PM_{10} (µg/m^3)	$PM_{2.5}$ (µg/m^3)	SO_2 (µg/m^3)	NO_x (µg/m^3)	NH_3 (µg/m^3)
April' 23	Near Admin	67.6	28.0	16.4	19.7	-
	Near ETP Area	67.3	27.6	17.8	19.2	-
	Near PD lab	59.4	26.7	16.4	19.0	-
	Near Gate-02	65.2	27.8	16.9	20.6	-
May' 23	Near Admin	65.5	25.7	15.4	20.1	-
	Near ETP Area	64.6	28.3	19.1	23.7	-
	Near Pd lab	57.2	24.5	14.9	18.8	-
	Near Gate-02	63.4	26.1	15.8	19.2	-
June' 23	Near Admin	67.2	28.5	19.3	22.9	20
	Near ETP Area	68.3	29.7	15.8	20.5	20
	Near Pd lab	67.3	28.9	16.9	19.5	18
	Near Gate-02	68.3	27.5	19.7	21.9	15
July' 23	Near Admin	67.3	27.9	16.5	19.8	-
	Near ETP Area	65.8	29.0	20.4	24.8	-
	Near Pd lab	59.4	25.8	15.3	19.7	-
	Near Gate-02	64.8	27.3	16.7	20.5	-
Aug' 23	Near Admin	68.4	28.1	17.9	20.3	-
	Near ETP Area	64.1	28.3	19.5	23.7	-
	Near Pd lab	58.4	24.1	14.8	18.3	-
	Near Gate-02	62.3	25.7	15.1	19.5	-
Sep' 23	Near Admin.	65.3	29.5	18.1	21.7	20
	Near ETP Area	65.9	27.4	16.8	22.0	27
	Near Pd lab	68.4	29.3	17.6	20.7	35
	Near Gate-02	67.8	28.0	18.3	22.7	22
Oct' 23	Near Admin	69.6	27.3	16.2	19.8	-
	Near ETP Area	62.7	27.4	18.5	22.1	-
	Near Pd lab	56.4	22.9	13.3	17.7	-
	Near Gate-02	65.5	26.9	16.4	20.1	-
Nov' 23	Near Admin	67.6	25.4	15.5	18.1	-
	Near ETP Area	61.4	28.9	19.3	23.7	-
	Near Pd lab	57.8	23.5	14.8	19.3	-

Escientia Advanced Sciences Pvt Ltd.,
Atchuthupuram, APSEZ, Anakapalli-531011

Annexure -1

Ambient Noise Level Data					
Month	Time	Gate-1 Area	DG set area	ETP area	Production area
April' 23	Day time	59.2	68.6	62.1	60.4
	Night time	50.4	60.6	57.2	57.1
May' 23	Day time	57.5	67.2	61.3	60.4
	Night time	51.4	61.3	55.7	57.1
June' 23	Day time	59.2	67.2	63.8	59.4
	Night time	53.1	57.2	59.5	55.7
July' 23	Day time	55.9	65.5	60.8	61.8
	Night time	50.8	60.7	56.2	58.3
Aug' 23	Day time	53.4	63.5	61.9	58.6
	Night time	49.3	59.4	53.7	55.2
Sep' 23	Day time	52.6	62.0	60.7	57.3
	Night time	48.5	58.3	52.8	53.6
Oct' 23	Day time	52.9	62.1	60.4	57.1
	Night time	48.6	58.4	52.1	54.3
Nov' 23	Day time	51.3	61.9	62.3	58.5
	Night time	49.3	57.5	51.7	53.8
Dec' 23	Day time	51.9	61.3	62.4	55.9
	Night time	49.4	57.2	51.7	52.3
Jan' 24	Day time	52.8	65.6	63.1	59.4
	Night time	48.6	60.3	52.6	54.8
Feb' 24	Day time	53.9	64.4	62.6	57.0
	Night time	49.2	61.7	55.0	53.4
Mar' 24	Day time	52.7	62.8	63.4	53.1
	Night time	48.3	56.3	50.4	51.7

Note: **Day time is reckoned in between 6.0 am to 10.0 pm, Limit < 75 dB(A)**

Nighttime is reckoned in between 10.0 pm to 6.0 am, Limit < 70 dB(A)

Escientia Advanced Sciences Private Limited
AtchuthaPuram, Anakapalli -531011

Annexure -1

Month	Area	SPM (mg/Nm^3)	SO_2 (mg/Nm^3)	NO_X (mg/Nm^3)
April' 23	Boiler Stack 3.5 TPH	63.9	33.1	43.5
	DG set-I-1500 KVA	63.5	31.9	35.7
	DG set-II-1500 KVA	63.8	33.2	44.9
	Fire Hydrant Diesel Engine	61.2	34.0	45.7
May' 23	Boiler Stack	61.2	34.9	45.3
	DG set-I-1500 KVA	65.2	32.7	36.9
	DG set-II-1500 KVA	65.1	35.6	46.3
	Fire Hydrant Diesel Engine	65.4	35.6	48.3
June' 23	Boiler Stack	67.4	34.0	45.3
	DG set-I-1500 KVA	63.1	31.6	37.4
	DG set-II-1500 KVA	63.9	31.5	42.6
	Fire Hydrant Diesel Engine	69.4	41.7	48.4
July' 23	Boiler Stack	62.7	35.5	46.8
	DG set-I-1500 KVA	66.7	33.1	37.4
	DG set-II-1500 KVA	63.8	33.6	45.3
	Fire Hydrant Diesel Engine	63.1	33.5	47.4
Aug' 23	Boiler Stack	61.6	32.4	44.7

	DG set-I-1500 KVA	63.4	35.1	37.3
	DG set-II-1500 KVA	61.6	33.8	45.5
	Fire Hydrant Diesel Engine	65.1	32.6	45.8
Feb' 24	Boiler Stack	64.8	33.7	41.3
	DG set-I-1500 KVA	65.1	34.3	39.8
	DG set-II-1500 KVA	63.6	35.9	46.1
	Fire Hydrant Diesel Engine	66.1	33.9	47.2
Mar' 24	Boiler Stack	61.5	31.4	42.8
	DG set-I-1500 KVA	62.6	31.7	34.3
	DG set-II-1500 KVA	64.1	36.3	48.5
	Fire Hydrant Diesel Engine	67.5	35.1	48.9

Escientia Advanced Sciences Pvt Ltd.,
Atchuthapuram, APSEZ, Anakapalli-531021

Scrubber data			
Month	Area	ID number	Acid mist
April' 23	Production	SBR-1101	16.5
May' 23	Production	SBR-1101	14.5
June' 23	Production	SBR-1101	18.3
July' 23	Production	SBR-1101	15.6
Aug' 23	Production	SBR-1101	16.2
Sep' 23	Production	SBR-1101	17.5
Oct' 23	Production	SBR-1101	15.8
Nov' 23	Production	SBR-1101	16.4
Dec' 23	Production	SBR-1101	16.1
Jan' 24	Production	SBR-1101	15.2
Feb' 24	Production	SBR-1101	14.1
Mar' 24	Production	SBR-1101	17.5

Escientia Advanced Sciences Pvt Ltd.,
Atchuthapuram, APSEZ, Anakapalli-531021

Annexure -2

Hazardous waste Generation details from Apr-2023 to March-2024						
Month	Spent carbon (Kgs)	Process Inorganic Salts (Kgs)	Organic Residue (Kgs)	Etp Sludge	Discarded Containers in No's	Remarks
Apr'23	5.702	2.267	0	0	76	-
May'23	1.12	0.545	0	0	0	-
Jun'23	1.49	1.64	0	0	0	-
Jul'23	2.6	2.79	0	0	0	-
Aug'23	4.28	3.91	0	0	233	-
Sep'23	0.80	1.505	0	0	118	-
Oct'23	1.51	5.525	0	0	15	-
Nov'23	2.76	8.21	0	0	150	-
Dec'23	0.97	2.145	0	0	0	-
Jan'24	3.46	4.33	0	0	300	-
Feb'24	5.3	1.641	1.41	0.7	300	-
Mar'24	1.42	13.222	0.91	0	195	-

Esscientia Advanced Sciences Private Limited

Water Consumption data-2023 to 2024

S.No	Month	During previous financial Year 2022-2023	During previous financial Year 2023-2024
1	Apr	3795	3076
2	May	3268	2863
3	Jun	2817	3324
4	Jul	3210	2772
5	Aug	2624	2973
6	Sep	2671	2462
7	Oct	3202	3173
8	Nov	2450	2962
9	Dec	2818	3097
10	Jan	2784	3096
11	Feb	2127	3425
12	Mar	3032	3446
Total quantity		34798	36669
Average KLM		2899.8	3055.8
Average KLD		95.3	100.5

Esscientia Advanced Sciences Private Limited			
HTDS Effluent disposal data-2023 to 2024			
S.No	Month	During previous financial Year 2022-2023	During previous financial Year 2023-2024
1	Apr	180	480
2	May	420	320
3	Jun	220	380
4	Jul	120	360
5	Aug	100	460
6	Sep	160	260
7	Oct	140	140
8	Nov	240	240
9	Dec	400	400
10	Jan	380	300
11	Feb	500	260
12	Mar	520	100
Total quantity		3380	3700
Average KLM		281.7	308.3
Average KLD		9.3	10.1

Esscientia Advanced Sciences Private Limited			
LTDS Effluent disposal data-2023 to 2024			
S.No	Month	During previous financial Year 2022-2023	During previous financial Year 2023-2024
1	Apr	720	260
2	May	900	340
3	Jun	620	320
4	Jul	780	460
5	Aug	580	320
6	Sep	900	460
7	Oct	680	580
8	Nov	320	620
9	Dec	320	500
10	Jan	300	400
11	Feb	120	440
12	Mar	80	600
Total quantity		6320	5300
Average KLM		526.67	441.67
Average KLD		17.32	14.52

Esscientia Advanced Sciences Private Limited			
HTDS Effluent disposal data-2023 to 2024			
S.No	**Month**	**During previous financial Year 2022-2023**	**During previous financial Year 2023-2024**
1	Apr	180	480
2	May	420	320
3	Jun	220	380
4	Jul	120	360
5	Aug	100	460
6	Sep	160	260
7	Oct	140	140
8	Nov	240	240
9	Dec	400	400
10	Jan	380	300
11	Feb	500	260
12	Mar	520	100
Total quantity		3380	3700
Average KLM		281.7	308.3
Average KLD		9.3	10.1

escientia

Escientia Advanced Sciences Private Limited
Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram,
Anakapalli - 531 011, Andhra Pradesh, INDIA.
Telephone : +91 8924 665000
Facsimile : +91 8924 665299
Website : www.escientia.com

17.06.2024,

Visakhapatnam.

To,

The Member Serictery,

AP Pollution Control Board,

APIIC colony road, Guru Nanak colony

Vijayawada-Andhra Pradesh.

Subject:

Submission of Bio Medical waste annual returns in FORM-4 for the year January-2023-December-2023-Reg.

Dear sir,

With reference to the above said subject, we are herewith submitting the annual report of Bio-Medical Waste in Form-IV for the preceding year'2023 (Jan'2023 to Dec'2023) as per the Bio medical waste Management rules 2016 and amendments thereof.

We are requesting your good office to acknowledge our letter submission.

Thanking you

Yours Faithfully

For ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

AUTHORIZED SIGNATORY.

Copy to: APPCB-Regional office, Visakhapatnam.

A.P. Pollution Control Board * Regional Office, Visakhapatnam *

18/6/24

Form - IV
(See rule 13)
ANNUAL REPORT

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl.No.	Particulars		
1.	Particulars of the Occupier		
	(i) Name of the authorised person (occupier or operator of facility)	:	Mr. Sanjay Vaishnav Senior VP - Operations
	(ii) Name of HCF or CBMWTF	:	ESCIENTIA ADVANCED SCIENCES PVT LTD
	(iii) Address for Correspondence	:	ESCIENTIA ADVANCED SCIENCES PVT LTD Plot No: 11, 11A, 12, 12A APSEZ, Atchutapuram, Anakapalli – 531011
	(iv) Address of Facility		Same as above
	(v)Tel. No, Fax. No	:	0892466 – 5108/5208
	(vi) E-mail ID	:	amballasatyanarayana@escientia.com
	(vii) URL of Website	:	https://www.escientia.com/
	(viii) GPS coordinates of HCF or CBMWTF	:	Latitude: 17.5188 Longitude: 82.9605
	(ix) Ownership of HCF or CBMWTF	:	~~(State Government or Semi Govt. or any other)~~ Private
	(x). Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	:	Authorisation No.: PCB/ROVSP/BMW/HCE - 2020-26 Dated on: 03.09.202 valid up to 2026
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to: APPCB/VSP/VSP/327/HO/CFO/2018 Dated: 28.02.2018
2.	Type of Health Care Facility		
	(i) Bedded Hospital	:	No. of Beds: 01 No's.
	(ii) Non-bedded hospital (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	It is occupational Health Centre, Only First Aid treatment only.
	(iii) License number and its date of expiry		----------
3.	Details of CBMWTF		
	(i) Number healthcare facilities covered by CBMWTF	:	NA
	(ii) No of beds covered by CBMWTF	:	NA
	(iii) Installed treatment and disposal capacity of CBMWTF:	:	Not applicable (BMW disposed off to CBMWTF for treatment and disposal)
	(iv) Quantity of biomedical waste treated or disposal by CBMWFT	:	
4.	Quantity of waste ~~generated~~ or disposed in Kg per annum (on monthly average basis)		Yellow Category: 0.0913 Kg per annum Red Category: 0.035 Kg per annum White Category: 0.01 Kg per annum Blue Category: 0 Kg per annum General Solid Waste: ---- NIL -----

			Category wise monthly disposal summary here with enclosed as Annexure-I
5.	Details of the Storage, treatment, transportation, processing and Disposal facility		
	(i) Details of the on-site storage facility	:	Size: 10 square meters Capacity: 10 kgs Provision of on-site storage: (cold storage or any other provision): Secure storage
	(ii) Details of the treatment or disposal facilities	:	Type of treatment equipment / No. of units / Capacity Kg/day / Quantity treated and disposed in Kg per annum
			Incinerators: Nil / Not Applicable Plasma Pyrolysis: Nil / Not Applicable Autoclaves: Nil / Not Applicable Microwaves: Nil / Not Applicable Hydro clave: Nil / Not Applicable Shredder: Nil / Not Applicable Needle tip cutter or destroyer: Nil / Not Applicable
			Sharps encapsulation Or concrete pit: Nil / Not Applicable
			Deep burial pits: Chemical disinfection: Any other treatment equipment: Nil / Not Applicable
	(iii) Quantity of recyclable wastes sold to authorized recyclers after treatment in kg per annum.	:	Not applicable (BMW disposed off to CBMWTF for treatment and disposal)
	(iv) No of vehicles used for collection and transportation of bio medical waste	:	
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in KG per annum	:	Quantity generated / where disposed Incineration Ash: ---------NA---------- ETP sludge: ---------NA---------
	(vi) Name of the Common Bio- Medical Waste Treatment Facility Operator through which wastes are disposed of	:	M/s. Vasishta Environ Care De-Notified Area, APSEZ, Atchutapuram (M), Visakhapatnam. Mobile No: 7331195570
	(vii) List of member HCF not handed over bio-medical waste.	:	Not Applicable
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period	:	Yes, Minutes of meeting held on 06.04.2023 & 04.10.2023 here with enclosed as Annexure – II
7	Details trainings conducted on BMW		
	(i) Number of trainings conducted on BMW Management.	:	02
	(ii) number of personnel trained	:	13
	(iii) number of personnel trained at the time of induction	:	General awareness training given to all the persons at the time of induction
	(iv) number of personnel not undergone any training so far	:	We have provided training to all relevant staff who handle Bio Medical waste in the Organization
	(v) whether standard manual for training is available?	:	Yes, we have standard operating procedure for training

	(vi) any other information)	:	-----
8	Details of the accident occurred during the year		
	(i) Number of Accidents occurred	:	No accidents occurred during the year
	(ii) Number of the persons affected	:	Not applicable
	(iii) Remedial Action taken (Please attach details if any)	:	Not applicable
	(iv) Any Fatality occurred, details.	:	Not applicable
9.	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards?	:	Not applicable
	Details of Continuous online emission monitoring systems installed	:	Not applicable
10.	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?	:	Not applicable
11.	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?	:	Yes, the disinfection method meeting the log 4 standard No, such conditions were not recorded after disinfection
12.	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator) Not applicable

Certified that the above report is for the period from

Date:
Place

Name and Signature of the Head of the Institution

ESCIENTIA ADVANCED SCIENCES PVT LTD

Summary of BMW Disposed to CBMWFT from Jan-2023 to De-'2023

Month	DisposedQuantity					
	Yellow Cateogery	Red Cateogery	White Cateogery	Blue Cateogery	Total Qty. in Kgs	Disposed to Vasistha Enviro
January'2023	0.09	0.04	0	0	0.13	0.13
February'2023	0.08	0.04	0	0	0.12	0.12
March'2023	0.11	0	0	0	0.11	0.11
April'2023	0.12	0.05	0	0	0.17	0.17
May'2023	0.19	0.3	0	0	0.49	0.49
June'2023	0.2	0.04	0	0	0.24	0.24
July'2023	0.17	0.06	0.3	0	0.53	0.53
August'2023	0.15	0.07	0	0	0.22	0.22
September'2023	0.52	0.17	0	0	0.69	0.69
October'2023	0.15	0.11	0	0	0.26	0.26
November'2023	0.21	0.09	0	0	0.3	0.3
December'2023	0.75	0.08	0	0	0.83	0.83
Total Quantity	2.74	1.05	0.3	0	4.09	4.09
Monthly Average	0.0913	0.035	0.01	0	0.136	0.136

Annexure - 8

ANDHRA PRADESH POLLUTION CONTROL BOARD

REGIONAL OFFICE: VISAKHAPATNAM

D.No. 39-33-20/4/1, Madhavadhara Vuda Colony,
Visakhapatnam - 530018,
Phone No. 0891 – 2755356, Email Id : rovsnapnch@gmail.com

BIO –MEDICAL WASTE AUTHORISATION

(Issued under Rule 10 of the Bio-Medical Waste Management Rules, 2016)

(Authorisation for operating a facility for generation, collection, reception, treatment, storage, transport and disposal of biomedical wastes)

Order PCB/ROVSP/BMW/HCE- /2020-21 **Dated:-09-2020**

1. M/s **Occupational Health Centre** an occupier or operator of the facility located **at Escientia Advanced Sciences Pvt. Ltd., Plot No.11,11A,12 & 12A, APSEZ, Atchuthapuram, Visakhapatnam** is hereby granted an authorization for:

Activity	Please tick
Generation, segregation	(√)
Collection,	(√)
Storage	(√)
Packaging	(√)
Reception	( )
Transportation	( )
Treatment or processing or conversion	( )
Recycling	( )
Disposal or destruction	( )
Use	( )
Offering for sale, transfer	( )
Any other form of handling	( )

2. **M/s Occupational Health Centre** is hereby authorized for handling of biomedical waste as per the capacity given below:

(i) Number of beds of HCF: 02 No's
(ii) Quantity of Biomedical waste handled treated or disposed:

Type of Waste Category	Quantity permitted for Handling
Yellow	15.0 Kgs/Month
Red	2.0 Kgs/Month
White (Translucent)	2.0 Kgs/Month
Blue	2.0 Kgs/Month

3. This authorization shall be in force for a period of 5 Years **i.e., up to 31.08.2025.**
4. This authorisation is subject to the conditions stated below and to such other conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.

Date: 03.09.2020
Place: Visakhapatnam

Signature:
Designation: Environmental Engineer(FAC)

Environmental Engineer
A.P. Pollution Control Board
Regional Office, Visakhapatnam.

TERMS AND CONDITIONS OF AUTHORISATION

SCHEDULE – A

1. The authorised person shall comply with the rules of Bio-Medical Waste Management Rules, 2016 and the amendments made there under from time to time.
2. The authorised person should handle the waste without any adverse effects to human health and the Environment.
3. Take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with these rules;
4. The Bio-Medical Waste shall not be mixed with other wastes.
5. The Bio-Medical Waste shall be segregated into containers / bags at the point of generation in accordance with Schedule – I of the Notification prior to its storage, transportation, treatment and disposal. The containers shall be labeled according to Schedule – IV of the Notification.
6. If a container is transported from the premises where Bio-Medical Waste is generated to any waste treatment facility outside the premises, the container shall, apart from the label prescribed in Schedule – IV of the Notification, also carry information prescribed in Schedule – IV of the Notification.
7. Notwithstanding anything contained in the Motor Vehicles Act, 1988, or Rules there under, untreated Bio-Medical Waste shall be transported only in such vehicle as may be authorised for the purpose by the Competent Authority as specified by the Government.
8. The person authorised under these Rules shall not lease, sell, transfer or otherwise transport the Bio-Medical Wastes without obtaining prior permission of the Member Secretary, Andhra Pradesh Pollution Control Board.
9. An application for the renewal of authorisation shall be made as laid down in Rule 10 and Form II of the Rules.
10. Every occupier/operator shall submit an annual report to the Member Secretary, Andhra Pradesh Pollution Control Board in Form – IV by 30th June every year, containing information about the categories and quantities of Bio-Medical Wastes handled during the preceding year.
11. Every HCE shall maintain a daily record of waste generation quantity either in volume or by weight in kg/day as follows:
    a. **Human anatomical /Animal anatomical/solid waste/expired and discarded medicines, Chemical liquid etc. (Yellow Bag)**
    b. **Contaminated waste(recyclable) (Red Bag)**
    c. **Waste Sharps including metals etc. (White translucent Puncture Proof Bags)**
    d. **Glassware, Metallic body implants (Blue Bag)**
12. Every authorized person shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal and / or any form of handling of Bio-Medical Waste in accordance with these Rules and any guidelines issued.
13. All records shall be subject to inspection and verification by the Member Secretary, Andhra Pradesh Pollution Control Board, or authorized officer of A.P.Pollution Control Board at any time.
14. The Applicant shall exhibit the Authorisation of the Board in the premises at a prominent place for the information of inspecting officer of different Departments.
15. The applicants shall inform the Prescribed Authority, the name and designation of the concerned person in-charge of Bio-Medical Waste Management in the Health Care Establishment. This person shall be held responsible for the implementation of the Bio-Medical Waste Management Rules, 2016.

SCHEDULE – B

1. The HCE shall obtain DM & HO Registration.
2. Biomedical waste shall be treated and disposed in accordance with Schedule – I (Part I & II) and in compliance with standards provided in Schedule II of the Bio-Medical Waste Management Rules, 2016 should be carried out at source only. Only Yellow, Red, Blue, non chlorinated bags shall be used for collection of BMW.
3. Make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I;
4. Pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) or National AIDs Control Organization (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;
5. Phase out use of chlorinated plastic bags, gloves and blood bags within two years from the date of notification of BMWM Rules, 2016.
6. Dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;
7. Not to give treated bio-medical waste with municipal solid waste;
8. Provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year and the details of training programmers conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the Annual Report;
9. Immunize all its health care workers and others, involved in handling of bio-medical waste for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste, in the manner as prescribed in the National Immunization Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time;
10. Establish a Bar- Code System for bags or containers containing bio-medical waste to be sent to CBMWTF within one year from the date of the notification of these rules;
11. Ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities;
12. Ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
13. Ensure occupational safety of all health care workers and others involved in handling of biomedical waste by providing appropriate and adequate personal protective equipments;
14. Conduct health check up at the time of induction and at least once in a year for all its health care workers and others involved in handling of bio- medical waste and maintain the records for the same;
15. Maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I;
16. Report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority and also along with the annual report;

17. Make available the annual report your official web-site within two years from the date of notification of BMWM Rules, 2016;
18. Inform the Prescribed Authority i.e, APPCB immediately in case the Operator of a common facility does not collect the bio-medical waste within 48 hours or as per the agreed time;
19. Establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of this committee shall be submitted along with the annual report to the prescribed authority.
20. Maintain all record for operation of incineration, hydro or autoclaving etc., for a period of five years;
21. All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.
22. Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act, 197, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the Medical Superintendent of hospital or health care establishment.
23. Cytotoxic drug vials shall not be handed over to unauthorized person under any circumstances. These shall be sent back to the manufacturers for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio medical waste treatment and disposal facility or TSDFs or plasma pyrolysis is at temperature >1200°C.
24. Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio medical waste treatment and disposal facility only.
25. Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage. Wherever the occupier is not linked to a disposal facility it shall be the responsibility of the occupier to sterilize and dispose in the manner prescribed.
26. The Occupier shall hand over segregated waste as per the Schedule-I to common bio-medical waste treatment facility for treatment, processing and final disposal.
27. Every occupier shall phase out use of non-chlorinated plastic bags within two years from the date of publication of these rules and after two years from such publication of these rules, the chlorinated plastic bags shall not be used for storing and transporting of bio medical waste and the occupier or operator of a common bio medical waste treatment facility shall not dispose of such plastics by incineration and the bags used for storing and transporting bio medical waste shall be in compliance with the Bureau of Indian Standards. Till the standards are published, the carry bags shall be as per the Plastic Waste Management Rules, 2016.
28. The Occupier shall maintain a record of recyclable wastes which are auctioned or solid and the same shall be submitted to the prescribed authority as part of its annual report. The record shall open for inspection by the prescribed authorities.
29. Segregation of the waste in accordance with Schedule – I of the Bio-Medical Waste Management Rules, 2016 should be carried out at source.
30. Chemical treatment should be carried out using at least 1% Hypochlorite Solution or any other equivalent chemical reagent. It must be ensured that chemical treatment ensures disinfection.
31. No untreated Bio-Medical Waste shall be kept stored beyond a period of 48 hours.
32. The Mercury spillage / losses due to breakage of Thermometers, pressure and other measuring equipment in Health Care Establishments shall be collected stored and send back to the manufacturers.

33. The occupier of HCE shall take all necessary measures to ensure that the spilled mercury does not become part of bio-medical or other solid waste generated from the HCE.
34. The occupier of HCE shall dispose any waste containing equal to or more than 50mg/Kg of Mercury, as per the provisions of Hazardous and other wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof.
35. The Bio Medical Waste shall be disposed for treatment after disinfection and segregation to the following Common Bio-Medical Waste Treatment Facility.

M/s. Vasista Enviro Care,
De-Notified Area, APSEZ,
Atchutapuram (M),
Visakhapatnam District

36. No Health Care Establishment shall install or operate an incinerator without specific Authorization of Prescribed Authority.
37. Under no circumstances shall incinerable waste of the Schedule I of the Rules of 2016 of any kind be openly burnt anywhere.
38. The effluents generated from the hospital should conform to the standards prescribed in schedule - II of Bio-Medical Waste Management Rules, 2016.
39. The applicant shall make an application for renewal of authorization under Bio-Medical Waste Management Rules, 2016 at least 120 days before the date of expiry of this order, along with prescribed fee.
40. The applicant shall obtain consent for operation under Water (Prevention & Control of Pollution) Act 1974 and Air (Prevention & Control of Pollution) Act 1981.
41. The HCE should provide adequate fire protection equipment (such as smoke detectors, fire extinguishers, sand bucket, fire alarm, water sprinklers etc) at salient places within the HCEs even at Bio Medical Waste storage area, in accordance with fire safety regulations and the HCE should obtain certificate from fire department.

ANY CONTRAVENTION OF THE CONDITIONS OR DIRECTIONS OF AUTHORISATION WILL ATTRACT PROSECUTION UNDER THE PROVISIONS OF THE ENVIRONMENT (PROTECTION) ACT, 1986.

Environmental Engineer (FAC)

Environmental Engineer
A.P. Pollution Control Board
Regional Office, Visakhapatnam.

To
The Occupier,
M/s Escientia Advanced Sciences Pvt. Ltd.,
Plot No.11,11A,12 & 12A, APSEZ,
Atchuthapuram,
Visakhapatnam.

escientia

Escientia Advanced Sciences Private Limited
Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram,
Anakapalli - 531 011, Andhra Pradesh, INDIA.
Telephone : +91 8924 665000
Facsimile : +91 8924 665299
Website : www.escientia.com

20th Nov'2023,

Visakhapatnam.

To,

AP Pollution Control Board,

Reginal Office

Visakhapatnam.

Respected Sir,

Subject: Submission of Bio-Medical waste Authorization – Reg.

Ref – Our Bio Medical Waste Authorization order No : PCB/ROVSP/BMW/HCE -2020-26
Dated on : 03.09.2020

*****

We have been conducted BMW committee meeting held on 04.10.2023. Please find the minutes of the meeting in Annexure – I to your kind perusal and records.

We are requesting your good office to acknowledge our letter submission.

Thanking you

Yours Faithfully

For ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

AUTHORIZED SIGNATORY.

Enclosure:

1. Bio – Medical Waste Management Committee List.
2. BMW committee meeting MOM.

A.P. POLLUTION CONTROL BOARD ANDHRA PRADESH *ROVSP*

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ESCIENTIA ADVANCED SCIENCES PVT LTD

Plot No: 11, 11A, 12, 12A, APSEZ, Atchutapuram,
Anakapalli – 531011

BIO – MEDICAL WASTE MEETING AGENDA

Date: 04.10.2023,

Visakhapatnam.

Venue : ETP training hall

Time : 11:00 – 12:00

S.NO	Observations	Remarks
01	Segregation of Bio Medical waste to be done as per color coding	
02	Agreement with the Bio-Medical waste vendor to be done	

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ESCIENTIA ADVANCED SCIENCES PVT LTD

Plot No: 11, 11A, 12, 12A, APSEZ, Atchutapuram,
Anakapalli – 531011

BIO – MEDICAL WASTE - MOM

Points Discussed:

Date: 04.10.2023

S.No	Description of the review point	Action	Responsibility	Status
01	Segregation of Bio Medical waste to be done as per color coding	Segregation id being done as per BMW 2016 rules color coding	Incharge – EHS & OHC	Being Followed
02	Agreement with the Bio-Medical waste vendor to be done	Agreement with the authorized vendor will be done	Incharge - EHS	30.01.2024

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ESCIENTIA ADVANCED SCIENCES PVT LTD
CONTRACT SAFETY TRAINING ATTENDANCE SHEET

TOPIC: Storage & Segregation of Biomedical W	**DATE:** 09/11/2023
Document Ref. No. if any: — NA —	**TIME:** 15:00 to 16:00
NAME OF THE TRAINER: A. Satyanarayana	

S.NO	Name	E. Code /Contract	Dept.	Signature
1.	Alampalli Sai praveen	Medirise	OHC	A. Satya
2.	Jarsinge Ananaui	Medirise	OHC	
3.	Ch. Rahul	Medirise	OHC	
4.	B. Naga Ramarao	CHARAN	E-H-S	
5	B. Suvesh	RK	EHS	
6	Ch. Naveen	RK	EHS	Nai

SIGNTURE OF THE TRAINER: 09/11/2023

BIO MEDICAL WASTE MANAGEMENT COMMITTEE MEMBERS

Chairman: Mr. Sanjay Vaishnava, Senior Vice President – Operations

Secretary: Mr. A. Satyanarayana, AM – EHS

S. No	Name of the Member	Designation	Department
01	Mr. Sanjay Vaishnava	Sr-VP	Operation
02	Mr. A. Satyanarayana	AM	EHS
03	Mr. B. Nagendra Kumar	Executive	EHS
04	Mr. S. Kranthi Kumar	Executive	EHS
05	Dr. Suresh	Doctor	OHC
06	Mrs. Parameshwari	Health Assistant	OHC
07	Mr. Raja Babu	Health Assistant	OHC
08	Mr. Ramana	Health Assistant	OHC
09	Mr. Venkatesh	Health Assistant	OHC
10	Mr. L. Tata Babu	Executive	HR & Admin

Frequency of meeting: Once in six months

Chairman – BMW Management Committee

Mr. Sanjay Vaishnava

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Escientia Advanced Sciences Private Limited
Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram,
Anakapalli - 531 011, Andhra Pradesh, INDIA.
Telephone : +91 8924 665000
Facsimile : +91 8924 665299
Website : www.escientia.com

10th May'2023,

Visakhapatnam.

To,

AP Pollution Control Board,

Regional Office

Visakhapatnam.

Respected Sir,

Subject: Submission of Bio-Medical waste Authorization – Reg.

Ref – Our Bio Medical Waste Authorization order No : PCB/ROVSP/BMW/HCE -2020-26
Dated on : 03.09.2020

*****

We have been formed Bio – Medical Waste Management Committee on 06.04.2023 and subsequently BMW committee meeting held on 06.04.2023. Please find the minutes of the meeting in Annexure – I to your kind perusal and records.

We are requesting your good office to acknowledge our letter submission.

Thanking you

Yours Faithfully

For ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

AUTHORIZED SIGNATORY.

Enclosure:

1. Bio – Medical Waste Management Committee List.
2. BMW committee meeting MOM.

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ESCIENTIA ADVANCED SCIENCES PVT LTD

Plot No: 11, 11A, 12, 12A, APSEZ, Atchutapuram,
Anakapalli – 531011

BIO – MEDICAL WASTE MEETING AGENDA

Date: 06.04.2023,

Visakhapatnam.

Venue : ETP training hall

Time : 11:00 – 12:00

S.NO	Observations	Remarks
01	Awareness on segregation according to the color coding	
02	Immunization for the Bio Medical waste handlers	

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ESCIENTIA ADVANCED SCIENCES PVT LTD

Plot No: 11, 11A, 12, 12A, APSEZ, Atchutapuram,
Anakapalli – 531011

BIO – MEDICAL WASTE - MOM

Points Discussed:

Date: 06.04.2023

S.No	Description of the review point	Action	Responsibility	Status
01	Awareness on segregation according to the color coding	As per the BMW rules 2016, segregation to be done as per color coding	Incharge – EHS & OHC	Completed
02	Immunization for the Bio Medical waste handlers	Who are handling bio medical waste are immunized	Incharge – EHS	Completed

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ESCIENTIA ADVANCED SCIENCES PVT LTD
CONTRACT SAFETY TRAINING ATTENDANCE SHEET

TOPIC: Handling of Bio-Medical Waste	**DATE:** 04/04/2023
Document Ref. No. if any: – NA –	**TIME:** 11:00 TO 12:00
NAME OF THE TRAINER: A. Satyanarayana	

S.No	Name	Contract Agency/Firm	Dept.	Signature
1.	Parameswara.D	DKMS	DHC	
2.	D. Laxmana	DKMS	OHC	
3.	Venkatesh	DKMS	OHC	venkatesh
4.	Raja babu	DKMS	OHC	
5.	D. Anush	DKMS	OHC	
06	S. Kranthi Kumar	Escientia	EHS	04/04/2023
7	B. Nagendra Kumar	Escientia	EHS	04/04/2023

SIGNATURE & DATE OF THE TRAINER: 04/04/2023

BIO MEDICAL WASTE MANAGEMENT COMMITTEE MEMBERS

Chairman: Mr. Sanjay Vaishnava, Senior Vice President – Operations

Secretary: Mr. Suresh Kumar, Head – EHS

S. No	Name of the Member	Designation	Department
01	Mr. Sanjay Vaishnava	Sr-VP	Operation
02	Mr. Suresh Kumar	Manager	EHS
03	Mr. A. Satyanarayana	AM	EHS
04	Mr. B. Nagendra Kumar	Executive	EHS
05	Mr. S. Kranthi Kumar	Executive	EHS
06	Dr. Suresh	Doctor	OHC
07	Mrs. Parameshwari	Health Assistant	OHC
09	Mr. Raja Babu	Health Assistant	OHC
09	Mr. Ramana	Health Assistant	OHC
10	Mr. Venkatesh	Health Assistant	OHC
11	Mr. L. Tata Babu	Executive	HR & Admin

Frequency of meeting: Once in six months

Chairman – BMW Management Committee

Mr. Sanjay Vaishnava

Annexure - 9a

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/AAQ/055
	Sample Registration No	: SLPL/ AAQ/146
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Ambient air quality monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Near Gate 2
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Units	Method	Result	NAAQM Standards
1.	Particulate Matter PM 10	µg / m^3	IS 5182 (Part 23); 2006: 2017	68.9	100
2.	Particulate Matter PM 2.5	µg / m^3	IS 5182 (Part 24); 2019	31.3	60
3.	Sulphur Dioxide (SO_2)	µg / m^3	IS 5182 (Part 2) 2001; 2017	19.4	80
4.	Oxides Of Nitrogen (NO_x)	µg / m^3	IS 5182 (Part6); 2017	21.4	80
5	Ammonia (NH_3)	µg / m^3	IS:5182(Part 25): 2018	< 20	400
6.	Ozone (O_3)	mg / m^3	IS 5182 Part-9 :1974: 2019	14.4	100
7.	Lead (Pb)	µg / m^3	IS 5182 : Part 22 : 2004	< 0.5	1.0
8.	Nickel (Ni)	ng / m^3	IS 5182 : Part 26 : 2020	< 10	20

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS
Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Report Number : SLPL/2024/06/AAQ/146

S.No.	Parameters	Units	Method	Result	NAAQM Standards
9.	Benzene	µg / m^3	IS 5182 Part-11 2006	< 0.5	05
10.	Benzo(a)Pyrene	ng / m^3	IS 5182 Part-11 2006	< 0.1	01
11.	Arsenic (As)	ng / m^3	USEPA method: 108	< 0.05	06
12.	Carbon Monoxide (Co)	mg / m^3	IS 5182 Part-10 1999 (RA - 2003)	< 0.2	2.0

EQUIPMENT DETAILS:
Make: Envirotech
Model: APM-550M/S. No: 103-DTH-2018
Calibrated On: 25.08.2023 Due On: 24.08.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/AAQ/054
	Sample Registration No	: SLPL/ AAQ/145
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Ambient air quality monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Near PD Lab
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Units	Method	Result	NAAQM Standards
1.	Particulate Matter PM 10	µg / m^3	IS 5182 (Part 23); 2006: 2017	67.3	100
2.	Particulate Matter PM 2.5	µg / m^3	IS 5182 (Part 24); 2019	29.1	60
3.	Sulphur Dioxide (SO_2)	µg / m^3	IS 5182 (Part 2) 2001; 2017	17.8	80
4.	Oxides Of Nitrogen (NO_x)	µg / m^3	IS 5182 (Part6); 2017	21.7	80
5	Ammonia (NH_3)	µg / m^3	IS:5182(Part 25): 2018	< 20	400
6.	Ozone (O_3)	mg / m^3	IS 5182 Part-9 :1974: 2019	13.9	100
7.	Lead (Pb)	µg / m^3	IS 5182 : Part 22 : 2004	< 0.5	1.0
8.	Nickel (Ni)	ng / m^3	IS 5182 : Part 26 : 2020	< 10	20

Note : This report is subject to terms and conditions mentioned overleaf

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TEST REPORT

Report Number : SLPL/2024/06/AAQ/145

S.No.	Parameters	Units	Method	Result	NAAQM Standards
9.	Benzene	µg / m^3	IS 5182 Part-11 2006	< 0.5	05
10.	Benzo(a)Pyrene	ng / m^3	IS 5182 Part-11 2006	< 0.1	01
11.	Arsenic (As)	ng / m^3	USEPA method: 108	< 0.05	06
12.	Carbon Monoxide (Co)	mg / m^3	IS 5182 Part-10 1999 (RA - 2003)	< 0.2	2.0

Equipment Details:

Make: Envirotech
Model: APM 411/S.No: 6602-DTG-2019
Instrument ID: SLPL/HYD/RDS/50
Calibrated On: 25.08.2023 DUE ON: 24.08.2024

Make: E & E Solutions
Model: APM-550 Mini/830-DTH-2019
Instrument ID: SLPL/HYD/FP/51
Calibrated On: 25.08.2023 DUE ON: 24.08.2024

Verified by
D. Krishna Kalyani
Technical Manager

SAI LABORATORIES PVT. LTD. Hyderabad

Authorized Signatory
Allam Satyanarayana
Managing Director

*****End of report*****

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS
Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

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Mobile : 8501880764
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TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/AAQ/053
	Sample Registration No	: SLPL/ AAQ /144
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Ambient air quality monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Near ETP Area
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Units	Method	Result	NAAQM Standards
1.	Particulate Matter PM 10	µg / m^3	IS 5182 (Part 23); 2006: 2017	68.6	100
2.	Particulate Matter PM 2.5	µg / m^3	IS 5182 (Part 24); 2019	32.5	60
3.	Sulphur Dioxide (SO_2)	µg / m^3	IS 5182 (Part 2) 2001; 2017	20.6	80
4.	Oxides Of Nitrogen (NO_x)	µg / m^3	IS 5182 (Part6); 2017	23.8	80
5	Ammonia (NH_3)	µg / m^3	IS:5182(Part 25): 2018	< 20	400
6.	Ozone (O_3)	mg / m^3	IS 5182 Part-9 :1974: 2019	13.7	100
7.	Lead (Pb)	µg / m^3	IS 5182 : Part 22 : 2004	< 0.5	1.0
8.	Nickel (Ni)	ng / m^3	IS 5182 : Part 26 : 2020	< 10	20

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TEST REPORT

Report Number : SLPL/2024/06/AAQ/144

S.No.	Parameters	Units	Method	Result	NAAQM Standards
9.	Benzene	$\mu g / m^3$	IS 5182 Part-11 2006	< 0.5	05
10.	Benzo(a)Pyrene	ng / m^3	IS 5182 Part-11 2006	< 0.1	01
11.	Arsenic (As)	ng / m^3	USEPA method: 108	< 0.05	06
12.	Carbon Monoxide (Co)	mg / m^3	IS 5182 Part-10 1999 (RA - 2003)	< 0.2	2.0

Equipment Details:
Make: Envirotech
Model: APM 460/ 664 E23
Calibrated On: 17.06.2024 DUE ON: 16.06.2025

Make: Envirotech
Model: APM 550 MINI/1329 F23
Calibrated On: 17.06.2024 DUE ON: 16.06.2025

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

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TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/AAQ/052
	Sample Registration No	: SLPL/ AAQ/143
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Ambient air quality monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Gate-01(Admin Building)
Sample Collected Person Details: Mr. Venkatesh	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Units	Method	Result	NAAQM Standards
1.	Particulate Matter PM 10	µg / m^3	IS 5182 (Part 23); 2006: 2017	65.9	100
2.	Particulate Matter PM 2.5	µg / m^3	IS 5182 (Part 24); 2019	30.2	60
3.	Sulphur Dioxide (SO_2)	µg / m^3	IS 5182 (Part 2) 2001; 2017	19.5	80
4.	Oxides Of Nitrogen (NO_x)	µg / m^3	IS 5182 (Part6); 2017	22.7	80
5	Ammonia (NH_3)	µg / m^3	IS:5182(Part 25): 2018	< 20	400
6.	Ozone (O_3)	mg / m^3	IS 5182 Part-9 :1974: 2019	14.2	100
7.	Lead (Pb)	µg / m^3	IS 5182 : Part 22 : 2004	< 0.5	1.0
8.	Nickel (Ni)	ng / m^3	IS 5182 : Part 26 : 2020	< 10	20

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ISO 9001 - 2015 & OHSAS
Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
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TEST REPORT

Report Number : SLPL/2024/06/AAQ/143

S.No.	Parameters	Units	Method	Result	NAAQM Standards
9.	Benzene	µg / m^3	IS 5182 Part-11 2006	< 0.5	05
10.	Benzo(a)Pyrene	ng / m^3	IS 5182 Part-11 2006	< 0.1	01
11.	Arsenic (As)	ng / m^3	USEPA method: 108	< 0.05	06
12.	Carbon Monoxide (Co)	mg / m^3	IS 5182 Part-10 1999 (RA - 2003)	< 0.2	2.0

Equipment Details:
Make: Envirotech
Model: APM 460/ 663 E23
Calibrated On: 17.06.2024 DUE ON: 16.06.2025

Make: Envirotech
Model: APM 550 MINI/1330 F23
Calibrated On: 17.06.2024 DUE ON: 16.06.2025

Verified by
D. Krishna Kalyani
Technical Manager

SAI LABORATORIES PVT. LTD. Hyderabad

Authorized Signatory
Allam Satyanarayana
Managing Director

*****End of report*****

Note : This report is subject to terms and conditions mentioned overleaf

Sai Laboratories Pvt. Ltd.

NABL ACCREDITED

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
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TC-8396

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/NS/051
	Sample Registration No	: SLPL/NS/139-142
	Issue Date	: 04.07.2024
	Date of completion of testing	: 27.06.2024
	Date of commencement of testing	: 27.06.2024
Discipline: Chemical	Date of Registration	: 27.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 27.06.2024
Product: Noise Level Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : --	Location of Sampling	: As given below
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Test Report No	Name of the Location	Test Method	Units	Results	
					Day Time	Night Time
1	139	Near Gate- 01 (Security Room)	IS 9989:1981 (RA 2008)	dB (A)	53.8	47.3
2	140	Near DG Set Area	IS 9989:1981 (RA 2008)	dB (A)	61.4	55.0
3	141	Near ETP	IS 9989:1981 (RA 2008)	dB (A)	62.8	51.4
4	142	Near Production Area	IS 9989:1981 (RA 2008)	dB (A)	54.5	50.8

Note: -APPCB Norms -Day Time Limits in dB (A) - 75dB (A)
Night Time Limits in dB (A) - 70dB (A)

EQUIPMENT DETAILS: Make: Lutron; Model: SL-4010
Calibrated On: 04.12.2023 Due On: 03.12.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

Sai Laboratories Pvt. Ltd.

NABL ACCREDITED

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TC-8396

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/STK/056
	Sample Registration No	: SLPL/ STK /147
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Stack Emission Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Stack attached to Boiler 3.5 TPH
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Method	Unit	Result	APPCB Norms
1	Temperature	IS 11255 Part-3: 2008 : 2018	°C	102	--
2	Flue gas velocity	IS 11255 Part-3: 2008: 2018	m/s	9.56	--
3	Flow Rate	IS 11255 Part-3: 2008: 2018	Nm3/hr	2288	--
4	Suspended Particulate Matter (SPM)	IS 11255 Part-I) 1985: 2019	mg/Nm^3	63.6	115
5	Sulphur Dioxide (SO_2)	IS 11255 (Part2):1985: 2019	mg/Nm^3	32.4	800
6	Oxides of Nitrogen (NO_x)	IS 11255Part-7 2005: 2017	mg/Nm^3	43.7	600

Equipment Details: Make: Envirotech
Model: VSS – I
Calibrated On: 05.10.2023 Due On: 05.10.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

Sai Laboratories Pvt. Ltd.

NABL ACCREDITED

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Mobile : 8501880764
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TC-9396

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/STK /057
	Sample Registration No	: SLPL/STK/148
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Stack Emission Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Stack attached to D.G Set-I 1500 KVA
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Method	Unit	Result	APPCB Norms
1	Temperature	IS 11255 Part-3: 2008 : 2018	°C	101	--
2	Flue gas velocity	IS 11255 Part-3: 2008: 2018	m/s	8.21	--
3	Flow Rate	IS 11255 Part-3: 2008: 2018	Nm3/hr	2036	--
4	Suspended Particulate Matter (SPM)	IS 11255 Part-I) 1985: 2019	mg/Nm^3	60.9	115
5	Sulphur Dioxide (SO_2)	IS 11255 (Part2):1985: 2019	mg/Nm^3	32.6	800
6	Oxides of Nitrogen (NO_x)	IS 11255Part-7 2005: 2017	mg/Nm^3	36.8	600

Equipment Details: Make: Envirotech
Model: VSS – I
Calibrated On: 05.10.2023 Due On: 05.10.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

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Sai Laboratories Pvt. Ltd.

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TC-8396

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/STK /058
	Sample Registration No	: SLPL/ STK /149
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Stack Emission Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Stack attached to D.G Set-II 1500 KVA
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Method	Unit	Result	APPCB Norms
1	Temperature	IS 11255 Part-3: 2008 : 2018	°C	103	--
2	Flue gas velocity	IS 11255 Part-3: 2008: 2018	m/s	8.44	--
3	Flow Rate	IS 11255 Part-3: 2008: 2018	Nm3/hr	2684	--
4	Suspended Particulate Matter (SPM)	IS 11255 Part-I) 1985: 2019	mg/Nm^3	63.8	115
5	Sulphur Dioxide (SO_2)	IS 11255 (Part2):1985: 2019	mg/Nm^3	35.3	800
6	Oxides of Nitrogen (NO_x)	IS 11255Part-7 2005: 2017	mg/Nm^3	47.6	600

Equipment Details: Make: Envirotech
Model: VSS – I
Calibrated On: 05.10.2023 Due On: 05.10.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

Sai Laboratories Pvt. Ltd.

NABL ACCREDITED

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TC-8396

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/STK /059
	Sample Registration No	: SLPL/ STK/150
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Stack Emission Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Stack attached to Fire Hydrant Diesel Engine
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Method	Unit	Result	APPCB Norms
1	Temperature	IS 11255 Part-3: 2008 : 2018	°C	105	--
2	Flue gas velocity	IS 11255 Part-3: 2008: 2018	m/s	8.75	--
3	Flow Rate	IS 11255 Part-3: 2008: 2018	Nm3/hr	1034	--
4	Suspended Particulate Matter (SPM)	IS 11255 Part-I) 1985: 2019	mg/Nm^3	65.9	115
5	Sulphur Dioxide (SO_2)	IS 11255 (Part2):1985: 2019	mg/Nm^3	34.1	
6	Oxides of Nitrogen (NO_x)	IS 11255Part-7 2005: 2017	mg/Nm^3	49.3	600

Equipment Details: Make: Envirotech
Model: VSS – I
Calibrated On: 05.10.2023 Due On: 05.10.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Note : This report is subject to terms and conditions mentioned overleaf

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Certified Company

Sai Laboratories Pvt. Ltd.

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TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/STK/060
	Sample Registration No	: SLPL/ STK/151
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Atmospheric Pollution	Date of Receipt	: 29.06.2024
Product: Stack Emission Monitoring	Date of Sampling	: 27.06.2024
Qty: --	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : P.E. Cover	Location of Sampling	: Scrubber (SBR-1102 Production Building)
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameters	Method	Unit	Result	APPCB Norms
1	Sulphuric Acid mist	EPA method	mg/Nm^3	14.4	50
2	Hydrochloric Acid	EPA method	mg/Nm^3	< 1.0	35
3	Ammonia as NH_3	EPA method	mg/Nm^3	BDL	30
4	Chlorine as Cl_2	EPA method	mg/Nm^3	1.5	15

Equipment Details: Make: Envirotech
Model: VSS – I
Calibrated On: 05.10.2023 Due On: 05.10.2024

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

SAI LABORATORIES (I) PVT. LTD.

End of report

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

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Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/WS/063
	Sample Registration No	: SLPL/WS/154
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Pollution & Environment	Date of Receipt	: 29.06.2024
Product: Waste Water	Date of Sampling	: 27.06.2024
Qty: 2 ltrs	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : Plastic cans	Location of Sampling	: HTDS (Effluent)
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameter	Method	Units	Results
1	pH at 25^{0}C	APHA 23rdEdition 4500H$^+$ B	--	7.33
2	Temperature	APHA23rd Edition 2550 B	^{0}C	29
3	Total Dissolved Solids	APHA 23rdEdition 2540 – C	mg/L	46790
4	Total Suspended Solids	APHA 23rdEdition 2540 – D	mg/L	412
5	Chemical Oxygen Demand	APHA 23rdEdition 5220 -- B	mg/L	18796
6	Biological Oxygen Demand(at 27^{0}C)	APHA 23rdEdition 5210 – B	mg/L	52180
7	Oil & Grease	APHA 23rdEdition 5520 – B	mg/L	126
8	Hexavalent Chromium as Cr^{+6}	APHA 23rdEdition 3500 Cr B	mg/L	< 0.03
9	Chromium as Cr	APHA 23rdEdition 3111B	mg/L	< 0.5
10	Ammonical Nitrogen	APHA 23rd Edition 4500 NH_3 B	mg/L	116
11	Cyanide as CN	APHA 23rdEdition) 4500 CN- C, E	mg/L	< 0.05
12	Nickel as Ni	APHA 23rdEdition 3111B	mg/L	< 0.5
13	Lead as Pb	APHA 23rdEdition 3111B	mg/L	0.73
14	Zinc as Zn	APHA 23rdEdition 3111B	mg/L	1.64
15	Arsenic as As	APHA 23rdEdition 3111B	mg/L	< 0.1
16	Mercury as Hg	APHA 23rdEdition 3111B	mg/L	< 0.1

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

SAI LABORATORIES PVT. LTD. Hyderabad

*****End of report*****

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS
Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/06/WS/064
	Sample Registration No	: SLPL/WS/155
	Issue Date	: 04.07.2024
	Date of completion of testing	:04.07.2024
	Date of commencement of testing	: 29.06.2024
Discipline: Chemical	Date of Registration	: 29.06.2024
Group: Pollution & Environment	Date of Receipt	: 29.06.2024
Product: Waste Water	Date of Sampling	: 27.06.2024
Qty: 2 ltrs	Sampling Method	: SLPL/HYD/SOP/SP/001
Packing : Plastic cans	Location of Sampling	: LTDS (Effluent)
Sample Collected Person Details: Mr. Chandra	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Sunny		

S. No.	Parameter	Method	Units	Results	Standards as per APPCB
1	pH at 25^{0}C	APHA 23rd Edition 4500H$^+$ B	--	7.31	6.5-8.5
2	Temperature	APHA23rd Edition 2550 B	^{0}C	31	< 45
3	Total Dissolved Solids	APHA 23rd Edition 2540 – C	mg/L	2487	12000
4	Total Suspended Solids	APHA 23rd Edition 2540 – D	mg/L	78	600
5	Chemical Oxygen Demand	APHA 23rd Edition 5220 – B	mg/L	5640	8000
6	Biological Oxygen Demand(at 27^{0}C)	APHA 23rd Edition 5210 – B	mg/L	2180	3000
7	Oil & Grease	APHA 23rd Edition 5520 – B	mg/L	< 5.0	20
8	Hexavalent Chromium as Cr^{+6}	APHA 23rd Edition 3500 Cr B	mg/L	< 0.03	2.0
9	Chromium as Cr	APHA 23rd Edition 3111B	mg/L	< 0.5	2.0
10	Ammonical Nitrogen	APHA 23rd Edition 4500 NH_3 B	mg/L	16.3	30
11	Cyanide as CN	APHA 23rd Edition) 4500 CN- C, E	mg/L	< 0.05	0.2
12	Nickel as Ni	APHA 23rd Edition 3111B	mg/L	< 0.5	3.0
13	Lead as Pb	APHA 23rd Edition 3111B	mg/L	0.74	1.0
14	Zinc as Zn	APHA 23rd Edition 3111B	mg/L	1.64	15
15	Arsenic as As	APHA 23rd Edition 3111B	mg/L	< 0.1	0.2
16	Mercury as Hg	APHA 23rd Edition 3111B	mg/L	< 0.01	0.01

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

SAI LABORATORIES PVT. LTD. Hyderabad

*****End of report*****

Note : This report is subject to terms and conditions mentioned overleaf

ISO 45001 Safety Management System & 14001 Certifications

TÜVINDIA

Certificate

Management system as per
ISO 14001:2015

TÜVINDIA
TUV INDIA PVT. LTD.
ISO 14001:2015
www.tuv-nord.com/in EM 002

The Certification Body TUV INDIA PVT. LTD. hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
Plot No.11,11A,12 and 12A, APSEZ, Atchutapuram,
Anakapalli – 531 011, Andhra Pradesh,
India

operates a management system in accordance with the requirements of ISO 14001 : 2015 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

Manufacture of Intermediates and Active Pharmaceuticals Ingredients (APIs).

Certificate Registration No. **IND 104 24394811**
Audit Report No. **Q 13239/2024**

Valid from **16.02.2024**
Valid until **15.02.2027**
Initial certification **16.02.2024**

Visit our database to verify the validity of this certificate.

Mumbai, **16.02.2024**

Certification Body at TUV INDIA PVT. LTD.

TUV INDIA PVT. LTD.
801, Raheja Plaza 1, L.B.S Marg,
Ghatkopar (W) Mumbai – 400 086,
India
www.tuv-nord.com/in

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EM 002

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Annexure - 9b

Certificate

Management system as per
ISO 45001:2018

TÜVINDIA
TUV INDIA PVT. LTD.
ISO 45001:2018
www.tuv-nord.com/in OH 006

The Certification Body TUV INDIA PVT. LTD. hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
Plot No.11,11A,12 and 12A, APSEZ, Atchutapuram,
Anakapalli – 531 011, Andhra Pradesh,
India

operates a management system in accordance with the requirements of ISO 45001 : 2018 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

Manufacture of Intermediates and Active Pharmaceuticals Ingredients (APIs).

Certificate Registration No. **IND 126 24394811**
Audit Report No. **Q 13239/2024**

Valid from **16.02.2024**
Valid until **15.02.2027**
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India
www.tuv-nord.com/in

NABCB
OH 006

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escientia

Fire protection Systems

PUMP HOUSE DETAILS

Water Sump Capacity -1000KL

Pump Details	Make	Motor (HP)	Pump Capacity	Operation Status	
				Start	Stop
Hydrant jockey pump	Kirloskar	20	15 m^3/hr	Auto start @ 07 kg/cm^2	Auto stop @ 08 kg/cm^2
Hydrant electrical main pump	Kirloskar	270	410 m^3/hr	Auto start @ 6 kg/cm^2	Manual stop
Hydrant diesel engine pump	Kirloskar	243	410 m^3/hr	Auto start @ 5 kg/cm^2	Manual stop
Sprinkler jockey pump	Kirloskar	20	10.8 m^3/hr	Auto start @ 07 kg/cm^2	Auto stop @ 08 kg/cm^2
Sprinkler electrical main pump	Kirloskar	170	273 m^3/hr	Auto start @ 06 kg/cm^2	Manual stop

Fire protection Systems

169

Fire Hydrant System Details

Name of the equipment	Availability Qty
Single Hydrant points	20 No's
Double Hydrant points	05 No's
Water cum Foam monitors	04 No's
Fire Escape Hydrant points	12 No's
Fire Hose Reels	12 No's

- Entire plant provided with fire alarm system with public addressing system
- Central fire alarm panel and repeated panels provided in Security, EHS Office, Engineering Office and API building

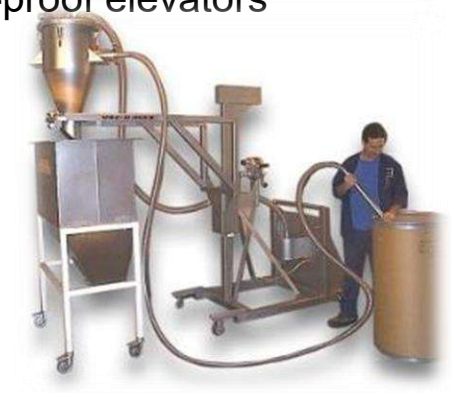
Fire Extinguishers Details

Name of the fire extinguisher	Availability Qty
Foam 09 Liters	38 No's
Foam 50 Liters	09 No's
Foam 135 Liters	01 No
DCP/ABC 09 Kgs	73 No's
DCP 25 Kgs	05 No's
DCP 50 Kgs	02 No's
CO2 4.5 Kgs	54 No's
CO2 6.5 Kgs	18 No's
Clean Agent 06 Kgs	30 No's
Modular Fire Extinguishers 05 Kgs	02 No's
Modular Fire Extinguishers 05 Kgs	36 No's
Total	**259 No's**

Safety Facilities

Process Safety

- Nitrogen blanketing System
- Powder transferring system (PTS)
- Conductive gaskets and hoses
- Earth continuity monitoring system
- Rupture disc with proximity sensors
- Flashback arrestors
- Ex-proof electrical installation
- Ex-proof elevators



Fire Safety

- 1000 KL Fire Hydrant water storage
- Medium velocity auto-sprinkler system
- Fire & Escape hydrant points
- Fusible auto Sprinklers
- Fire alarms & MCPs
- Fire Extinguishers
- Gas suppression system
- FM global approved components

Emergency Handling

- SCBAs – 10 Nos
- Dupont – fire retardant suits
- Fire proximity suits
- Foldable stretchers
- Inhouse Ambulance van
- Public Address System (PAS)
- Trained Emergency response Team.
- Emergency way finding signs – auto-glow

Few snaps - Process Safety installations

Nitrogen Blanketing System

Safety relief valves & Rupture disks provided to all reactors

Earth monitoring system

Few snaps - Fire Safety installations

Fire Hydrant Pump house

Deluge system - MVWSS

Hydrant & hose reel points

Gas Suppression system

Fusible sprinklers

Few snaps – Emergency handling installations

Public address system

Emergency break panel

SCBA sets available in all floors

Emergency exit layout

Annexure - 10

ANDHRA PRADESH POLLUTION CONTROL BOARD
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Website: https://pcb.ap.gov.in/

RENEWAL OF CONSENT TO OPERATE & HAZARDOUS WASTE AUTHORISATION ORDER

Consent Order No: APPCB/VSP/VSP/98/CFO/HO/2025 03-03-2025

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorization under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s. Atchutapuram Effluent Treatment Ltd
(M/s. AETL), APSEZ - 1.5 MLD CETP (Phase - 1)
Atchutapuram, Anakapalli District
E-Mail: md@aetltd.org

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i. Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge KLD	Point of Disposal
1.	High TDS effluents from member units (TDIS concentration more than 12000 mg/l and COD more than 8000 mg/l)*	450 KLD	• To MEE followed by ATFD after steam stripping. • MEE condensate to biological ETP of CETP for further treatment. • Evaporation salts to TSDF through APEMC.
2.	Low TDS effluents from member industries including trade and domestic streams after treatment (TDIS concentration less than 12000 mg/l and COD less than 8000 mg/l)	1500 KLD	• Into sea through marine outfall after primary, biological and tertiary treatment duly meeting the marine discharge standards stipulated.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow (m^3/hr)
1.	Attached to 1X14 TPH Coal fired boiler	--
2.	Attached to 125 KVA D.G. Sets	--

iii) HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 6 (2)]:

M/s. Atchutapuram Effluent Treatment Ltd (M/s. AETL), APSEZ - 1.5 MLD CETP (Phase - 1) Atchutapuram, Anakapalli District is hereby granted an authorization to operate a facility for generation, collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

- **HAZARDOUS WASTES WITH DISPOSAL OPTION:**

S. No	Name of the Hazardous waste	Stream	Quantity	Method of disposal
1.	MEE Salts & ETP Sludge	35.3 of schedule I	70 TPD	Shall be disposed to TSDF Parawada for incineration / Authorized cement plants for co-processing through APEMC.

This consent order is valid for manufacture the following products along with quantities indicated only:

S.No	Product	Quantity
1.	To treat HTDS & LTDS effluents generated from the member units of APSEZ, APIIC at Atchutapuram & Rambilli (M)	1.5 MLD

(*High TDS effluents: 450 KLD, Low TDS effluents: 1050 KLD)

The issue of CTO&HWA renewal to the facility was placed in the Consent Management Committee meeting held on 14.02.2025. The committee has agreed to issue CTO&HWA (Renewal) subject to following conditions:

1. The non-compliances of Board conditions shall be complied within one month.
2. The facility shall comply with the Board directions vide order dated 24.11.2022
   & 14.12.2023.
3. This order is subject to the provisions of `the Acts' and the Rules' and orders

made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the **31st day of July, 2025.**

S SRI SARAVANAN
MEMBER SECRETARY

To
M/s. Atchutapuram Effluent Treatment Ltd
(M/s. AETL), APSEZ - 1.5 MLD CETP (Phase - 1)
Atchutapuram, Anakapalli District
E-Mail: md@aetltd.org

Copy to:

1. The JCEE, Zonal Office, **Visakhapatnam** for information and necessary action.
2. The Environmental Engineer, Regional Office, **Visakhapatnam** for information and necessary action.

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the facility, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The facility should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. The facility should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CTO and exhibit the CTO order at a prominent place in the factory premises.
5. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the

purpose of the Acts by the Board.

6. The facility shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CTO conditions for obtaining Consent & HW Authorization of the Board.
9. The facility should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
10. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
11. The facility shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
12. The facility may explore the possibility of tapping the solar energy for their energy requirements.
13. The facility should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE-B

The issue of CTO&HWA Renewal to the facility was placed in the Consent Management Committee meeting held on 14.02.2025. The Committee recommended to issue CTO & HWA renewal for a period up to 31.07.2025. The facility shall comply with the following:

1. The non-compliances of Board conditions shall be complied within one month.
2. The facility shall comply with the Board directions vide order dated 24.11.2022 & 14.12.2023.

WATER POLLUTION:

3. The parameters of low TDS effluents shall meet the following inlet standards of the CETP:

Parameter	Concentration in mg/l
pH	6.50 – 8.50
Temperature ^{o}C	< $45^{0}C$
TDS (inorganic)	<12,000 mg/l
TSS	<400mg/l
BOD	3,000 mg/l
COD	<8,000 mg/l
Oil and Grease	20 mg/l
Chromium Hexavalent (as Cr+6)	2 mg/l
Chromium (total) (as Cr)	2 mg/l
Ammonical Nitrogen (as N)	30 mg/l
Cynide (as CN)	0.20 mg/l
Lead (as Pb)	1 mg/l
Nickel (as Ni)	3 mg/l
Zinc (as Zn)	15 mg/l
Arsenic (as As)	0.20 mg/l
Mercury (as Hg)	0.01 mg/l

4. The treated effluent discharged from CETP into Guard ponds and to marine outfall shall not contain constituents in excess of the tolerance limits mentioned below:

Outlet No.	Parameter	Concentration not to exceed limits in mg/l (except pH)
02	PH	6 to 9.0
	Biochemical Oxygen Demand (BOD)3, 27 ℃	100
	Chemical Oxygen Demand (COD)	250
	Total Suspended Solids (TSS)	100

Temperature at the point of discharge (^{o}C)	shall not exceed more than 5℃ above ambient temperature of the receiving water body
Oil and Grease	10.0
Ammonical Nitrogen	50.0
Total Kjeldahl Nitrogen (TKN)	50.0
Nitrate – Nitrogen	50.0
Fluoride	15.0
Sulphide (as S)	5.0
Phenolic Compounds (as C_6H_5OH)	5.0
Total residual Chlorine	1.0
Zinc	15.0
Iron	3.0
Copper	3.0
Total Chromium	2.0
Manganese	2.0
Nickel	3.0
Arsenic	0.2
Cyanide	0.2
Vanedium	0.2
Lead	0.1
Hexavalent Chromium	0.1
Selenium	0.05
Cadimum	0.05
Mercury	0.01
Bio-assay test	90% survival of fish after 96 hours in 100% effluents.
*All efforts shall be made to remove colour and unpleasant odour as far as possible. The TDS of the treated effluents discharge from CETP to marine outfall shall be more than TDS of Sea.	

5. **The facility shall comply with the roles and responsibilities notified by MoEF&CC in Notification dated 09.09.2024:**
   i. In order to manage the CETP professionally, there shall be a Special Purpose Vehicle (SPV) or Society (registered under the Societies Registration Act, 1860) or Trust (registered under an appropriate statute), which would be responsible for the entire operation and maintenance of CETP.
   ii. (a) The CETP operating agencies shall distribute the total available treatment capacity among the member units in a rational and transparent manner.

(b) A legal agreement between the CETP and its member units clearly delineating their mutual obligations, terms and conditions of membership, membership fee, cost recovery formula developed for the installation and treatment charges, operation and maintenance of CETP, shall be executed.

iii. The CETP operating agencies shall comply with the prescribed inlet and outlet effluent standards. In order to strengthen the monitoring and compliance through self-regulatory mechanism, Online Continuous Effluent Monitoring System (OCEMS) shall be installed at the CETP and data connectivity be provided to the Central Board and concerned Board or Committee.

iv. (a) The CETP operating agencies shall develop an automated online mechanism to monitor quantity and quality of effluent (by way of installing SCADA–PLC and auto samplers or sensors,) being discharged by the member units through pipelines or sewers, at individually or in cluster, to ensure compliance.

(b) The connectivity of the monitored data shall be provided to the State Board or the Committee.

(c) CCTV cameras at appropriate locations shall also be installed to check bypass or unauthorised discharges.

v. In case of transportation of effluent through tankers, CETP operating agencies shall,—

(a) Ensure a tri-partite interface among the CETP, member industries and tankers, through an integrated communication technology (ICT), combined with logistic system with tankers for collection and transportation of effluent to CETPs;

(b) ensure that tankers are fitted with GPS system and carry out real-time monitoring of the tankers; and

(c) ensure the sampling and quality check of the effluent upon receipt of tanker at CETP.

vi. (a) The CETP operating agencies shall have authority to access the member industry premises, without prior notice, to collect wastewater samples.

(b) The OCEMS system, if installed, shall also be accessible to the CETP operating agencies for cross verification of the monitored values with the online data.

vii. (a) The CETP operating agencies shall ensure that the member industries discharge their trade effluent meeting the outlet norms of their individual PETPs. In case of non-compliance of the norms and/or nonpayment of their share, within specific or agreed time limits, towards meeting operation and maintenance costs, the

CETP operating agencies shall take appropriate action, such as, refusal to take effluent of defaulting member, cancellation of membership of the individual unit with CETP.

(b) The CETP operating agency shall develop the control mechanism to regulate the flow from a member industry.

(c) The list of such non-complying member industrial units and action taken against them shall be provided to the Board or Committee, through online mode, for further necessary action.

viii. (a) The CETP operating agencies shall ensure sludge management based on the sludge characteristics (i.e. hazardous or non-hazardous) as per the conditions mentioned in the authorisation.

(b) Adequate linkage with Treatment, Storage and Disposal Facility (TSDF) for disposal of hazardous waste, generated from the facility, shall be ensured.

ix. (a) The CETP operating agencies, shall also monitor the upstream and downstream conveyance linkages for the physical and hydraulic status.(b) In case of any inadequacy, the same shall be addressed and reported to the State agencies.

x. The CETP operating agencies shall establish the laboratory facilities on site, at least, for the core parameters, namely, pH, BOD, COD, TSS and any other parameter required by the State Board or the Committee.

xi. Alternate power backup arrangement of adequate capacity shall be installed at CETP to ensure continuous operation of CETP even during power failure.

xii. The CETP operating agencies shall be responsible for carrying regular surface and ground water quality monitoring of the receiving water and ground water along its reaches, covering all the parameters prescribed in the stream standards at least once a year. Such analysis report shall form part of environmental audit being conducted annually.

5. The source of water is APIIC supply. The following is the permitted water consumption:

Sl. No.	Purpose	Quantity (KLD)
1	Cooling	200
2	Scrubbers	10
3	RO plant	420
4	Greenbelt	100

5	Domestic	10
	Total	**740**

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above.

7. The facility shall install Electromagnetic digital flow meters with totalisers for various purposes.
8. The effluents which are not meeting the standards stipulated at condition No.3 of schedule-B shall be treated as HTDS effluents and shall be sent to stripper, MEEs followed by ATFD.

AIR POLLUTION:

9. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	Emission Standards
1	Particulate matter	100 mg/Nm^3

10. The facility shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10 microns) - 100 micro gram/ m3; PM2.5 (Particulate Matter size less than 2.5 microns) - 60 micro gram/ m3; SO_2 - 80 micro gram/ m3; NOx - 80 micro gram/m3, outside the factory premises at the periphery of the facility.

    Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No. B-29016/20/90/PCI-I, dated 18.11.2009.

    Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
    Night time (10 PM to 6 AM) - 70 dB (A)

11. The facility shall comply with emission limits for DG sets of capacity up to 800 KW as per the Notification G.S.R. 804(E), dated 03.11.2022, under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.
12. The facility shall install and operate bag filter continuously to 14 TPH coal fired boiler and maintain records.
13. The facility shall install continues emission monitoring system to 14 TPH coal fired boiler.

GENERAL:

14. The facility shall construct coal storage shed for storage of coal.
15. The facility installs flow meters at inlet & outlet of CETP.
16. The facility shall accept wastewater to CETP by tankers fitted with GPS which can be monitored by APPCB at Regional Office and at AETL with uniform color tanker.
17. The facility shall install flow meters preferably Electro Magnetic flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.
18. The drums containing chemicals shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
19. The facility shall install Continuous on-line effluent monitoring system and web camera before discharging into the sea through the marine outfall. It should be connected to the website of APPCB and CPCB as per the directions of CPCB. The facility shall comply with CPCB directions dated 05.02.2014 / 02.03.2015 and guidelines issued regarding online monitoring systems issued from time to time.
20. The facility shall operate stripper, MEE and ATFD continuously for treatment of HTDS effluent.
21. The facility shall provide and operate screen chamber, equalization tank, flash mixer, clari-floculator, aeration tank, secondary clarifier for treatment of LTDS effluent.
22. The facility shall not increase the capacity beyond the permitted capacity mentioned in this order.
23. The facility shall ensure maintenance of green belt as per CFE orders / EC orders. The operator shall maintain green belt with appropriate species of trees around the project area.
24. The facility shall take proper care to nullify the effect of odour nuisance due to effluents.
25. The facility shall co-ordinate with member units of the AETL for segregation of effluents and shall ensure that separate leak proof and non-corrosive tankers are used for carrying effluents containing Cyanide and heavy metals.
26. The facility shall maintain daily records on characteristics of effluents and hydraulic load for each stream of cyanide & heavy metals bearing effluents and shall furnish soft copy of the consolidated records through mail to RO, VSP & ZO, VSP every week
27. The facility shall own total responsibility for any illegal dumping elsewhere and for conveying the High TDS effluents to CETP and shall ensure

implementation of adequate measures to prevent spillages / discharges of the effluents during loading and unloading the effluents into tankers either at the premises of member industries or at the CETP facility.

28. The facility shall measure the quantity and characteristics industry wise of High TDS & Low TDS effluent streams receiving from the member industries. The consolidated daily records along with analysis reports of the effluents for each stream shall be submitted on daily basis along with storage quantity in each tank and disposal quantity through E-mail to RO, VSP & ZO, VSP and monthly consolidated report every month.
29. The operator of the facility shall ensure that all the treatment facilities are impervious to prevent contamination of soil & ground water table.
30. The operator of the CETP shall prepare the contingency plan to prevent any leakages or accidental discharges outside the premises even during shock load / other events and shall own total responsibility for any leakages or discharges in any form outside the premises.
31. The operator of CETP shall maintain diffuser system and monitoring of aquatic life in the sea shall be done periodically for every three months. The consolidated trend analysis report of the marine aquatic life shall be submitted to the RO, VSP & ZO, VSP every three months.
32. The pipeline carrying the treated Low TDS effluents for marine disposal shall be maintained buried at a safe depth. The operator of the CETP shall own total responsibility to prevent any leakages / damage of pipeline carrying the treated effluents.
33. The 4 guard ponds shall be bounded suitably to prevent mixing of rain water run off with flood water from upstream of the facility. The operator shall provide flow meters with totalizer at the inlet and outlet of each guard pond to quantify the treated effluents disposed off through outfall and report compliance within two months to RO-Visakhapatnam.
34. The operator of facility shall of provide online monitoring system of the effluents for the parameters like pH, DO, TDS, COD at each outlet of the guard ponds and Bioassay testing facility. If it is found the effluents are not conforming to the prescribed standards, the effluents shall be taken back to the treatment system to provide adopting suitable treatment to achieve the prescribed standards.
35. The operator of the CETP shall maintain Piezometric stations for monitoring of ground water quality all around the facility including effluent conveying systems from member industries, collection tanks and guard ponds. The operator shall maintain trend analysis on ground water quality and shall regularly monitor for fluctuations of the ground water quality. If any substantial changes in the ground water quality is observed and deviating from the

existing data, the same shall be immediately brought to the notice of the Board along with plan of action to prevent further damage & necessary rectification works shall be taken up.

36. In order to avoid smell nuisance in the surrounding area, the operator of the CETP shall maintain adequate measures which includes dosing of liquid oxygen into the effluents during break down / maintenance /shut down of CETP even for short gap.
37. The facility shall maintain Environment monitoring program covering AAQ for 5-Km radius and ground water quality for a distance of 3 Kms around the facility. The facility shall include monitoring of RSPM at regular intervals. The analysis reports shall be submitted to the Board every month.
38. The ground water sampling points shall be provided on the basis of the ground water profiles and the gradients in consultation with RO, Visakhapatnam.
39. The facility shall follow all the guidelines / directions of CPCB / APPCB issued from time to time.
40. The facility shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.
41. The facility shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent to Establishment (CTE) and Consent to Operation (CTO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the facility **and second half yearly compliance reports shall be the audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.**

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the Hazardous and other wastes except what is permitted through this authorization.

4. Any un authorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site-specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”.
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. An application for the renewal of an authorization shall be made as laid down under these Rules.
9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
10. The authorized person shall submit annual returns in Form- 4 as per Rule 6(5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof to APPCB by 30th day of June of every year for the preceding period April to March. Hazardous Wastes quantities in Form- 4 shall be submitted in terms of Metric Tones/annum.
11. The authorized person shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
12. The authorized person shall store Used /Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buy back basis.
13. The authorized person shall maintain 7 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
14. The authorized person shall maintain proper records for Hazardous & other wastes stated in Authorization in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4

as per Rule 6 (5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof by June 30th for the period ensuring 31st March of the year.

S SRI SARAVANAN
MEMBER SECRETARY

To
M/s. Atchutapuram Effluent Treatment Ltd
(M/s. AETL), APSEZ - 1.5 MLD CETP (Phase - 1)
Atchutapuram, Anakapalli District
E-Mail: md@aetltd.org

Digitally signed by
SHANMUGAM SRISARAVANAN
Date: 03-03-2025 14:46:03

Annexure - 11

SOLVENT-3

SOLVENT-2

SOLVENT-1

SOLVENT CONDENSATION

HEAT EXCHANGER
HE-R-3340 / 3310

SOLVENT

REACTION-1, DISTILLATION, CO-DISTILLATION, REACTION-2

REACTOR
R-3340 / R-3310

KEY STARTING MATERIAL- 1

KEY STARTING MATERIAL- 2

KEY STARTING MATERIAL- 3

SOLVENT-1

CARBON TREATMENT

REACTOR
R-2340

SOLVENT-1

RESLURRY, CRYSTALLIZATION, PURIFICATION

REACTOR
R-2350

KEY STARTING MATERIAL- 1

KEY STARTING MATERIAL- 2

KEY STARTING MATERIAL- 3

FILTRATION

CENTRIFUGE
CF-1320

MOTHER LIQUOR

DRYING

VACUUM TRAY DRYER
D-1310

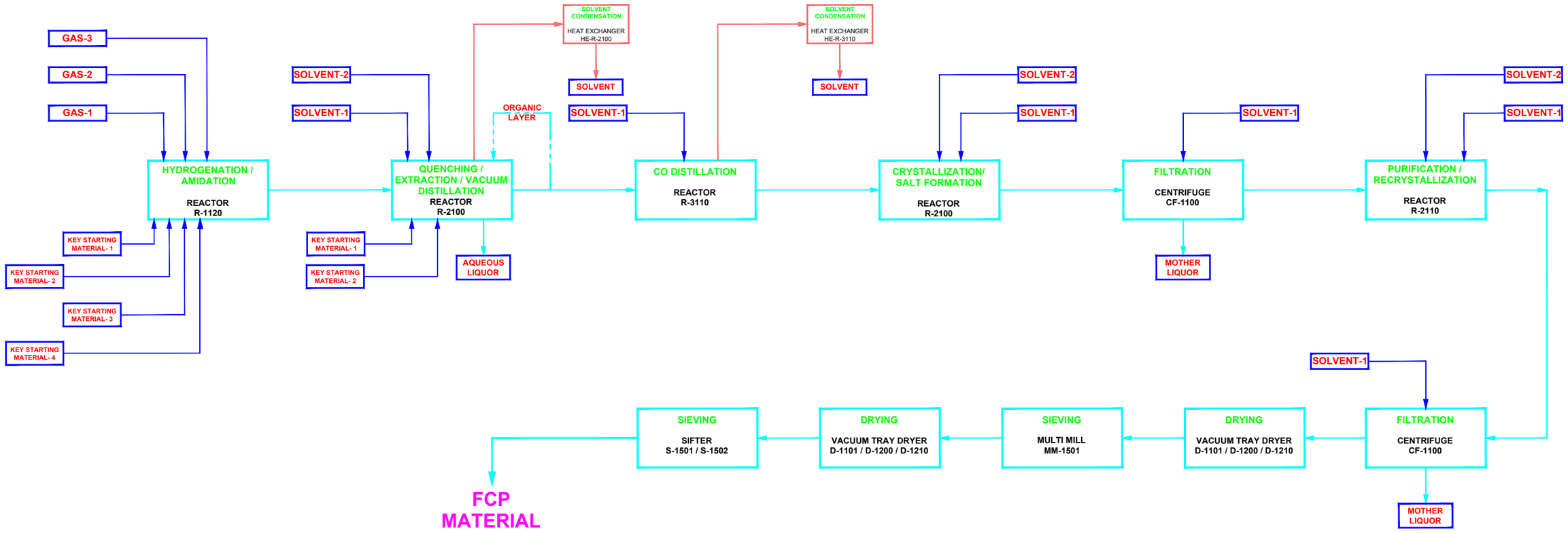
AMC PRODUCT

DRAFT

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
PLOT NOS:11, 11A, 12 & 12A, APSEZ,
ATCHUTAPURAM - 531011

TITLE OF LAYOUT	BLOCK FLOW DIAGRAM FOR AMC		
DRAWING NUMBER	EASPL-BFD-AMC-001/00	EFFECTIVE DATE	
LOCATION	API-II BLOCK	REFERENCE CC NO	

	DRAWN BY	CHECKED BY		APPROVED BY
NAME				
SIGN				
DATE				



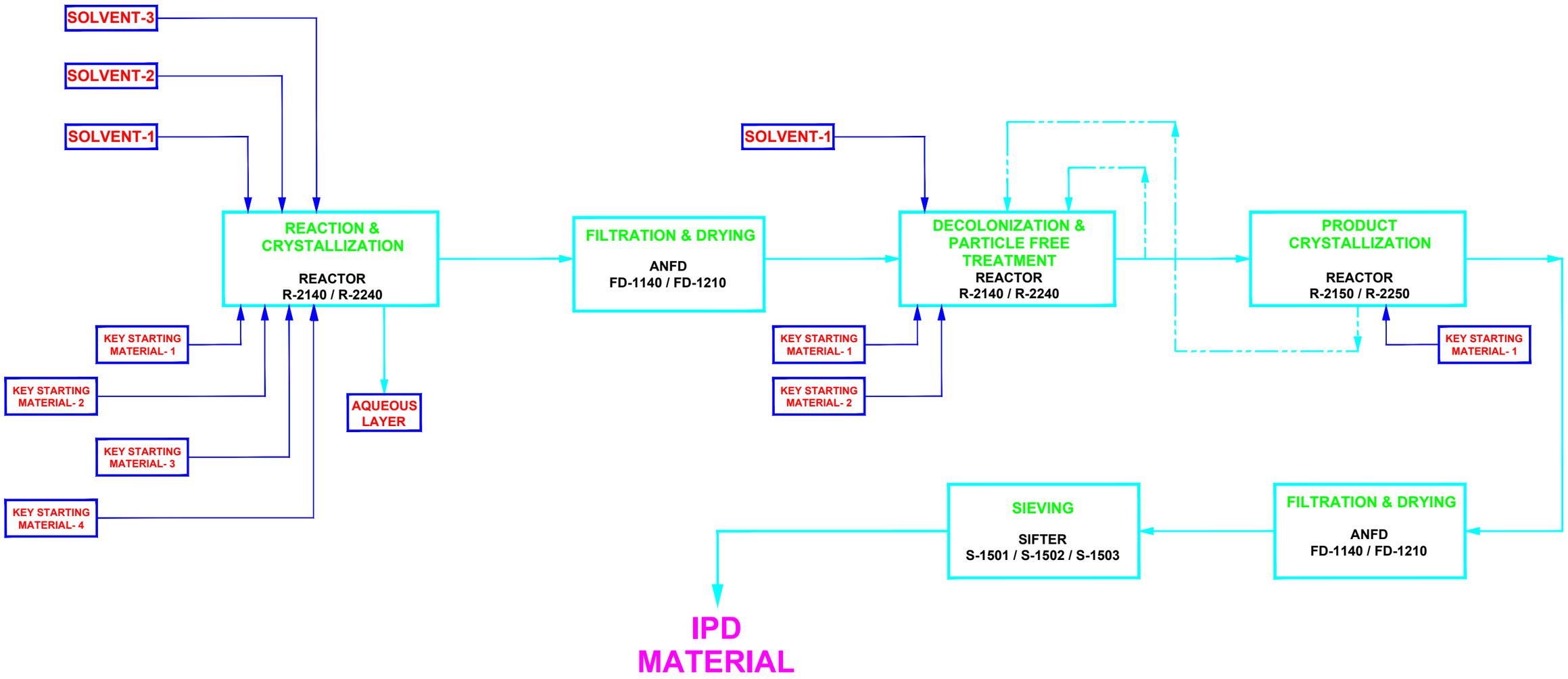
INITIAL DRAFT

escientia

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
PLOT NOS:11, 11A, 12 & 12A, APSEZ,
ATCHUTAPURAM - 531011

TITLE OF LAYOUT	BLOCK FLOW DIAGRAM FOR FCP		
DRAWING NUMBER	EASPL-BFD-FCP-001/00	EFFECTIVE DATE	
LOCATION	API-II BLOCK	REFERENCE CC NO	

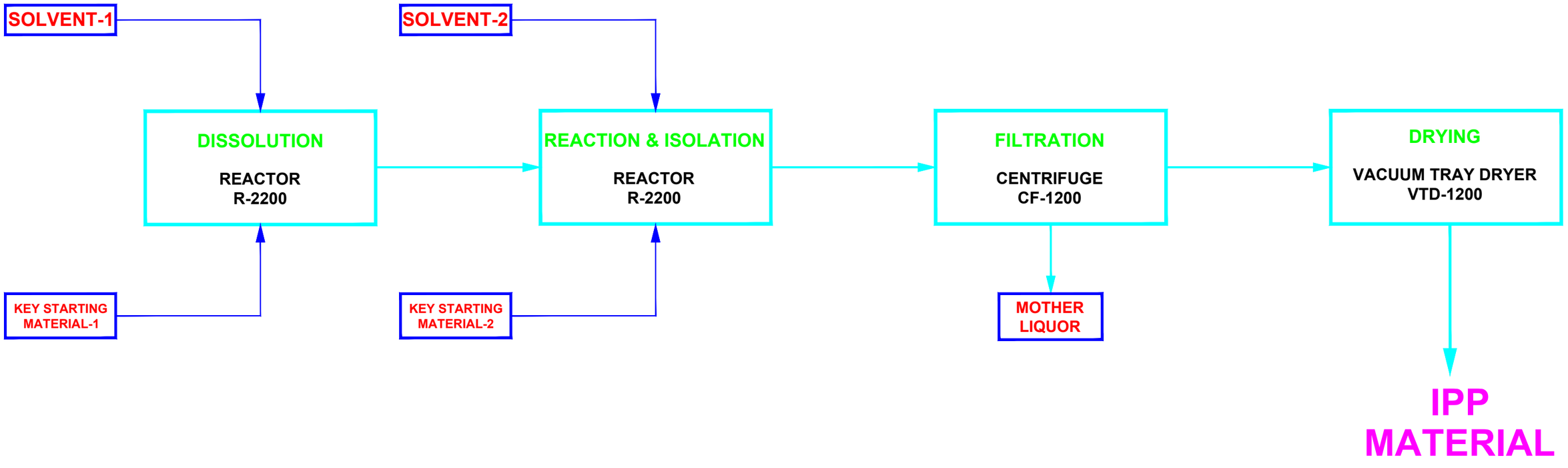
	DRAWN BY	CHECKED BY		APPROVED BY
NAME				
SIGN				
DATE				



DRAFT

	ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED PLOT NOS:11, 11A, 12 & 12A, APSEZ, ATCHUTAPURAM - 531011
TITLE OF LAYOUT	BLOCK FLOW DIAGRAM FOR IPD
DRAWING NUMBER	EASPL-BFD-IPD-001/00
EFFECTIVE DATE	
LOCATION	API-II BLOCK
REFERENCE CC NO	

	DRAWN BY	CHECKED BY		APPROVED BY
NAME				
SIGN				
DATE				



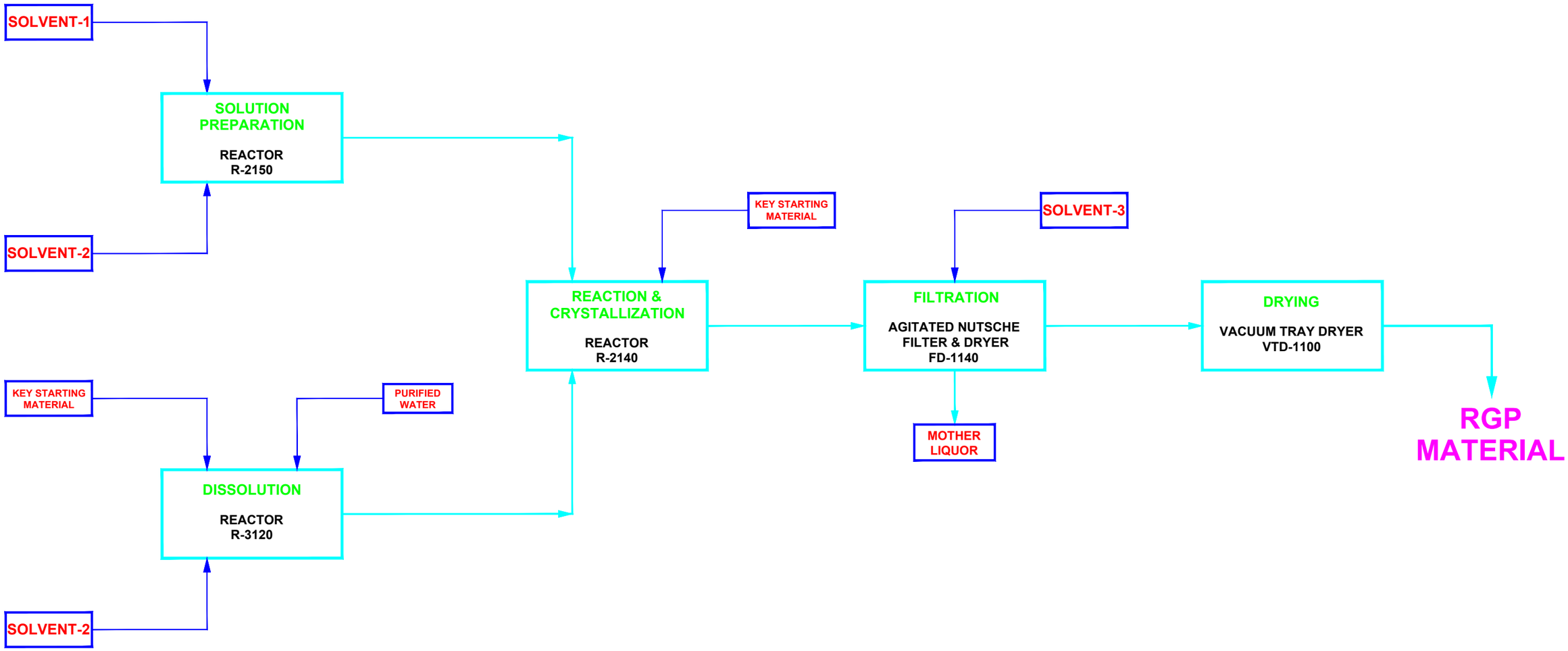
INITIAL DRAFT

escientia

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
PLOT NOS:11, 11A, 12 & 12A, APSEZ,
ATCHUTAPURAM - 531011

TITLE OF LAYOUT	BLOCK FLOW DIAGRAM FOR IPP		
DRAWING NUMBER	EASPL-BFD-IPP-001/00	EFFECTIVE DATE	
LOCATION	API-II BLOCK	REFERENCE CC NO	

	DRAWN BY	CHECKED BY		APPROVED BY
NAME				
SIGN				
DATE				



INITIAL DRAFT

escientia

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
PLOT NOS:11, 11A, 12 & 12A, APSEZ,
ATCHUTAPURAM - 531011

TITLE OF LAYOUT	BLOCK FLOW DIAGRAM FOR RGP		
DRAWING NUMBER	EASPL-BFD-RGP-001/00	EFFECTIVE DATE	
LOCATION	API-II BLOCK	REFERENCE CC NO	

	DRAWN BY	CHECKED BY		APPROVED BY
NAME				
SIGN				
DATE				

Annexure - 12a

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12405

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 3 KL
			Sl. No. R-2140, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2 Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY - 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12406

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 5 KL
			Sl. No. R-2150, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12403

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 5 KL
			Sl. No. R-2100, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12404

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 3 KL
			Sl. No. R-2110, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... #9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948, Rule 56 of AP Factories Rules

			Cert No: GLR/12409
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 3000 ltr
			Sl. No. R-2210, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY (...) 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12407

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 500 ltr
			Sl. No. R-5100, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
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RAJAHMUNDRY Cell: 9848290978

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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12408

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 250 ltr
			Sl. No. R-5110, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12402

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 1 KL
			Sl. No. R-3110, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12401

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 3 KL
			Sl. No. R-3100, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
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RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948, Rule 56 of AP Factories Rules

			Cert No: GLR/12414
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 250 ltr
			Sl. No. R-3420, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948, Rule 56 of AP Factories Rules

			Cert No: GLR/12413
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 400 ltr
			Sl. No. R-3410, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948, Rule 56 of AP Factories Rules

Cert No: GLR/12412

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 250 ltr
			Sl. No. R-3400, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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AS PER A.P. FACTORIES RULES
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948, Rule 56 of AP Factories Rules

Cert No: SSR/12403

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 3000 ltrs
			Sl. No. R-2120, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm²
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm² Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm²
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

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Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12404

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 5000 ltrs
			Sl. No. R-2130, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12407

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Cryo SS Reactor
			Type: SSR, Cap: 3000 ltrs
			Sl. No. R-2220, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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RAJAHMUNDRY Cell: 9848290978

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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12405

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 250 ltrs
			Sl. No. R-5120, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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RAJAHMUNDRY C... 9848290978

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Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12406

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 400 ltrs
			Sl. No. R-5130, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12402

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 3000 ltrs
			Sl. No. R-3130, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

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Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12401

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 1000 ltrs
			Sl. No. R-3120, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

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Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12411

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 400 ltrs
			Sl. No. R-3450, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

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RAVINDRA BALAGAM – COMPETENT PERSON
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Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel

Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12410

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 250 ltrs
			Sl. No. R-3440, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: SSR/12409

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	SS Reactor
			Type: SSR, Cap: 250 ltrs
			Sl. No. R-3430, Location: API Block 2, MOC: SS 316
4	Name and Address of the manufacturer	:	M/s. S2 Engineering Services
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 8.0, Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 27-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar
RAJAHMUNDRY

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
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Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

Cert No: GLR/12410

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 3000 ltr
			Sl. No. R-2240, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C- 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Reactor vessel
Prescribed under Factories Act,1948. Rule 56 of AP Factories Rules

			Cert No: GLR/12411
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Glass Lined Reactor
			Type: GLR, Cap: 5000 ltr
			Sl. No. R-2250, Location: API Block 2, MOC: MS GL
4	Name and Address of the manufacturer	:	M/s. GMM Pfaudler
5	Nature of process in which it is used	:	For reaction process
6	Particulars of Reaction Vessel:-		
	a) Date of construction	:	2015
	b) Thickness of walls	:	Shell thickness: 3.0, Dish thickness: 3.0
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	4 kg/cm^2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2
			Previous inspection by Undersigned on 27-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 6 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept inside building
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : Satisfactory
12	Are all required fitting and appliances provided in accordance with the Rules for reaction vessels?	:	Pressure gauge, Rupture Disc, Temperature Gauge are Provided, Earthing provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.0, Dish: 2.9
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Reaction Vessel thoroughly inspected and found to be fit for operation

I certify that on 25-01-2024, the reaction vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the reaction vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C~ #9848290978

Annexure - 12b

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
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Report of Examination of Storage Tanks

Cert No: ST/823-17

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No: SST-101
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Storage Tanks

Cert No: ST/823-16

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No: SST-102
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER APPROVAL RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

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Report of Examination of Storage Tanks

Cert No: ST/823-15

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No:SST-103
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
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Report of Examination of Storage Tanks

Cert No: ST/823-38

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No:SST-104
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2021
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Storage Tanks

Cert No: ST/823-39

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No: SST-105
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2021
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM
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Report of Examination of Storage Tanks

Cert No: ST/823-40

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: CCOE Tank farm Cap: 40 KL, ID No: SST-106
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2021
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
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Report of Examination of Storage Tanks

Cert No: ST/823-17

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: Non-CCOE Tank farm Cap: 40 KL, ID No: ST-101
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

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Report of Examination of Storage Tanks

Cert No: ST/823-16

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: Non-CCOE Tank farm Cap: 40 KL, ID No: ST-102
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory
			Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

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Report of Examination of Storage Tanks

Cert No: ST/823-15

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of equipment	:	**Solvent storage tank**
			Location: Non-CCOE Tank farm Cap: 40 KL, ID No: ST-103
			Type: Vertical, MOC: SS
4	Name and Address of the manufacturer	:	M/s: AS Engineering equipment
5	Nature of process in which it is used	:	for process storage purpose
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls found during examination	:	Shell: 8.0 mm, Top plate: 8.1 mm
	c) Date on which the vessel was first taken into use	:	2016
	d) previous inspection history		Previous inspection by D Narasimharaju
8	Is the vessel in open or otherwise exposed to weather	:	
	or to damp?		
9	What parts (if any) were inaccessible?	:	Nil, all parts are accessible
10	What examination & tests were made?	:	External thorough examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External: Satisfactory Internal: could not examine
12	Are all required fitting and appliances provided	:	Yes, provided with safe vent, secondary containment and earthing
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes, maintained
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
16	Where repairs affecting the safe working pressure are required state the safe working pressure. a) Before the expiration of the period specified (14) b) After the expiration of such period if the required repairs have not been completed. c) After the completion of the required repairs.	:	Nil
17	Other observations/Examinations findings.	:	The equipment thoroughly inspected and found to be fit for operation within the specified limits

I certify that on 01-08-2023, the equipment described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the equipment including its fittings and that the above is true report of my examination. This certification is valid for twelve months.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh

Certificate No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF.

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Annexure - 13

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12412

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.0 m^3 Sl No 1516/1112-233
			ID. No. VR-2125, Loc: 2nd floor suit-1
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 4.0, Dishend: 5.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure	:	1.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.8, Dishend: 4.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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RAJAHMUNDRY C... 9848290978

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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12413

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.0 m^3 Sl No 1516/1155-407
			ID. No. VR-2130, Loc: 2nd floor suit-1
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 4.0, Dishend: 5.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	1.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.7, Dishend: 4.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

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RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12408

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.2 m^3 Sl No 1516/1155-412
			ID. No. VR-R-5120, Loc: Highly potent area
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 3.0, Dishend: 3.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	1.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	3.5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 3.5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 2.8, Dishend: 2.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
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RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12414

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.2 m^3 Sl No 1516/1155-413
			ID. No. VR-R-5130, Loc: Highly potent area
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 3.0, Dishend: 3.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	1.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	3.5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 3.5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 2.8, Dishend: 2.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
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RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12415

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.5 m^3 Sl No 1516/1112-234
			ID. No. VR-3125, Loc: 3rd floor suit-1
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 4.0, Dishend: 4.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure	:	1.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.8, Dishend: 3.5 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12416

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.5 m^3 Sl No 1516/1112-232
			ID. No. VR-3130, Loc: 3rd floor suit-1
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 4.0, Dishend: 4.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure	:	1.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 3.8, Dishend: 3.5 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12417

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.2 m^3 Sl No 1516/1155-411
			ID. No. VR-R-3435, Loc: Pilot plant
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 3.0, Dishend: 4.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure	:	1.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	5 kg/cm^2
	given and the examiner should state whether he has been previous report)		Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 2.8, Dishend: 3.9 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY Cell # 9848290978

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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12418

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.2 m^3 Sl No 1516/1112-234
			ID. No. VR-R-3445, Loc: Pilot plant
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 3.0, Dishend: 3.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure	:	1.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 2.9, Dishend: 2.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... #9848290978

RAVINDRA BALAGAM -- COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV/12419

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.2 m^3 Sl No 1516/1155-412
			ID. No. VR-R-3455, Loc: Pilot plant
4	Name and Address of the manufacturer	:	M/s. Thermotech Engineering Pvt Ltd
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 3.0, Dishend: 4.0 mm
	c) Date on which the vessel was first taken into use	:	2017
	d) Maximum permissible working pressure recommended by the manufacturer	:	1.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	5 kg/cm^2 Previous inspection by Undersigned on 28-07-2023
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 7.8 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 2.9, Dishend: 3.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 27-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12401

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-R-3220, Loc: AP Suit-2 Third Floor
4	Name and Address of the manufacturer	:	M/s. SSG Industries
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.4, Dishend: 7.5 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... - 9848290978

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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12402

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-R-3210, Loc: AP Suit-2 Third Floor
4	Name and Address of the manufacturer	:	M/s. SSG Industries
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.7, Dishend: 8.2 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12403

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-3200, Loc: AP Suit-2 Third Floor
4	Name and Address of the manufacturer	:	M/s. SSG Industries
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.2, Dishend: 8.1 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY C... - 9848290978

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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12404

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-3230, Loc: AP Suit-2 Third Floor
4	Name and Address of the manufacturer	:	M/s. SSG Industries
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.2, Dishend: 8.3 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULE
78-4-9 Syamala Nagar,
RAJAHMUNDRY [illegible]

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12405

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.5 KL
			ID. No. VR-R-3300, Loc: AP Suit-3 Third Floor
4	Name and Address of the manufacturer	:	M/s. Thero Engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.5, Dishend: 8.0 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12406

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.25 KL
			ID. No. VR-R-3425, Loc: API Plant Third floor
4	Name and Address of the manufacturer	:	M/s. De Dietretch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.4 Dishend: 7.5 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12407

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.25 KL
			ID. No. VR-R-3415, Loc: API Plant Third floor
4	Name and Address of the manufacturer	:	M/s. De Dietretch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.4 Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
"COMPETENT PERSON"
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12408

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 0.25 KL
			ID. No. VR-R-3405, Loc: API Plant Third floor
4	Name and Address of the manufacturer	:	M/s. De Dietretch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.4 Dishend: 8.2 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12409

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.5 KL
			ID. No. VR-2270, Loc: API Suit-2 Second floor
4	Name and Address of the manufacturer	:	M/s. Thermo engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure recommended by the manufacturer	:	2.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	6 kg/cm^2
			First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.4 Dishend: 7.8 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

			Cert No: PV-N/12410
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-2220, Loc: API Suit-2 Second floor
4	Name and Address of the manufacturer	:	M/s. VMF engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure recommended by the manufacturer	:	2.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	6 kg/cm^2 First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.8 Dishend: 7.6 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell : 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
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Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12411

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.5 KL
			ID. No. VR-2330, Loc: API Suit-3 Second floor
4	Name and Address of the manufacturer	:	M/s. Thermo engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.8 Dishend: 7.6 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12412

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.5 KL
			ID. No. VR-2300, Loc: API Suit-3 Second floor
4	Name and Address of the manufacturer	:	M/s. Thermo engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2021
	b) Thickness of walls	:	Shell: 6.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 6.8 Dishend: 7.6 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY [illegible] 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12413

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-2145, Loc: API Crystallisation area second floor Suit-1
4	Name and Address of the manufacturer	:	M/s. De Dietertch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.6 Dishend: 8.2 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05 12021(68)/18/2023 B SEC DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

			Cert No: PV-N/12414
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-2155, Loc: API Crystallisation area second floor suit-1
4	Name and Address of the manufacturer	:	M/s. De Dietertch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.6 Dishend: 8.2 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12415

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-2255, Loc: API Crystallisation area second floor suit-2
4	Name and Address of the manufacturer	:	M/s. De Dietertch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure recommended by the manufacturer	:	2.5 kg/cm2
	e) Design pressure (The history should be briefly given and the examiner should state whether he has been previous report)	:	6 kg/cm^2 First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.6 Dishend: 8.2 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-R SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULES
78-4-9 Syamala Nagar,
RAJAHMUNDRY Cell: 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

Cert No: PV-N/12416

1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1 KL
			ID. No. VR-2245, Loc: API Crystallisation area second floor suit-2
4	Name and Address of the manufacturer	:	M/s. De Dietertch process systems
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.3 Dishend: 8.4 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

RAVINDRA BALAGAM
COMPETENT PERSON
AS PER A.P. FACTORIES RULE
78-4-9, Syamala Nagar,
RAJAHMUNDRY Cell - 9848290978

RAVINDRA BALAGAM – COMPETENT PERSON
H No. 78-4-9, Syamalanagar, Rajahmundry – 533103 A.P
Ph: 9848290978, Email: proaction.in@gmail.com

Report of Examination of Pressure Vessel
Form No. 8
Prescribed under Sec 31 of Factories Act,1948

			Cert No: PV-N/12417
1	Name of occupier (or factory)	:	M/s Escientia Advanced Science Limited
2	Situation of and address of factory	:	Plot No-11, APSEZ, Atchutapuram, Visakhapatnam
3	Name, description and distinctive Number of Pressure vessel.	:	Vacuum Receiver
			Type: Vertical, Cap: 1.5 KL
			ID. No. VR-2350, Loc: API Crystallisation area second floor suit-3
4	Name and Address of the manufacturer	:	M/s. Thermo Engg services
5	Nature of process in which it is used	:	For vacuum process
6	Particulars of Vessel:-		
	a) Date of construction	:	2016
	b) Thickness of walls	:	Shell: 8.0, Dishend: 8.0 mm
	c) Date on which the vessel was first taken into use	:	2024
	d) Maximum permissible working pressure	:	2.5 kg/cm2
	recommended by the manufacturer		
	e) Design pressure (The history should be briefly	:	6 kg/cm^2
	given and the examiner should state whether he has been previous report)		First time been examined
7	Date of last hydraulic test (if any) and pressure applied	:	by the manufacturer @ 5 kg/cm^2
8	Is the vessel in open or otherwise exposed to weather or to damp?	:	Kept under shed
9	What parts (if any) were inaccessible?	:	Nil
10	What examination & tests were made? (specify pressure if hydraulic test was carried out?	:	Thorough Visual examination and thickness gauging
11	Condition of vessel (state any defects materially affecting the safe working pressure or the safe working of the vessel)	:	External : Satisfactory Internal : could not examine
12	Are all required fitting and appliances provided in accordance with the Rules for pressure vessels?	:	Safety indicators and venting are provided
13	Are all fitting and appliances properly maintained and in good condition?	:	Yes
14	Repairs (if any required and period within which they should be executed and any other condition which the person marking the examination thinks it necessary to specify for securing safe working).	:	Nil
15	Safe working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination due allowance being made for conditions of working if unusual or exceptionally severe (state minimum thickness of walls measured during examination).	:	MPWP of the vessel does not exceeds and within the Limits. Min Thickness found as Shell: 7.7 Dishend: 8.5 mm
16	Where repairs affecting the safe working pressure are required state the safe working pressure		Nil
	a) Before the expiration of the period specified (14)	:	Nil
	b) After the expiration of such period if the required repairs have not been completed	:	Nil
	c) After the completion of the required repairs	:	Nil
17	Other observations/Examinations findings.	:	The Pressure Vessel thoroughly inspected and found to be fit for operation upto the rated working pressure.

I certify that on 25-01-2024, the pressure vessel described above was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such test as very necessary for thorough examination and that on the said date, I thoroughly examined the pressure vessel including its fittings and that the above is true report of my examination.
This certification is valid for six months as per Factories Rules.

Ravindra Balagam
Competent Person

Approved competent person by The Director of Factories, Government of Andhra Pradesh
Order No: C.P.(O) No. LAE05-12021(68)/18/2023-B SEC-DOF

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QAD Sign & Date: 03/09/2024

ISSUED BY QAD
Sign & Date: 30/07/2024

ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
1.	R-3100	GL Reactor	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	22/04/2024	NA
				20/07/2024	19/07/2024	NA
				20/10/2024		
2.	R-3110	GL Reactor	Quarterly ± 5 Days	22/01/2024	21/01/2024	NA
				22/04/2024	24/04/2024	NA
				22/07/2024	26/07/2024	NA
				22/10/2024		
3.	R-3120	SS Reactor	Quarterly ± 5 Days	24/01/2024	21/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	20/07/2024	NA
				24/10/2024		

	Prepared By	Reviewed By	Reviewed By	Approved By
Name	P Harsha Vardhan Varma	K Kartheek	U A N Raju	K Varaprasad
Department	Engineering Services	Engineering Services	Production	Quality Assurance
Signature	P. Harsha			
Date	29/07/2024	29/07/2024	29/07/2024	29/07/2024

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
4.	R-3130	SS Reactor	Quarterly ± 5 Days	27/01/2024	25/01/2024	NA
				27/04/2024	25/04/2024	NA
				27/07/2024	25/07/2024	NA
				27/10/2024		
5.	R-2100	GL Reactor	Quarterly ± 5 Days	29/01/2024	27/01/2024	NA
				29/04/2024	25/04/2024	NA
				29/07/2024	31/07/2024	Varuy 31/07/2024
				29/10/2024		
6.	R-2110	GL Reactor	Quarterly ± 5 Days	02/02/2024	31/01/2024	NA
				02/05/2024	28/04/2024	NA
				02/08/2024	01/08/2024	Varuy 01/08/2024
				02/11/2024		

Approved by			
K Varaprasad	Quality Assurance	Quruy	29/07/2024
Name	Department	Signature	Date

ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

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Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
7.	R-2120	SS Reactor	Quarterly ± 5 Days	03/02/2024	02/02/2024	NA
				03/05/2024	03/05/2024	NA
				03/08/2024	02/08/2024	02/08/2024
				03/11/2024		
8.	R-2130	SS Reactor	Quarterly ± 5 Days	04/02/2024	05/02/2024	NA
				04/05/2024	04/05/2024	NA
				04/08/2024	02/08/2024	02/08/2024
				04/11/2024		
9.	R-2140	GL Reactor	Quarterly ± 5 Days	05/02/2024	03/02/2024	NA
				05/05/2024	06/05/2024	NA
				05/08/2024	05/08/2024	05/08/2024
				05/11/2024		

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
10.	R-2150	GL Reactor	Quarterly ± 5 Days	05/02/2024	03/02/2024	NA
				05/05/2024	06/05/2024	NA
				05/08/2024	05/08/2024	Varu 05/08/2024
				05/11/2024		
11.	R-3400	GL Reactor	Quarterly ± 5 Days	06/02/2024	02/02/2024	NA
				06/05/2024	09/05/2024	NA
				06/08/2024	05/08/2024	Varu 05/08/2024
				06/11/2024		
12.	R-3410	GL Reactor	Quarterly ± 5 Days	07/02/2024	06/02/2024	NA
				07/05/2024	04/05/2024	NA
				07/08/2024	06/08/2024	06/08/2024
				07/11/2024		

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
13.	R-3420	GL Reactor	Quarterly ± 5 Days	08/02/2024	06/02/2024	NA
				08/05/2024	10/05/2024	NA
				08/08/2024	08/08/2024	Varu 08/08/2024
				08/11/2024		
14.	R-3430	SS Reactor	Quarterly ± 5 Days	09/02/2024	07/02/2024	NA
				09/05/2024	10/05/2024	NA
				09/08/2024	07/08/2024	for 07/08/2024
				09/11/2024		
15.	R-3440	SS Reactor	Quarterly ± 5 Days	10/02/2024	07/02/2024	NA
				10/05/2024	11/05/2024	NA
				10/08/2024	06/08/2024	for 06/08/2024
				10/11/2024		

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
16.	R-3450	SS Reactor	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	11/05/2024	NA
				11/08/2024	07/08/2024	P. Reddy 07/08/2024
				11/11/2024		
17.	R-5100	GL Reactor	Quarterly ± 5 Days	12/02/2024	12/02/2024	NA
				12/05/2024	15/05/2024	NA
				12/08/2024	12/08/2024	Kiz 12/08/2024
				12/11/2024		
18.	R-5110	GL Reactor	Quarterly ± 5 Days	13/02/2024	12/02/2024	NA
				13/05/2024	15/05/2024	NA
				13/08/2024	12/08/2024	Varma 12/08/2024
				13/11/2024		

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19.	R-5120	SS Reactor	Quarterly ± 5 Days	14/02/2024	13/02/2024	NA
				14/05/2024	16/05/2024	NA
				14/08/2024	14/08/2024	Varuy 14/08/2024
				14/11/2024		
20.	R-5130	SS Reactor	Quarterly ± 5 Days	15/02/2024	13/02/2024	NA
				15/05/2024	16/05/2024	NA
				15/08/2024	14/08/2024	14/08/2024
				15/11/2024		
21.	AGR-0101	Glass reactor	Quarterly ± 5 Days	16/02/2024	15/02/2024	NA
				16/05/2024	17/05/2024	NA
				16/08/2024	16/08/2024	16/08/2024
				16/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
22.	AGR-0102	Glass reactor	Quarterly ± 5 Days	17/02/2024	15/02/2024	NA
				17/05/2024	17/05/2024	NA
				17/08/2024		
				17/11/2024		
23.	CF-3401	Centrifuge	Quarterly ± 5 Days	18/02/2024	17/02/2024	NA
				18/05/2024	18/05/2024	NA
				18/08/2024	17/08/2024	KR 17/08/2024
				18/11/2024		
24.	CF-1105	Centrifuge	Quarterly ± 5 Days	20/02/2024	21/02/2024	NA
				20/05/2024	20/05/2024	NA
				20/08/2024		
				20/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
25.	CF-1106	Centrifuge	Quarterly ± 5 Days	21/02/2024	20/02/2024	NA
				21/05/2024	18/05/2024	NA
				21/08/2024	19/08/2024	19/08/2024
				21/11/2024		
26.	CF-1100	Centrifuge	Quarterly ± 5 Days	10/03/2024	06/03/2024	NA
				10/06/2024	11/06/2024	NA
				10/09/2024		
				10/12/2024		
27.	CF-0101	Centrifuge	Quarterly ± 5 Days	22/02/2024	21/02/2024	NA
				22/05/2024	24/05/2024	NA
				22/08/2024	20/08/2024	20/08/2024
				22/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
28.	FD-1140	Agitated nutsche filter dryer	Quarterly ± 5 Days	23/02/2024	21/02/2024	NA
				23/05/2024	23/05/2024	NA
				23/08/2024		
				23/11/2024		
29.	FD-5105	Agitated nutsche filter dryer	Quarterly ± 5 Days	24/02/2024	23/02/2024	NA
				24/05/2024	28/05/2024	NA
				24/08/2024		
				24/11/2024		
30.	FD-3402	Agitated nutsche filter dryer	Quarterly ± 5 Days	25/02/2024	24/02/2024	NA
				25/05/2024	27/05/2024	NA
				25/08/2024		
				25/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
31.	VTD-3403	Vacuum tray dryer	Quarterly ± 5 Days	26/02/2024	27/02/2024	NA
				26/05/2024	27/05/2024	NA
				26/08/2024		
				26/11/2024		
32.	D-1101	Vacuum tray dryer	Quarterly ± 5 Days	27/02/2024	26/02/2024	NA
				27/05/2024	25/05/2024	NA
				27/08/2024		
				27/11/2024		
33.	VTD-0101	Vacuum tray dryer	Quarterly ± 5 Days	28/02/2024	26/02/2024	NA
				28/05/2024	29/05/2024	NA
				28/08/2024		
				28/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
34.	D-1100	Roto cone vacuum dryer	Quarterly ± 5 Days	18/03/2024	14/03/2024	NA
				18/06/2024	15/06/2024	NA
				18/09/2024		
				18/12/2024		
35.	COM-1501	Cone mill	Quarterly ± 5 Days	19/03/2024	15/03/2024	NA
				19/06/2024	15/06/2024	NA
				19/09/2024		
				19/12/2024		
36.	MM-1501	Multi mill	Quarterly ± 5 Days	19/03/2024	15/03/2024	NA
				19/06/2024	18/06/2024	NA
				19/09/2024		
				19/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
37.	S-1501	Sifter	Quarterly ± 5 Days	19/03/2024	18/03/2024	NA
				19/06/2024	17/06/2024	NA
				19/09/2024		
				19/12/2024		
38.	S-1502	Sifter	Quarterly ± 5 Days	15/01/2024	12/01/2024	NA
				15/04/2024	11/04/2024	NA
				15/07/2024	17/07/2024	NA
				15/10/2024		
39.	COM-5100	Cone mill	Quarterly ± 5 Days	16/01/2024	12/01/2024	NA
				16/04/2024	13/04/2024	NA
				16/07/2024	13/07/2024	NA
				16/10/2024		

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40.	AJM-1501	Air jet mill	Quarterly ± 5 Days	17/01/2024	17/01/2024	NA
				17/04/2024	13/04/2024	NA
				17/07/2024	13/07/2024	NA
				17/10/2024		
41.	AJM – 1502	Air jet mill	Quarterly ± 5 Days	17/01/2024	17/01/2024	NA
				17/04/2024	15/04/2024	NA
				17/07/2024	15/07/2024	NA
				17/10/2024		
42.	AJM - 1503	Air jet mill	Quarterly ± 5 Days	18/01/2024	17/01/2024	NA
				18/04/2024	15/04/2024	NA
				18/07/2024	15/07/2024	NA
				18/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
43.	AJM-5001	Air jet mill	Quarterly ± 5 Days	18/01/2024	18/01/2024	NA
				18/04/2024	16/04/2024	NA
				18/07/2024	16/07/2024	NA
				18/10/2024		
44.	BLD-1501	Blender	Quarterly ± 5 Days	19/01/2024	19/01/2024	NA
				19/04/2024	15/04/2024	NA
				19/07/2024	17/07/2024	NA
				19/10/2024		
45.	BLD-5100	Blender	Quarterly ± 5 Days	19/01/2024	19/01/2024	NA
				19/04/2024	16/04/2024	NA
				19/07/2024	16/07/2024	NA
				19/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
46.	VP-3100	Vacuum pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	21/04/2024	NA
				20/07/2024	19/07/2024	NA
				20/10/2024		
47.	VP -3110	Vacuum pump	Quarterly ± 5 Days	22/01/2024	21/01/2024	NA
				22/04/2024	23/04/2024	NA
				22/07/2024	22/07/2024	NA
				22/10/2024		
48.	VP - D - 1100	Vacuum pump	Quarterly ± 5 Days	18/03/2024	14/03/2024	NA
				18/06/2024	15/06/2024	NA
				18/09/2024		
				18/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
49.	VP – FD - 1140	Vacuum pump	Quarterly ± 5 Days	23/02/2024	21/02/2024	NA
				23/05/2024	23/05/2024	NA
				23/08/2024		
				23/11/2024		
50.	VP - 0101	Vacuum pump	Quarterly ± 5 Days	28/02/2024	26/02/2024	NA
				28/05/2024	28/05/2024	NA
				28/08/2024		
				28/11/2024		
51.	VP-5100	Vacuum pump	Quarterly ± 5 Days	12/02/2024	09/02/2024	NA
				12/05/2024	14/05/2024	NA
				12/08/2024	12/08/2024	Y. Ramaji 12/08/2024
				12/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
52.	VP-5110	Vacuum pump	Quarterly ± 5 Days	13/02/2024	09/02/2024	NA
				13/05/2024	14/05/2024	NA
				13/08/2024	12/08/2024	Y. Ramaji 12/08/2024
				13/11/2024		
53.	VP-FD-5105	Vacuum pump	Quarterly ± 5 Days	24/02/2024	23/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024	20/08/2024	Y. Ramaji 20/08/2024
				24/11/2024		
54.	VP-3400	Vacuum pump	Quarterly ± 5 Days	06/02/2024	02/02/2024	NA
				06/05/2024	08/05/2024	NA
				06/08/2024	05/08/2024	R Sai 05/08/2024
				06/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
55.	VP-3410	Vacuum pump	Quarterly ± 5 Days	07/02/2024	06/02/2024	NA
				07/05/2024	04/05/2024	NA
				07/08/2024	06/08/2024	Y.Ramesh 06/08/2024
				07/11/2024		
56.	VP-FD-3402	Vacuum pump	Quarterly ± 5 Days	25/02/2024	23/02/2024	NA
				25/05/2024	25/05/2024	NA
				25/08/2024		
				25/11/2024		
57.	VP-VTD-3403	Vacuum pump	Quarterly ± 5 Days	26/02/2024	27/02/2024	NA
				26/05/2024	27/05/2024	NA
				26/08/2024		
				26/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
58.	VP-PTS-R-3100	Vacuum pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	21/04/2024	NA
				20/07/2024	19/07/2024	NA
				20/10/2024		
59.	TP-R-3100	Transfer pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	21/04/2024	NA
				20/07/2024	19/07/2024	NA
				20/10/2024		
60.	TP-HT-R-3100	Transfer pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	21/04/2024	NA
				20/07/2024	19/07/2024	NA
				20/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
61.	TP-HT-R-3110	Transfer pump	Quarterly ± 5 Days	22/01/2024	21/01/2024	NA
				22/04/2024	23/04/2024	NA
				22/07/2024	22/07/2024	NA
				22/10/2024		
62.	TP-R-3120	Transfer pump	Quarterly ± 5 Days	24/01/2024	21/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	20/07/2024	NA
				24/10/2024		
63.	TP-HT-R-3120	Transfer pump	Quarterly ± 5 Days	24/01/2024	21/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	20/07/2024	NA
				24/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
64.	TP-R-3130	Transfer pump	Quarterly ± 5 Days	27/01/2024	23/01/2024	NA
				27/04/2024	25/04/2024	NA
				27/07/2024	23/07/2024	NA
				27/10/2024		
65.	TP-HT-R-3130	Transfer pump	Quarterly ± 5 Days	27/01/2024	23/01/2024	NA
				27/04/2024	25/04/2024	NA
				27/07/2024	23/07/2024	NA
				27/10/2024		
66.	TP-R-2100	Transfer pump	Quarterly ± 5 Days	29/01/2024	25/01/2024	NA
				29/04/2024	25/04/2024	NA
				29/07/2024	31/07/2024	Varu 31/07/2024
				29/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
67.	TP-HT-R-2100	Transfer pump	Quarterly ± 5 Days	29/01/2024	25/01/2024	NA
				29/04/2024	25/04/2024	NA
				29/07/2024	31/07/2024	31/07/2024
				29/10/2024		
68.	TP-R-2110	Transfer pump	Quarterly ± 5 Days	02/02/2024	31/01/2024	NA
				02/05/2024	29/04/2024	NA
				02/08/2024	01/08/2024	01/08/2024
				02/11/2024		
69.	TP-HT-R-2110	Transfer pump	Quarterly ± 5 Days	02/02/2024	31/01/2024	NA
				02/05/2024	29/04/2024	NA
				02/08/2024	01/08/2024	01/08/2024
				02/11/2024		

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70.	TP-R-2120	Transfer pump	Quarterly ± 5 Days	03/02/2024	02/02/2024	NA
				03/05/2024	30/04/2024	NA
				03/08/2024	01/08/2024	01/08/2024
				03/11/2024		
71.	TP-HT-R-2120	Transfer pump	Quarterly ± 5 Days	03/02/2024	02/02/2024	NA
				03/05/2024	30/04/2024	NA
				03/08/2024	01/08/2024	01/08/2024
				03/11/2024		
72.	TP-R-2130	Transfer pump	Quarterly ± 5 Days	04/02/2024	05/02/2024	NA
				04/05/2024	03/05/2024	NA
				04/08/2024	01/08/2024	01/08/2024
				04/11/2024		

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73.	TP-HT-R-2130	Transfer pump	Quarterly ± 5 Days	04/02/2024	05/02/2024	NA
				04/05/2024	03/05/2024	NA
				04/08/2024	01/08/2024	Y. Ramaji 01/08/2024
				04/11/2024		
74.	TP-R-2140	Transfer pump	Quarterly ± 5 Days	05/02/2024	03/02/2024	NA
				05/05/2024	06/05/2024	NA
				05/08/2024	03/08/2024	Varu 03/08/2024
				05/11/2024		
75.	TFP-2140	Thermic fluid transfer pump	Quarterly ± 5 Days	05/02/2024	03/02/2024	NA
				05/05/2024	06/05/2024	NA
				05/08/2024	05/08/2024	Y. Ramaji 05/08/2024
				05/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
76.	TP-R-2 .50	Transfer pump	Quarterly ± 5 Days	05/02/2024	03/02/2024	NA
				05/05/2024	06/05/2024	NA
				05/08/2024	03/08/2024	03/08/2024
				05/11/2024		
77.	MLSTP-1101	Transfer pump	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	18/05/2024	NA
				19/08/2024	17/08/2024	17/08/2024
				19/11/2024		
78.	MLSTP-1102	Transfer pump	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	18/05/2024	NA
				19/08/2024	17/08/2024	17/08/2024
				19/11/2024		

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79.	MLSTP-1103	Transfer pump	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	18/05/2024	NA
				19/08/2024	17/08/2024	17/08/2024
				19/11/2024		
80.	MLSTP-1104	Transfer pump	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	20/05/2024	NA
				19/08/2024	17/08/2024	17/08/2024
				19/11/2024		
81.	SDTP-101	Transfer pump	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	20/05/2024	NA
				19/08/2024	19/08/2024	19/08/2024
				19/11/2024		

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82.	SDTP-102	Transfer pump	Quarterly ± 5 Days	20/02/2024	17/02/2024	NA
				20/05/2024	20/05/2024	NA
				20/08/2024	19/08/2024	Y. Ramaji 19/08/2024
				20/11/2024		
83.	SDTP-103	Transfer pump	Quarterly ± 5 Days	20/02/2024	17/02/2024	NA
				20/05/2024	21/05/2024	NA
				20/08/2024	19/08/2024	R Sai 19/08/2024
				20/11/2024		
84.	SSDTP-101	Transfer pump	Quarterly ± 5 Days	20/02/2024	17/02/2024	NA
				20/05/2024	21/05/2024	NA
				20/08/2024	19/08/2024	J. CA 19/08/2024
				20/11/2024		

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85.	SSDTP-102	Transfer pump	Quarterly ± 5 Days	20/02/2024	17/02/2024	NA
				20/05/2024	21/05/2024	NA
				20/08/2024	19/08/2024	Y. Ramaji 19/08/2024
				20/11/2024		
86.	SSDTP-103	Transfer pump	Quarterly ± 5 Days	20/02/2024	17/02/2024	NA
				20/05/2024	21/05/2024	NA
				20/08/2024	19/08/2024	Sai 19/08/2024
				20/11/2024		
87.	TP-SF-2100	Transfer pump	Quarterly ± 5 Days	21/02/2024	17/02/2024	NA
				21/05/2024	21/05/2024	NA
				21/08/2024	20/08/2024	D Nagaraju 20/08/2024
				21/11/2024		

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88.	EFTP-1101	Effluent transfer pump	Quarterly ± 5 Days	21/02/2024	17/02/2024	NA
				21/05/2024	21/05/2024	NA
				21/08/2024	19/08/2024	Y. Ramaji 19/08/2024
				21/11/2024		
89.	EFTP-1102	Effluent transfer pump	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024	19/08/2024	J CR 19/08/2024
				21/11/2024		
90.	EFTP-1103	Effluent transfer pump	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024	19/08/2024	R Sai 19/08/2024
				21/11/2024		

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91.	EFTP-1104	Effluent transfer pump	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024	19/08/2024	Y Ramaji 19/08/2024
				21/11/2024		
92.	TP-R-5100	Transfer pump	Quarterly ± 5 Days	12/02/2024	09/02/2024	NA
				12/05/2024	14/05/2024	NA
				12/08/2024	12/08/2024	12/08/2024
				12/11/2024		
93.	TP-R-5110	Transfer pump	Quarterly ± 5 Days	13/02/2024	09/02/2024	NA
				13/05/2024	14/05/2024	NA
				13/08/2024	12/08/2024	12/08/2024
				13/11/2024		

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94.	TP-R-5120	Transfer pump	Quarterly ± 5 Days	14/02/2024	10/02/2024	NA
				14/05/2024	15/05/2024	NA
				14/08/2024	14/08/2024	Y. Ramaji 14/08/2024
				14/11/2024		
95.	TP-R-5130	Transfer pump	Quarterly ± 5 Days	15/02/2024	13/02/2024	NA
				15/05/2024	15/05/2024	NA
				15/08/2024	14/08/2024	14/08/2024
				15/11/2024		
96.	TP-HT-R-5100	Transfer pump	Quarterly ± 5 Days	12/02/2024	09/02/2024	NA
				12/05/2024	14/05/2024	NA
				12/08/2024	12/08/2024	12/08/2024
				12/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
97.	TP-HT-R-5130	Transfer pump	Quarterly ± 5 Days	15/02/2024	13/02/2024	NA
				15/05/2024	15/05/2024	NA
				15/08/2024	14/08/2024	14/08/2024
				15/11/2024		
98.	TFP-5100	Thermic fluid transfer pump	Quarterly ± 5 Days	12/02/2024	09/02/2024	NA
				12/05/2024	14/05/2024	NA
				12/08/2024	12/08/2024	12/08/2024
				12/11/2024		
99.	TFP-5110	Thermic fluid transfer pump	Quarterly ± 5 Days	13/02/2024	10/02/2024	NA
				13/05/2024	15/05/2024	NA
				13/08/2024	12/08/2024	Y. Ramoji 12/08/2024
				13/11/2024		

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100.	TFP-5120	Thermic fluid transfer pump	Quarterly ± 5 Days	14/02/2024	10/02/2024	NA
				14/05/2024	15/05/2024	NA
				14/08/2024	14/08/2024	14/08/2024
				14/11/2024		
101.	TFP-5130	Thermic fluid transfer pump	Quarterly ± 5 Days	15/02/2024	13/02/2024	NA
				15/05/2024	15/05/2024	NA
				15/08/2024	14/08/2024	14/08/2024
				15/11/2024		
102.	TP-R-3400	Transfer pump	Quarterly ± 5 Days	06/02/2024	02/02/2024	NA
				06/05/2024	08/05/2024	NA
				06/08/2024	05/08/2024	05/08/2024
				06/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
103.	TP-R-3410	Transfer pump	Quarterly ± 5 Days	07/02/2024	06/02/2024	NA
				07/05/2024	04/05/2024	NA
				07/08/2024	06/08/2024	06/08/2024
				07/11/2024		
104.	TP-R-3420	Transfer pump	Quarterly ± 5 Days	08/02/2024	06/02/2024	NA
				08/05/2024	09/05/2024	NA
				08/08/2024	08/08/2024	08/08/2024
				08/11/2024		
105.	TP-R-3430	Transfer pump	Quarterly ± 5 Days	09/02/2024	07/02/2024	NA
				09/05/2024	10/05/2024	NA
				09/08/2024	08/08/2024	08/08/2024
				09/11/2024		

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106.	TP-R-3440	Transfer pump	Quarterly ± 5 Days	10/02/2024	07/02/2024	NA
				10/05/2024	10/05/2024	NA
				10/08/2024	07/08/2024	07/08/2024
				10/11/2024		
107.	TP-R-3450	Transfer pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	10/05/2024	NA
				11/08/2024	08/08/2024	08/08/2024
				11/11/2024		
108.	TP-HT-R-3400	Transfer pump	Quarterly ± 5 Days	06/02/2024	02/02/2024	NA
				06/05/2024	08/05/2024	NA
				06/08/2024	05/08/2024	05/08/2024
				06/11/2024		

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109.	TP-HT-R-3410	Transfer pump	Quarterly ± 5 Days	07/02/2024	06/02/2024	NA
				07/05/2024	04/05/2024	NA
				07/08/2024	06/08/2024	Sai 06/08/2024
				07/11/2024		
110.	TP-HT-R-3420	Transfer pump	Quarterly ± 5 Days	08/02/2024	06/02/2024	NA
				08/05/2024	09/05/2024	NA
				08/08/2024	08/08/2024	P. Ruby 08/08/2024
				08/11/2024		
111.	TP-HT-R-3430	Transfer pump	Quarterly ± 5 Days	09/02/2024	07/02/2024	NA
				09/05/2024	10/05/2024	NA
				09/08/2024	08/08/2024	Y. Ramaji 08/08/2024
				09/11/2024		

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112.	TP-HT-R-3440	Transfer pump	Quarterly ± 5 Days	10/02/2024	07/02/2024	NA
				10/05/2024	10/05/2024	NA
				10/08/2024	07/08/2024	07/08/2024
				10/11/2024		
113.	TP-HT-3450	Transfer pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	10/05/2024	NA
				11/08/2024	08/08/2024	08/08/2024
				11/11/2024		
114.	MLSTP-CF-3401	Transfer pump	Quarterly ± 5 Days	18/02/2024	16/02/2024	NA
				18/05/2024	18/05/2024	NA
				18/08/2024	17/08/2024	17/08/2024
				18/11/2024		

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115.	TFP-3400	Thermic fluid transfer pump	Quarterly ± 5 Days	06/02/2024	02/02/2024	NA
				06/05/2024	08/05/2024	NA
				06/08/2024	05/08/2024	05/08/2024
				06/11/2024		
116.	TFP-3410	Thermic fluid transfer pump	Quarterly ± 5 Days	07/02/2024	06/02/2024	NA
				07/05/2024	04/05/2024	NA
				07/08/2024	06/08/2024	06/08/2024
				07/11/2024		
117.	TFP-3420	Thermic fluid transfer pump	Quarterly ± 5 Days	08/02/2024	06/02/2024	NA
				08/05/2024	09/05/2024	NA
				08/08/2024	08/08/2024	08/08/2024
				08/11/2024		

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118.	TFP-3430	Thermic fluid transfer pump	Quarterly ± 5 Days	09/02/2024	07/02/2024	NA
				09/05/2024	09/05/2024	NA
				09/08/2024	08/08/2024	08/08/2024
				09/11/2024		
119.	TFP-3440	Thermic fluid transfer pump	Quarterly ± 5 Days	10/02/2024	07/02/2024	NA
				10/05/2024	09/05/2024	NA
				10/08/2024	07/08/2024	07/08/2024
				10/11/2024		
120.	TFP-3450	Thermic fluid transfer pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	11/05/2024	NA
				11/08/2024	08/08/2024	08/08/2024
				11/11/2024		

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121.	HWP-5101	Hot water pump	Quarterly ± 5 Days	22/02/2024	21/02/2024	NA
				22/05/2024	22/05/2024	NA
				22/08/2024	20/08/2024	20/08/2024
				22/11/2024		
122.	HWP-5102	Hot water pump	Quarterly ± 5 Days	22/02/2024	21/02/2024	NA
				22/05/2024	22/05/2024	NA
				22/08/2024		
				22/11/2024		
123.	IS-5100	Isolator	Quarterly ± 5 Days	16/02/2024	15/02/2024	NA
				16/05/2024	18/05/2024	NA
				16/08/2024	16/08/2024	16/08/2024
				16/11/2024		

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124.	IS-5101	Isolator	Quarterly ± 5 Days	17/02/2024	15/02/2024	NA
				17/05/2024	18/05/2024	NA
				17/08/2024	16/08/2024	Varu 16/08/2024
				17/11/2024		
125.	IS-5102	Isolator	Quarterly ± 5 Days	18/02/2024	16/02/2024	NA
				18/05/2024	18/05/2024	NA
				18/08/2024	17/08/2024	Varu 17/08/2024
				18/11/2024		
126.	IS-5103	Isolator	Quarterly ± 5 Days	19/02/2024	16/02/2024	NA
				19/05/2024	20/05/2024	NA
				19/08/2024	17/08/2024	Varu 17/08/2024
				19/11/2024		

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127.	HWS-D-1101	Hot water system	Quarterly ± 5 Days	27/02/2024	26/02/2024	NA
				27/05/2024	25/05/2024	NA
				27/08/2024		
				27/11/2024		
128.	HWS-FD-1140	Hot water system	Quarterly ± 5 Days	23/02/2024	21/02/2024	NA
				23/05/2024	23/05/2024	NA
				23/08/2024		
				23/11/2024		
129.	TP-HWS-D-1101	Hot water circulation pump	Quarterly ± 5 Days	27/02/2024	26/02/2024	NA
				27/05/2024	25/05/2024	NA
				27/08/2024		
				27/11/2024		

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130.	TP-HWS-FD-1140	Hot water circulation pump	Quarterly ± 5 Days	23/02/2024	21/02/2024	NA
				23/05/2024	23/05/2024	NA
				23/08/2024		
				23/11/2024		
131.	HWS-0101	Hot water system	Quarterly ± 5 Days	28/02/2024	26/02/2024	NA
				28/05/2024	28/05/2024	NA
				28/08/2024		
				28/11/2024		
132.	HWP-0101	Hot water circulation pump	Quarterly ± 5 Days	28/02/2024	26/02/2024	NA
				28/05/2024	28/05/2024	NA
				28/08/2024		
				28/11/2024		

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133.	HWS-FD-3402	Hot water system	Quarterly ± 5 Days	25/02/2024	24/02/2024	NA
				25/05/2024	25/05/2024	NA
				25/08/2024		
				25/11/2024		
134.	HWS-VTD-3403	Hot water system	Quarterly ± 5 Days	26/02/2024	27/02/2024	NA
				26/05/2024	27/05/2024	NA
				26/08/2024		
				26/11/2024		
135.	TP-HWS-FD-3402	Hot water circulation pump	Quarterly ± 5 Days	25/02/2024	23/02/2024	NA
				25/05/2024	25/05/2024	NA
				25/08/2024		
				25/11/2024		

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136.	TP-HWS-VTD-3403	Hot water circulation pump	Quarterly ± 5 Days	26/02/2024	27/02/2024	NA
				26/05/2024	27/05/2024	NA
				26/08/2024		
				26/11/2024		
137.	HWS-FD-5105	Hot water system	Quarterly ± 5 Days	24/02/2024	23/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024	20/08/2024	20/08/2024
				24/11/2024		
138.	TP-HWS-FD-5105	Hot water circulation pump	Quarterly ± 5 Days	24/02/2024	23/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024	20/08/2024	Y. Ramaji 20/08/2024
				24/11/2024		

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139.	SBR-1101	Scrubber system	Quarterly ± 5 Days	22/02/2024	20/02/2024	NA
				22/05/2024	24/05/2024	NA
				22/08/2024		
				22/11/2024		
140.	SBR-1102	Scrubber system	Quarterly ± 5 Days	24/03/2024	20/03/2024	NA
				24/06/2024	21/06/2024	NA
				24/09/2024		
				24/12/2024		
141.	PL-1101	Passenger cum material lift	Quarterly ± 5 Days	21/03/2024	20/03/2024	NA
				21/06/2024	17/06/2024	NA
				21/09/2024		
				21/12/2024		

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142.	PL-1301	Passenger cum material lift	Quarterly ± 5 Days	23/03/2024	21/03/2024	NA
				23/06/2024	27/06/2024	NA
				23/09/2024		
				23/12/2024		
143.	R-2210	GL Reactor	Quarterly ± 5 Days	22/03/2024	19/03/2024	NA
				22/06/2024	23/06/2024	NA
				22/09/2024		
				22/12/2024		
144.	R-2220	Cryo Reactor	Quarterly ± 5 Days	23/03/2024	20/03/2024	NA
				23/06/2024	19/06/2024	NA
				23/09/2024		
				23/12/2024		

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145.	PRD/MTP-001	Metering Pump	Quarterly ± 5 Days	25/03/2024	21/03/2024	NA
				25/06/2024	22/06/2024	NA
				25/09/2024		
				25/12/2024		
146.	PNF-1100	Pressure Nutsche Filter	Half Yearly ± 7 Days	15/04/2024	11/04/2024	NA
				15/10/2024		
147.	NF-0101	Nutsche Filter	Half Yearly ± 7 Days	15/04/2024	13/04/2024	NA
				15/10/2024		
148.	PRD/SE-001	Heat sealer	Half Yearly ± 7 Days	05/06/2024	03/06/2024	NA
				05/12/2024		
149.	PRD/SE-002	Heat sealer	Half Yearly ± 7 Days	08/01/2024	06/01/2024	NA
				08/07/2024	05/07/2024	NA

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150.	PRD/SE-003	Heat sealer	Half Yearly ± 7 Days	10/01/2024	06/01/2024	NA
				10/07/2024	06/07/2024	NA
151.	R-2240	GL Reactor	Quarterly ± 5 Days	05/03/2024	06/03/2024	NA
				05/06/2024	03/06/2024	NA
				05/09/2024		
				05/12/2024		
152.	R-2250	GL Reactor	Quarterly ± 5 Days	15/01/2024	11/01/2024	NA
				15/04/2024	19/04/2024	NA
				15/07/2024	14/07/2024	NA
				15/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
153.	VTD-1200	Vacuum tray dryer	Quarterly ± 5 Days	12/03/2024	08/03/2024	NA
				12/06/2024	10/06/2024	NA
				12/09/2024		
				12/12/2024		
154.	HWS-VTD-1200	Hot water system	Quarterly ± 5 Days	12/03/2024	08/03/2024	NA
				12/06/2024	10/06/2024	NA
				12/09/2024		
				12/12/2024		
155.	TP-HWS-VTD-1200	Hot water circulation pump	Quarterly ± 5 Days	12/03/2024	08/03/2024	NA
				12/06/2024	10/06/2024	NA
				12/09/2024		
				12/12/2024		

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156.	VP-VTD-1200	Vacuum pump	Quarterly ± 5 Days	12/03/2024	08/03/2024	NA
				12/06/2024	10/06/2024	NA
				12/09/2024		
				12/12/2024		
157.	TFP-2240	Thermic fluid transfer pump	Quarterly ± 5 Days	05/03/2024	06/03/2024	NA
				05/06/2024	03/06/2024	NA
				05/09/2024		
				05/12/2024		
158.	CF-1200	Centrifuge	Quarterly ± 5 Days	25/02/2024	22/02/2024	NA
				25/05/2024	25/05/2024	NA
				25/08/2024		
				25/11/2024		

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159.	R-1110	Hydrogenation Reactor	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	11/05/2024	NA
				11/08/2024		
				11/11/2024		
160.	TP-R-1110	Transfer pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	09/05/2024	NA
				11/08/2024	09/08/2024	Y. Ramaji 09/08/2024
				11/11/2024		
161.	TP-HT-R-1110	Transfer Pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	09/05/2024	NA
				11/08/2024	09/08/2024	09/08/2024
				11/11/2024		

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162.	PNF-1200	Pressure Nutsche Filter	Half Yearly ± 7 Days	10/03/2024	06/03/2024	NA
				10/09/2024		
163.	PRD/PNF-001	Pressure Nutsche Filter	Half Yearly ± 7 Days	18/05/2024	20/05/2024	NA
				18/11/2024		
164.	R-3210	GL Reactor	Quarterly ± 5 Days	22/02/2024	22/02/2024	NA
				22/05/2024	23/05/2024	NA
				22/08/2024		
				22/11/2024		
165.	R-3200	GL Reactor	Quarterly ± 5 Days	22/03/2024	25/03/2024	NA
				22/06/2024	23/06/2024	NA
				22/09/2024		
				22/12/2024		

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166.	TP-HT-R-3200	Transfer Pump	Quarterly ± 5 Days	25/02/2024	22/02/2024	NA
				25/05/2024	27/05/2024	NA
				25/08/2024		
				25/11/2024		
167.	VTD-1210	Vacuum Tray Dryer	Quarterly ± 5 Days	24/01/2024	23/01/2024	NA
				24/04/2024	26/04/2024	NA
				24/07/2024	27/07/2024	NA
				24/10/2024		
168.	VP-VTD-1210	Vacuum Pump	Quarterly ± 5 Days	24/01/2024	23/01/2024	NA
				24/04/2024	24/04/2024	NA
				24/07/2024	27/07/2024	NA
				24/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
169.	TP-TFET-VTD-1210	Thermic Fluid Transfer Pump	Quarterly ± 5 Days	24/01/2024	23/01/2024	NA
				24/04/2024	24/04/2024	NA
				24/07/2024	27/07/2024	NA
				24/10/2024		
170.	R-1120	SS Reactor	Quarterly ± 5 Days	04/01/2024	01/01/2024	NA
				04/04/2024	01/04/2024	NA
				04/07/2024	02/07/2024	NA
				04/10/2024		
171.	TP-R-1120	Transfer Pump	Quarterly ± 5 Days	04/01/2024	01/01/2024	NA
				04/04/2024	01/04/2024	NA
				04/07/2024	01/07/2024	NA
				04/10/2024		

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172.	TP-HT-R-3220	Transfer Pump	Quarterly ± 5 Days	04/02/2024	03/02/2024	NA
				04/05/2024	03/05/2024	NA
				04/08/2024	03/08/2024	Y. Ramaji 03/08/2024
				04/11/2024		
173.	R-3230	SS Reactor	Quarterly ± 5 Days	13/02/2024	10/02/2024	NA
				13/05/2024	14/05/2024	NA
				13/08/2024	13/08/2024	13/08/2024
				13/11/2024		
174.	TP-HT-R-3230	Transfer Pump	Quarterly ± 5 Days	13/02/2024	10/02/2024	NA
				13/05/2024	14/05/2024	NA
				13/08/2024	13/08/2024	13/08/2024
				13/11/2024		

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175.	CF-1210	Centrifuge	Quarterly ± 5 Days	07/01/2024	22/01/2024	NA
				07/04/2024	02/04/2024	NA
				07/07/2024	03/07/2024	NA
				07/10/2024		
176.	FD-1200	Agitated Nutsche Filter	Quarterly ± 5 Days	17/01/2024	13/01/2024	NA
				17/04/2024	15/04/2024	NA
				17/07/2024	13/07/2024	NA
				17/10/2024		
177.	VP-FD-1200	Vacuum Pump	Quarterly ± 5 Days	17/01/2024	13/01/2024	NA
				17/04/2024	15/04/2024	NA
				17/07/2024	13/07/2024	NA
				17/10/2024		

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178.	TFP-FD-1200	Thermic Fluid Transfer Pump	Quarterly ± 5 Days	17/01/2024	13/01/2024	NA
				17/04/2024	15/04/2024	NA
				17/07/2024	13/07/2024	NA
				17/10/2024		
179.	R-2200	GL Reactor	Quarterly ± 5 Days	24/02/2024	20/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024		
				24/11/2024		
180.	TP-HT-R-2200	Transfer Pump	Quarterly ± 5 Days	24/02/2024	20/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024		
				24/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
181.	S-1200	Sifter	Quarterly ± 5 Days	14/01/2024	10/01/2024	NA
				14/04/2024	11/04/2024	NA
				14/07/2024	10/07/2024	NA
				14/10/2024		
182.	S-3400	Sifter	Quarterly ± 5 Days	14/01/2024	10/01/2024	NA
				14/04/2024	11/04/2024	NA
				14/07/2024	10/07/2024	NA
				14/10/2024		
183.	PRD/VP-001	Vacuum pump	Quarterly ± 5 Days	22/01/2024	20/01/2024	NA
				22/04/2024	19/04/2024	NA
				22/07/2024	19/07/2024	NA
				22/10/2024		

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184.	PRD/VP-002	Vacuum pump	Quarterly ± 5 Days	22/01/2024	20/01/2024	NA
				22/04/2024	19/04/2024	NA
				22/07/2024	19/07/2024	NA
				22/10/2024		
185.	TP-CFST-R-2220A	Transfer pump	Quarterly ± 5 Days	25/01/2024	22/01/2024	NA
				25/04/2024	27/04/2024	NA
				25/07/2024	22/07/2024	NA
				25/10/2024		
186.	TP-SF-3400	Transfer pump	Quarterly ± 5 Days	25/01/2024	22/01/2024	NA
				25/04/2024	27/04/2024	NA
				25/07/2024	22/07/2024	NA
				25/10/2024		

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187.	VTD-1100	Vacuum Tray Dryer	Quarterly ± 5 Days	16/02/2024	15/02/2024	NA
				16/05/2024	17/05/2024	NA
				16/08/2024	16/08/2024	P. Reddy 16/08/2024
				16/11/2024		
188.	R-2270	SS Reactor	Quarterly ± 5 Days	16/03/2024	18/03/2024	NA
				16/06/2024	14/06/2024	NA
				16/09/2024		
				16/12/2024		
189.	FD-1210	Agitated nutsche filter dryer	Quarterly ± 5 Days	13/01/2024	09/01/2024	NA
				13/04/2024	18/04/2024	NA
				13/07/2024	09/07/2024	NA
				13/10/2024		

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190.	R-3300	SS Reactor	Quarterly ± 5 Days	25/01/2024	22/01/2024	NA
				25/04/2024	22/04/2024	NA
				25/07/2024	23/07/2024	NA
				25/10/2024		
191.	R-3310	GL Reactor	Quarterly ± 5 Days	19/01/2024	17/01/2024	NA
				19/04/2024	22/04/2024	NA
				19/07/2024	17/07/2024	NA
				19/10/2024		
192.	R-3320	GL Reactor	Quarterly ± 5 Days	01/02/2024	30/01/2024	NA
				01/05/2024	28/04/2024	NA
				01/08/2024	31/07/2024	P. Reddy 31/07/2024
				01/11/2024		

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193.	R-3330	GL Reactor	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	18/04/2024	NA
				20/07/2024	18/07/2024	NA
				20/10/2024		
194.	R-3340	GL Reactor	Quarterly ± 5 Days	13/01/2024	18/01/2024	NA
				13/04/2024	11/04/2024	NA
				13/07/2024	10/07/2024	NA
				13/10/2024		
195.	R-2310	GL Reactor	Quarterly ± 5 Days	28/01/2024	27/01/2024	NA
				28/04/2024	24/04/2024	NA
				28/07/2024	24/07/2024	NA
				28/10/2024		

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196.	R-2330	SS Reactor	Quarterly ± 5 Days	14/02/2024	12/02/2024	NA
				14/05/2024	16/05/2024	NA
				14/08/2024	13/08/2024	13/08/2024
				14/11/2024		
197.	R-2340	GL Reactor	Quarterly ± 5 Days	29/01/2024	24/01/2024	NA
				29/04/2024	26/04/2024	NA
				29/07/2024	26/07/2024	NA
				29/10/2024		
198.	R-2350	SS Reactor	Quarterly ± 5 Days	30/01/2024	25/01/2024	NA
				30/04/2024	27/04/2024	NA
				30/07/2024	27/07/2024	NA
				30/10/2024		

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199.	TP-HT-R-3310	Transfer Pump	Quarterly ± 5 Days	19/01/2024	17/01/2024	NA
				19/04/2024	22/04/2024	NA
				19/07/2024	17/07/2024	NA
				19/10/2024		
200.	TP-HT-R-3320A	Transfer Pump	Quarterly ± 5 Days	01/02/2024	30/01/2024	NA
				01/05/2024	29/04/2024	NA
				01/08/2024	31/07/2024	31/07/2024
				01/11/2024		
201.	TP-HT-R-3320B	Transfer Pump	Quarterly ± 5 Days	01/02/2024	30/01/2024	NA
				01/05/2024	29/04/2024	NA
				01/08/2024	31/07/2024	31/07/2024
				01/11/2024		

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202.	TP-HT-R-3320C	Transfer Pump	Quarterly ± 5 Days	01/02/2024	30/01/2024	NA
				01/05/2024	29/04/2024	NA
				01/08/2024	31/07/2024	31/07/2024
				01/11/2024		
203.	TP-HT-R-3330A	Transfer Pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	16/04/2024	NA
				20/07/2024	18/07/2024	NA
				20/10/2024		
204.	TP-HT-R-3330B	Transfer Pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	16/04/2024	NA
				20/07/2024	18/07/2024	NA
				20/10/2024		

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205.	TP-HT-R-2330B	Transfer Pump	Quarterly ± 5 Days	14/02/2024	12/02/2024	NA
				14/05/2024	16/05/2024	NA
				14/08/2024	10/08/2024	Y. Ravaji 10/08/2024
				14/11/2024		
206.	TP-HT-R-2350	Transfer Pump	Quarterly ± 5 Days	30/01/2024	25/01/2024	NA
				30/04/2024	27/04/2024	NA
				30/07/2024	27/07/2024	NA
				30/10/2024		
207.	TP-TFET-TCU-R-3300	Transfer Pump	Quarterly ± 5 Days	25/01/2024	22/01/2024	NA
				25/04/2024	23/04/2024	NA
				25/07/2024	23/07/2024	NA
				25/10/2024		

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208.	TP-TFET-TCU-R-3310	Transfer Pump	Quarterly ± 5 Days	19/01/2024	17/01/2024	NA
				19/04/2024	22/04/2024	NA
				19/07/2024	17/07/2024	NA
				19/10/2024		
209.	TP-TFET-TCU-R-3320	Transfer Pump	Quarterly ± 5 Days	01/02/2024	30/01/2024	NA
				01/05/2024	29/04/2024	NA
				01/08/2024	31/07/2024	31/07/2024
				01/11/2024		
210.	TP-TFET-TCU-R-3330	Transfer Pump	Quarterly ± 5 Days	20/01/2024	19/01/2024	NA
				20/04/2024	16/04/2024	NA
				20/07/2024	18/07/2024	NA
				20/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
211.	TP-TFET-TCU-R-3340	Transfer Pump	Quarterly ± 5 Days	13/01/2024	17/01/2024	NA
				13/04/2024	11/04/2024	NA
				13/07/2024	09/07/2024	NA
				13/10/2024		
212.	TP-TFET-TCU-R-2310	Transfer Pump	Quarterly ± 5 Days	28/01/2024	27/01/2024	NA
				28/04/2024	24/04/2024	NA
				28/07/2024	24/07/2024	NA
				28/10/2024		
213.	TP-TFET-TCU-R-2330	Transfer Pump	Quarterly ± 5 Days	14/02/2024	12/02/2024	NA
				14/05/2024	16/05/2024	NA
				14/08/2024	10/08/2024	10/08/2024
				14/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
214.	TP-TFET-TCU-R-2340	Transfer Pump	Quarterly ± 5 Days	29/01/2024	24/01/2024	NA
				29/04/2024	26/04/2024	NA
				29/07/2024	26/07/2024	NA
				29/10/2024	*DT 17/08/24	
215.	TP-TFET-TCU-R-2350	Transfer Pump	Quarterly ± 5 Days	30/01/2024	25/01/2024	NA
				30/04/2024	27/04/2024	NA
				30/07/2024	27/07/2024	NA
				30/10/2024		
216.	R-2300	SS Reactor	Quarterly ± 5 Days	17/02/2024	15/02/2024	NA
				17/05/2024	17/05/2024	NA
				17/08/2024	17/08/2024.	P. Reddy 17/08/24
				17/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
217.	TP-R-2300	Transfer Pump	Quarterly ± 5 Days	17/02/2024	14/02/2024	NA
				17/05/2024	16/05/2024	NA
				17/08/2024	16/08/2024	16/08/2024
				17/11/2024		
218.	TP-HT-R-2300A	Transfer Pump	Quarterly ± 5 Days	17/02/2024	14/02/2024	NA
				17/05/2024	16/05/2024	NA
				17/08/2024	16/08/2024	Y. Ramaraju 16/08/2024
				17/11/2024		
219.	TP-HT-R-2300B	Transfer Pump	Quarterly ± 5 Days	17/02/2024	14/02/2024	NA
				17/05/2024	16/05/2024	NA
				17/08/2024	16/08/2024	16/08/2024
				17/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
220.	TP-TFET-TCU-R-2300	Transfer Pump	Quarterly ± 5 Days	13/01/2024	09/01/2024	NA
				13/04/2024	11/04/2024	NA
				13/07/2024	09/07/2024	NA
				13/10/2024		
221.	CF-1300	Centrifuge	Quarterly ± 5 Days	23/03/2024	19/03/2024	NA
				23/06/2024	19/06/2024	NA
				23/09/2024		
				23/12/2024		
222.	CF-1310	Centrifuge	Quarterly ± 5 Days	24/03/2024	20/03/2024	NA
				24/06/2024	20/06/2024	NA
				24/09/2024		
				24/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
223.	CF-1320	Centrifuge	Quarterly ± 5 Days	04/01/2024	05/01/2024	NA
				04/04/2024	03/04/2024	NA
				04/07/2024	01/07/2024	NA
				04/10/2024		
224.	D-1300	Rotary cone vacuum dryer	Quarterly ± 5 Days	24/01/2024	24/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	22/07/2024	NA
				24/10/2024		
225.	VP-D-1300	Vacuum Pump	Quarterly ± 5 Days	24/01/2024	24/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	22/07/2024	NA
				24/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
226.	HWS-D-1300	Hot water system	Quarterly ± 5 Days	24/01/2024	24/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	22/07/2024	NA
				24/10/2024		
227.	TP-HWS-D-1300	Hot water circulation pump	Quarterly ± 5 Days	24/01/2024	24/01/2024	NA
				24/04/2024	20/04/2024	NA
				24/07/2024	22/07/2024	NA
				24/10/2024		
228.	D-1310	Rotary cone vacuum dryer	Quarterly ± 5 Days	06/02/2024	05/02/2024	NA
				06/05/2024	04/05/2024	NA
				06/08/2024	03/08/2024	03/08/2024
				06/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
229.	VP-D-1310	Vacuum Pump	Quarterly ± 5 Days	06/02/2024	05/02/2024	NA
				06/05/2024	05/05/2024	NA
				06/08/2024	03/08/2024	Y. Ramaji 03/08/2024
				06/11/2024		
230.	HWS-D-1310	Hot water system	Quarterly ± 5 Days	06/02/2024	05/02/2024	NA
				06/05/2024	05/05/2024	NA
				06/08/2024	03/08/2024	03/08/2024
				06/11/2024		
231.	TP-HWS-D-1310	Hot water circulation pump	Quarterly ± 5 Days	06/02/2024	05/02/2024	NA
				06/05/2024	05/05/2024	NA
				06/08/2024	03/08/2024	Y. Ramaji 03/08/2024
				06/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
232.	TP-TFET-TCU-R-3210	Transfer Pump	Quarterly ± 5 Days	22/02/2024	22/02/2024	NA
				22/05/2024	23/05/2024	NA
				22/08/2024		
				22/11/2024		
233.	TP-TFET-TCU-R-2250	Transfer Pump	Quarterly ± 5 Days	15/01/2024	11/01/2024	NA
				15/04/2024	19/04/2024	NA
				15/07/2024	14/07/2024	NA
				15/10/2024		
234.	TP-PRD/SF-002	Transfer Pump	Quarterly ± 5 Days	23/02/2024	22/02/2024	NA
				23/05/2024	24/05/2024	NA
				23/08/2024	20/08/2024	Y. Ramaji 20/08/2024
				23/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
235.	TP-PRD/SF-003	Transfer Pump	Quarterly ± 5 Days	24/02/2024	22/02/2024	NA
				24/05/2024	24/05/2024	NA
				24/08/2024	20/08/2024	Sai 20/08/2024
				24/11/2024		
236.	TP-PRD/SF-004	Transfer Pump	Quarterly ± 5 Days	25/02/2024	22/02/2024	NA
				25/05/2024	27/05/2024	NA
				25/08/2024		
				25/11/2024		
237.	TP-TFET-TCU-R-2210	Transfer Pump	Quarterly ± 5 Days	22/03/2024	19/03/2024	NA
				22/06/2024	23/06/2024	NA
				22/09/2024		
				22/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
238.	TP-TFET-R-1120	Transfer Pump	Quarterly ± 5 Days	04/01/2024	01/01/2024	NA
				04/04/2024	01/04/2024	NA
				04/07/2024	01/07/2024	NA
				04/10/2024		
239.	TP-TFET-TCU-R-2270	Transfer Pump	Quarterly ± 5 Days	16/03/2024	18/03/2024	NA
				16/06/2024	14/06/2024	NA
				16/09/2024		
				16/12/2024		
240.	TP-TFET-R-1110	Transfer Pump	Quarterly ± 5 Days	11/02/2024	08/02/2024	NA
				11/05/2024	09/05/2024	NA
				11/08/2024	09/08/2024	Y. Ramaji 09/08/2024
				11/11/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
241.	FD-1300	Agitated nutsche filter and dryer	Quarterly ± 5 Days	19/01/2024	20/01/2024	NA
				19/04/2024	16/04/2024	NA
				19/07/2024	15/07/2024	NA
				19/10/2024		
242.	VP-FD-1300	Vacuum pump	Quarterly ± 5 Days	19/01/2024	20/01/2024	NA
				19/04/2024	16/04/2024	NA
				19/07/2024	15/07/2024	NA
				19/10/2024		
243.	HWS-FD-1300	Hot water system	Quarterly ± 5 Days	19/01/2024	20/01/2024	NA
				19/04/2024	16/04/2024	NA
				19/07/2024	15/07/2024	NA
				19/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
244.	TP-HWS-FD-1300	Hot water circulation pump	Quarterly ± 5 Days	19/01/2024	20/01/2024	NA
				19/04/2024	16/04/2024	NA
				19/07/2024	15/07/2024	NA
				19/10/2024		
245.	R-3240	GL Reactor	Quarterly ± 5 Days	04/02/2024	03/02/2024	NA
				04/05/2024	03/05/2024	NA
				04/08/2024	05/08/2024	05/08/2024
				04/11/2024		
246.	PRD/VP-003	Vacuum pump	Quarterly ± 5 Days	11/03/2024	07/03/2024	NA
				11/06/2024	07/06/2024	NA
				11/09/2024		
				11/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
247.	PRD/VP-004	Vacuum pump	Quarterly ± 5 Days	09/03/2024	07/03/2024	NA
				09/06/2024	07/06/2024	NA
				09/09/2024		
				09/12/2024		
248.	SBR-4300	Scrubber system	Quarterly ± 5 Days	27/03/2024	23/03/2024	NA
				27/06/2024	26/06/2024	NA
				27/09/2024		
				27/12/2024		
249.	FD-1310	Agitated Nutsche Filter and dryer	Quarterly ± 5 Days	16/03/2024	12/03/2024	NA
				16/06/2024	12/06/2024	NA
				16/09/2024		
				16/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
250.	VP-FD-1310	Vacuum pump	Quarterly ± 5 Days	16/03/2024	12/03/2024	NA
				16/06/2024	12/06/2024	NA
				16/09/2024		
				16/12/2024		
251.	HWS-FD-1310	Hot water system	Quarterly ± 5 Days	16/03/2024	12/03/2024	NA
				16/06/2024	12/06/2024	NA
				16/09/2024		
				16/12/2024		
252.	TP-HWS-FD-1310	Hot water circulation pump	Quarterly ± 5 Days	16/03/2024	12/03/2024	NA
				16/06/2024	12/06/2024	NA
				16/09/2024		
				16/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
253.	R-2320	HC-22 Reactor	Quarterly ± 5 Days	20/03/2024	16/03/2024	NA
				20/06/2024	21/06/2024	NA
				20/09/2024		
				20/12/2024		
254.	TP-HT-R-2320	Transfer Pump	Quarterly ± 5 Days	20/03/2024	16/03/2024	NA
				20/06/2024	20/06/2024	NA
				20/09/2024		
				20/12/2024		
255.	TP-TFET-TCU-R-2320	Transfer Pump	Quarterly ± 5 Days	20/03/2024	16/03/2024	NA
				20/06/2024	21/06/2024	NA
				20/09/2024		
				20/12/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
256.	CFS-1300	Cryo Fluid System	Quarterly ± 5 Days	05/03/2024	02/03/2024	NA
				05/06/2024	03/06/2024	NA
				05/09/2024		
				05/12/2024		
257.	TP-CFS-1300	Transfer Pump	Quarterly ± 5 Days	05/03/2024	02/03/2024	NA
				05/06/2024	03/06/2024	NA
				05/09/2024		
				05/12/2024		
258.	PRD/SJE-001	Steam Jet Ejector	Quarterly ± 5 Days	21/01/2024	20/01/2024	NA
				21/04/2024	18/04/2024	NA
				21/07/2024	19/07/2024	NA
				21/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
259.	PRD/SJE-002	Steam Jet Ejector	Quarterly ± 5 Days	23/01/2024	20/01/2024	NA
				23/04/2024	19/04/2024	NA
				23/07/2024	19/07/2024	NA
				23/10/2024		
260.	TP-PRD/SF-005	Transfer Pump	Quarterly ± 5 Days	26/01/2024	22/01/2024	NA
				26/04/2024	23/04/2024	NA
				26/07/2024	23/07/2024	NA
				26/10/2024		
261.	TP-PRD/SF-006	Transfer Pump	Quarterly ± 5 Days	28/01/2024	27/01/2024	NA
				28/04/2024	24/04/2024	NA
				28/07/2024	24/07/2024	NA
				28/10/2024		

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S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
262.	TP-PRD/SF-007	Transfer Pump	Quarterly ± 5 Days	30/01/2024	29/01/2024	NA
				30/04/2024	26/04/2024	NA
				30/07/2024	27/07/2024	NA
				30/10/2024		
263.	CF-1220	Centrifuge	Quarterly ± 5 Days	10/02/2024	07/02/2024	NA
				10/05/2024	10/05/2024	NA
				10/08/2024	12/08/2024	12/08/2024
				10/11/2024		
264.	TP-HT-R-2330A	Transfer Pump	Quarterly ± 5 Days	06/03/2024	02/03/2024	NA
				06/06/2024	04/06/2024	NA
				06/09/2024		
				06/12/2024		

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265.	VTD-1300	Vacuum Tray Dryer	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	23/05/2024	NA
				21/08/2024		
				21/11/2024		
266.	VP-VTD-1300	Vacuum Pump	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024		
				21/11/2024		
267.	HWS-VTD-1300	Hot Water System	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024		
				21/11/2024		

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
268.	TP-HWS-VTD-1300	Hot Water Circulation Pump	Quarterly ± 5 Days	21/02/2024	19/02/2024	NA
				21/05/2024	22/05/2024	NA
				21/08/2024		
				21/11/2024		
269.	PNF-1300	Pressure Nutsche Filter	Half Yearly ± 7 Days	15/06/2024	11/06/2024	NA
				15/12/2024		
270.	D-1210	Roto cone vacuum dryer	Quarterly ± 5 Days	03/05/2024	30/04/2024	NA
				03/08/2024	06/08/2024	Varu 06/08/2024
				03/11/2024		
271.	VP-D-1210	Vacuum pump	Quarterly ± 5 Days	03/05/2024	30/04/2024	NA
				03/08/2024	02/08/2024	Y. Ramaji 02/08/2024
				03/11/2024		

Approved by			
K Varaprasad	Quality Assurance	Varu	29/07/2024
Name	**Department**	**Signature**	**Date**

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
272.	HWS-D-1210	Hot water system	Quarterly ± 5 Days	03/05/2024	30/04/2024	NA
				03/08/2024	02/08/2024	02/08/2024
				03/11/2024		
273.	TP-HWS-D-1210	Hot water circulation pump	Quarterly ± 5 Days	03/05/2024	30/04/2024	NA
				03/08/2024	02/08/2024	Y. Ramaji 02/08/2024
				03/11/2024		
274.	CF-1230	Centrifuge	Quarterly ± 5 Days	08/05/2024	10/05/2024	NA
				08/08/2024	09/08/2024	09/08/2024
				08/11/2024		
275.	S-1503	Sifter	Quarterly ± 5 Days	21/06/2024	25/06/2024	NA
				21/09/2024		
				21/12/2024		

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

escientia

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

S.No.	Equipment no.	Equipment description	Frequency	Scheduled Date	Actual Date	Performed by (Sign & Date) (ESD)
276.	TP-TFET-TCU-R-3200	Transfer Pump	Quarterly ± 5 Days	27/08/2024		
				27/11/2024		
277.	TP-TFET-TCU-R-3230	Transfer Pump	Quarterly ± 5 Days	28/08/2024		
				28/11/2024		
278.	TP-TFET-TCU-R-3240	Transfer Pump	Quarterly ± 5 Days	29/08/2024		
				29/11/2024		
279.	PRD/TP-001 (Movable pump)	Transfer Pump	Quarterly ± 5 Days	13/07/2024	17/07/2024	NA
				13/10/2024		
280.	TP-PRD/SF-008	Transfer Pump	Quarterly ± 5 Days	15/10/2024		

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Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

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ANNUAL PREVENTIVE MAINTENANCE SCHEDULE

Year:	2024	Department / Area:	Production	Schedule no.:	APM/24/PRD-01

Note:

1. Frequency: 1M: Monthly 3M: Quarterly 6M: Half Yearly 1Y: Yearly

Half Yearly Review	
Engineering HOD/Designee	**NA**
QAD	**NA**

Annual Review	
Engineering HOD/Designee	
QAD	

Approved by			
K Varaprasad	Quality Assurance		29/07/2024
Name	**Department**	**Signature**	**Date**

Annexure - 15

2024

EMERGENCY PREPAREDNESS AND RESPONSE PLAN

Escientia Advanced Sciences Private Limited

Plot No. 11, 11A, 12 & 12A, APSEZ,

Atchutapuram, Visakhapatnam – 531 011.

1/1/2024

EMERGENCY PREPAREDNESS AND RESPONSE PLAN

	Prepared/ Reviewed by	Approved by
Signature & Date	26/03/2024	26/03/2024
Name	A Satyanarayana	Sanjay Kumar Vaishnava
Position/ Function	Deputy. Manager/ EHS	Unit Head/ Operations

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1. INTRODUCTION

1.1 General

1.1.1 Purpose

To establish responsibility for the various functions and individuals involved in emergency handling and outline procedures to respond for emergencies to minimize impacts to personnel, equipment, the surrounding community, and the wider environment.

1.1.2 Scope

The emergency preparedness and response plan (EPRP) applies to Escientia Advanced Sciences Private Limited, Visakhapatnam, their employees, contractors, and visitors on site.

As a part of regulatory requirement Sections 7-A, 41-B (4) of factories Act and Rule 13 of Manufacture, Storage, Handling, and Import of Hazardous Chemicals Rule 1989 promulgated under Environment Protection Act 1986.

1.1.3 Emergency Management Policies & Principles

It is Escientia's Emergency Management policy to operate without injuries, illnesses, or incidents. Escientia will act according to following principles:

- Act with caring, compassion and concern
- Protect life, health & safety, the environment and the community
- Act morally and ethically, and endeavor to exceed relevant laws & regulations
- Minimize property and economic damage
- Maximize restoration of normal activities

1.1.4 Reference

The reference for the Emergency Preparedness and Response Plan is part of Regulatory requirements as mentioned below:

- The Factories Act, 1948
- Andhra Pradesh Factories Rules, 1950
- Environment Protection Act 1986

1.1.5 Definition

An emergency is any inadvertent incident which causes or may cause personnel injuries and equipment damage such as fire, explosion, loss of containment of hazardous material and flammable or toxic gas release.

1.1.6 Responsibility

1.1.6.1 The Site Environment, Health & Safety (EHS) Head is responsible for developing, reviewing, and revising the EPRP and providing leadership guidance to the site Emergency Response Team in every aspect of emergency response capability.

1.1.6.2 Line managers and leaders are responsible to ensure that all employees on site are familiar and conversant with the EPRP and take necessary actions to protect themselves and safeguard the facilities in an emergency.

1.1.6.3 The Emergency Response Team (ERT), which has the responsibility to respond to any emergency in accordance with the procedure set out in this EPRP.

1.1.6.4 Employees who are identified to provide support services to the Emergency Response Team shall perform their roles and responsibilities in accordance with the procedure set out in this plan.

1.1.7 Company Profile

Escientia was founded in 2008 by senior executives from top-tier innovator pharmaceutical companies in USA to become:

- Preferred development and manufacturing services partner
- Leader in developing green and safe processes
- Manage cost and time in making life-saving therapeutics

The multi-product API Manufacturing facility is in Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, Andhra Pradesh – 531011.

1.2 Area of Operations

1.2.1 Location of Installation and its main access road

This facility is located at Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, Andhra Pradesh – 531011.

Situated at about 40 km from Visakhapatnam Airport.

The National Highway is situated at about 25 km away.

The Fire Service department is situated at Yelamanchili about 20 km away.

The fire tender is available at APSEZ office about 6 km away.

Escientia is situated in Andhra Pradesh Special Economic Zone.

1.2.2 General Description of the site area (including neighboring buildings and installations)

Escientia is in Andhra Pradesh Industrial Infrastructure Corporation (APIIC) developed Special Economic Zone (SEZ) and the neighboring premises details are given below:

East – M/s. Vasant Chemicals Private Limited (SEZ unit)
West – M/s. Sundaram Alloys Private Limited
North – SEZ Access Road (12m wide double road)
South – SEZ Access Road (12m wide single road)

1.2.3 Population

SEZ colony is the nearest population area with 1400 people is situated in the North at about 3.5km away. Bay of Bengal ocean is reachable about 7 km away on the South. Escientia has average population of 500+ persons including employees, contract employees and visitors on site. Escientia surrounded by two companies in East & West and access roads in North and South.

1.2.4 Layout of installation

Total plot area of Escientia is about 41 acres.

Master Layout of the Site is attached as **Annexure I**.

1.2.5 General Information of the Premises

General information regarding the Occupier, Unit Head, Plant Manager, Safety Officer – Contacts, Number of Employees and the other information's are given in **Annexure II**

1.2.6 Location, storage and quantities of Raw Materials stored in the facility

1. Flammable solvents (200lt Drums) are stored in CCOE drum storage area
2. Diesel is stored in CCOE bulk storage tank with 20KL capacity
3. Furnace oil is stored in CCOE bulk storage area with 40KL capacity
4. Non-flammable liquids are stored in non-CCOE drum storage area
5. Acids, Alkali, and water reactive materials are physically segregated and stored in dedicated storage rooms.
6. The solid raw materials and other non-flammable liquid required temperature control are stored in Warehouse RM storage area.
7. Laboratory flammable chemicals are stored in flammable safety cabinets
8. Laboratory acid chemicals are stored in acid storage cabinets
9. The chemicals from the warehouse/bulk storage tank are distributed to the plants as per the process requirements
10. The Materials stored with quantity is given in **Annexure III**

1.2.7 Description of Process Areas (including summary of the Process and operations carried out)

General manufacturing Process Flow Chart is given in – **Annexure IV**

1.3 Hazard and Risk Assessment

1.3.1 Main Areas where hazards present on site

The most important areas where Hazards are present in the site :

1. API II building Suite II manufacturing area
2. Medium Scale manufacturing area
3. Small scale manufacturing area
4. CCOE - bulk solvent storage area
5. CCOE drum storage area
6. CCOE – Diesel & Furnace oil storage area
7. Gas Cylinder Storage area
8. Quality Control Lab
9. Highly Potent Manufacturing area
10. Process development lab
11. Electrical panel room
12. ETP
13. Scrap Yard
14. Warehouse
15. Engineering Store
16. Boiler
17. Utility

The common list of Anticipated Emergencies are:

1. Spillage
2. Fire/Explosion
3. Dust Explosion
4. Physical injuries to personnel
5. Toxic or poisonous gas release in process areas
6. Toxic gas release from neighboring industries
7. Natural disasters
8. Food poisoning
9. Road Tanker leakage during the wastewater transfer
10. Electrical shock/Electrocution
11. Structural collapse
12. Vehicle accident inside the plant
13. ETP/AGT tanks leakage

1.3.2 Inventory list of Hazardous substances handled/stored in the facility

As in 1.2.6

1.3.3 Process Hazard Analysis and Risk Management (PHA & RM)

The Risks are identified and are studied for their severity and likelihood/probability. Based on the accident and hazard potential of the chemicals used in the process, the operating conditions, their material factor, inventory, the release as well as accident scenarios have been created for the Maximum Credible Accident & Consequence Analysis. The following steps are involved in assessing the Hazards in the facility and thereby planning for the emergency in the facility

1. ***Identification of Hazards:*** The basic source of Hazardous material storage details is available in **Annexure V**
2. ***Screening Threshold*****:** Screening quantities or thresholds are done based on the significant hazards of the chemicals and its properties.
3. ***Characterize Hazards***: After the facility hazards have been Identified/ Screened, the hazards are analyzed in detail in line with the Process/ Activity carried out in the facility as in ***Analyzing Emergency Events Conditions/Identify Barriers/Identify Failure modes of Barriers:*** The extracts of events from the Risk Assessment are again studied for the detailed failures as in **Table 3**
4. ***Estimating Consequences: Emergency Responses for identified Emergencies –*** **Table 4**

1.3.4 Descriptions of emergency scenarios

TABLE 3: EMERGENCY SCENARIOS

S. No	Hazards	Causes	Consequence	Emergency Scenario(s)
1	*Fire / explosion in process area*	Static electricity or external heat or leak from containers / pipelines or electrical short circuit in small, medium, and large-scale production area, technical areas, highly potent manufacturing area	Equipment damage, serious personnel injury or fatal	Case 1
2	*Fire / explosion in bulk solvent storage / drum storage area*	Static electricity or external heat or leak from containers / pipelines or electrical short circuit in solvent bulk storage / drum storage area	Equipment damage, serious personnel injury or fatal	Case 2
3	*Fire / Explosion in Hydrogenation area*	Static electricity or external heat or leak from hydrogen cylinders / pipelines or electrical short circuit or catalyst spillage in hydrogenation area	Equipment damage, serious personnel injury or fatal	Case 3
4	*Dust explosion*	Static electricity Combustible / Explosive powder handling in small- and large-scale powder processing area	Equipment Damage, serious personnel injury or fatal	Case 4
5	*Fire in QC Laboratory*	Solvent spillage or solvent bottles / containers damage	Human injury or Equipment damage and property loss	Case 5
6	*Serious injuries to personnel*	Raw material storage rack collapse in raw material, personnel fall from height	Material loss, Serious personnel injury or fatal	Case 6
7	*Toxic or poisonous gas release in process areas*	During the charging /manual handling of toxic chemicals, hazardous reactions, scrubber failure, local venting of toxic gas, pipeline leak in process areas	Personnel Overexposure or Fatal	Case 7
8	*Toxic gas release from neighbor industries*	Fire / explosion / toxic material combustion	Personnel overexposure	Case 8
9	*Natural disasters*	Cyclone	Personnel injury or property loss	Case 9
10	*Food poisoning*	External food Contamination	Personnel health illness (multiple)	Case 10
11	*Spillage/Leakage in Tank Farm area*	pipe line leakage/storage tank leakage/overflow of storage tank.	Fire / Explosion personnel Exposure/Environmental Damage	Case 11

12	*Electrical shock/Electrocution*	During the inspection of Electrical panels / Live electrical cable work/Transformer inspection/DG set inspection	Personnel Electrical Burn or Fatal	Case 12
13	*Structural collapse*	During the new construction of buildings or structures / Modification activity of buildings or structures	Personnel injury or fatal and property loss	Case 13
14	*Vehicle accident inside the plant*	Vehicle movement inside the roads/vehicle cross the road corners/over speed	Personnel injury	Case 14
15	ETP/AGT tanks leakage	ETP/AGT Tanks damages/Failure of bottom valves	Large quantity of effluent leakage and environmental damage	Case 15

TABLE 4: POTENTIAL ACCIDENT SCENARIOS

Case#1	FIRE / EXPLOSION IN PROCESS AREA	
1.1	*Type of Incident*	Fire / Explosion
1.2	*Material*	Flammable Solvents / mixture / reaction mass
1.3	*Main Hazards*	Personnel exposure, Potential for exceeding the LEL and/or IDLH, solvent flash fire
1.4	*Location*	Small, medium, large-scale manufacturing area and respective technical areas
1.5	*Incident Scenario*	Flammable solvents are handled for manufacturing processes from pipelines, drums or containers and the spillage and leakage will increase the solvent exposure at the workplace and form enough concentrations of flash mixture to catch fire or uncontrollable reactions may lead to fire / explosion from the process.
1.6	The extent of release depends on the quantity, vapor pressure, density of the solvent, nature of hazardous process and degree of the ventilation.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to fire and explosion during the process/operation • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • The process equipment, electrical power, and ventilation equipment (AHUs) shall be stopped. • Emergency response team should reach the incident location for firefighting. • Identify the source and contain the fire. • Operate fire hydrant point or fire hose reel to mitigate the fire. • Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Leak arresting team shall support to contain the leaks if any. • Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#2	FIRE / EXPLOSION IN BULK SOLVENT STORAGE / DRUM STORAGE AREA	
1.1	*Type of Incident*	Fire / Explosion
1.2	*Material*	Flammable Solvents
1.3	*Main Hazards*	Personnel exposure, Potential for exceeding the LEL and/or IDLH, solvent flash fire
1.4	*Location*	CCOE solvent storage tanks, CCOE drums storage area, CCOE – diesel & FO storage tanks
1.5	*Incident Scenario*	Flammable solvents are handled and stored in the bulk solvent storage tanks and drums. Solvents are being transferring from pipelines, dispensing to drums or containers and the spillage, leakage and accidental damage will increase the risk of flash fire and personnel exposure at the workplace.

1.6	The extent of release depends on the quantity, vapor pressure and density of the solvent and degree of the ventilation.
1.7	***Emergency Response Plan:***
	The emergency response plan is applicable to fire and explosion during handling, storage and loading/unloading of flammable liquids • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • Solvent transferring pump shall be stopped, and electrical power supply shall be isolated. • Activate manual activation switch of deluge system for solvent storage tank fire if not activated automatically. • Emergency response team should reach the incident location for firefighting. • Identify the source and contain the fire. • Operate fire hydrant point or medium velocity water sprinkler system to mitigate the fire. • Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Leak arresting team shall support to contain the leaks if any. • Dyke drain valves shall be closed. Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.

Case#3	**FIRE / EXPLOSION IN HYDROGENATION AREA**	
1.1	***Type of Incident***	Fire / Explosion
1.2	***Material***	Flammable gas
1.3	***Main Hazards***	Potential for exceeding the LEL and/or IDLH, flammable gases flash fire
1.4	***Location***	Hydrogenation area
1.5	***Incident Scenario***	Flammable gas cylinders (hydrogen) are being used for hydrogenation process. Hydrogen gas is being transferred through pressure reduction station to reactors for pressure reactions and leakage from reactor, pipelines or cylinders will increase the risk of causing flash fire and explosion.
1.6	The extent of release depends on the quantity, density of the gas and degree of the ventilation.	

1.7	***Emergency Response Plan:***
	The emergency response plan is applicable to fire and explosion while using flammable gas cylinders for pressure reactions • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • Cylinder valve and PRS manifold valve shall be closed, and electrical power supply shall be isolated. • Emergency response team should reach the incident location for firefighting. • Identify the source and contain the fire if any. • Operate fire hydrant point or fire hose reel to mitigate the fire. • Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Leak arresting team shall support to contain the leaks if any. • Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.

Case#4	**DUST EXPLOSION**	
1.1	***Type of Incident***	Dust explosion
1.2	***Material***	Combustible / flammable / explosive powders
1.3	***Main Hazards***	Personnel exposure, Potential for exceeding the MIE of the powder, Accumulation of static charge
1.4	***Location***	Small scale and Large-scale powder processing area
1.5	***Incident Scenario***	Combustible / powders are handled in the small scale and large-scale powder processing area equipment. Manual handling of combustible / flammable powders will form combustible dust cloud and catch fire due to ignition source or static charge accumulation.
1.6	The extent of release depends on the quantity, density, particle size, MIE and conductivity of the powder / dust and degree of the ventilation.	
1.7	***Emergency Response Plan:***	
	The emergency response plan is applicable to fire and explosion during the process/operation • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • Powder handling activity shall be stopped and remove the source from the place possibly. • Emergency response team should reach the incident location for firefighting. • Operate fire hydrant point or fire hose reel to mitigate the fire.	

	• Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.

Case#5	FIRE IN QC LABORATORY	
1.1	***Type of Incident***	Fire
1.2	***Material***	Flammable Solvents
1.3	***Main Hazards***	Personnel exposure, Potential for exceeding the LEL and/or IDLH, solvent flash fire
1.4	***Location***	QC chemical storage, wet lab, and mobile phase preparation area
1.5	***Incident Scenario***	Flammable solvents are handled and stored in the chemical store, wet lab, and mobile phase preparation areas. Solvents are being handled in bottles or containers and the spillage, leakage and accidental damage will increase the risk of flash fire and personnel exposure at the workplace.
1.6	The extent of release depends on the quantity, vapor pressure and density of the solvent and degree of the ventilation.	
1.7	***Emergency Response Plan:***	
	The emergency response plan is applicable to fire and explosion during handling and storage • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • Contain the Spillage or leakage and remove nearby flammable solvents if any. • Emergency response team should reach the incident location for firefighting. • Identify the source and contain the fire. • Operate fire hydrant point or fire hose reel to mitigate the fire. • Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Leak arresting team shall support to contain the leaks if any. • Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#6	SERIOUS INJURIES TO PERSONNEL	
1.1	***Type of Incident***	Storage rack collapse or personnel / material fall from height
1.2	***Material***	Solid raw materials and finished goods
1.3	***Main Hazards***	Storage rack collapse, personnel or material fall from height
1.4	***Location***	Warehouse RM & FG storage area
1.5	***Incident Scenario***	Solid raw materials and non-combustible materials are stored in the warehouse RM storage area and Finished goods are stored in FG storage area in the racks designed for 2000 kg SWL/rack. Materials and FG are being transferred and stored in the racks by using stacker machine. A movable ladder is used for cleaning or performing maintenance work at the ceiling level. Material storage racks may collapse due to maloperation of stacker machine and personnel may fall from the ladder at above 6-meter height.
1.6	The severity of injury depends on the weight of materials stored, height of the material falling from and height of the personnel falling from.	
1.7	***Emergency Response Plan:***	
	The emergency response plan is applicable to serious injuries to personnel while handling and storage of raw materials / finished goods • Remove the injured personnel immediately from the place. • Activate manual call point or other means of communication to get attention from neighboring department / personnel. • Prevent material fall from height possibly and stop the stacker machine operation. • Emergency response team should reach the incident location for first aid. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel from the same building shall evacuate through nearby emergency exit during emergency. • Call occupational health center or security gate to send ambulance van. • EHS coordinator shall support / guide for first aid treatment and further shifting of affected personnel. • Incident controller shall inform the status after controlling the emergency. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#7	TOXIC OR POISONOUS GAS RELEASE IN PROCESS AREA	
1.1	*Type of Incident*	Toxic or Poisonous gas release
1.2	*Material*	Highly toxic or poisonous raw materials or reaction mixture
1.3	*Main Hazards*	Personnel overexposure, Potential for exceeding the PEL and/or IDLH, fatality
1.4	*Location*	API II building Small, Medium and Large-scale Manufacturing areas and/or respective technical areas
1.5	*Incident Scenario*	Highly toxic and/or poisonous raw materials are being handled in manufacturing processes. Toxic and/or poisonous gases may be generated from the process and may release into the manufacturing areas and/or technical areas.
1.6	The severity of impact depends on the quantity of release, density of the gas, severity of the toxic/poisonous gas and degree of the ventilation.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to toxic/poisonous gas release to the manufacturing areas while handling and processing of highly toxic or poisonous raw materials in the manufacturing areas. • Activate manual call point or other means of communication to get attention from neighboring department / personnel. • Wear SCBA immediately and remove the overexposed personnel if affected. • Isolate or barricade the area and ventilate the area • Identify the source and control the leaks if any. • Emergency response team should reach the incident location for first aid. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel from the same building shall evacuate through nearby emergency exit during emergency. • Call occupational health center or security gate to send ambulance van if required. • EHS coordinator shall support / guide for first aid treatment and safe evacuation. • Inform nearby industries / local authorities if the toxic or poisonous gas release not controlled. • Incident controller shall inform the status after controlling the emergency. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#8	TOXIC OR POISONOUS GAS RELEASE FROM NEIGHBOR INDUSTRIES	
1.1	*Type of Incident*	Toxic or Poisonous gas release
1.2	*Material*	--
1.3	*Main Hazards*	Personnel overexposure, Potential for exceeding the PEL and/or IDLH, fatality
1.4	*Location*	Neighbor industries – M/s. Vasant Chemicals (East Side); M/s. Laurus Labs (South side)
1.5	*Incident Scenario*	Highly toxic and/or poisonous raw materials might be used for manufacturing in neighboring industries. Toxic and/or poisonous gases may be generated from the process(es) or storage may release into the environment and may spread towards our company based on wind direction.
1.6	The severity of impact depends on the quantity of release, density of the gas, severity of the toxic/poisonous gas and wind direction.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to toxic/poisonous gas release from the neighboring industries. • Main controller shall decide for emergency declaration after receiving communication from neighboring industries. • Shut down the process equipment and/or processes immediately. • Evacuate all personnel safely and assemble in assembly point based on the wind direction. • Arrange vehicle for further evacuation from the location if required. • Co-ordinate with neighboring industries to get the status of the emergency. • Main controller shall be informed about the status after controlling the emergency. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#9	NATURAL DISASTER – CYCLONE	
1.1	*Type of Incident*	Natural Disaster
1.2	*Material*	--
1.3	*Main Hazards*	Personnel injury or property loss
1.4	*Location*	Across the factory premises
1.5	*Incident Scenario*	The factory is in cyclone prone area. Cyclone may form based on climatic or seasonal change and it will affect the operations and/or damage properties or injury to personnel.
1.6	The severity of impact depends on the severity of the cyclone and/or wind speed.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to natural disasters (cyclone). • Main controller shall decide for emergency declaration after evaluating the legal / local state orders or announcements. • Plan the process activities to avoid major process delay or equipment damage. • All movable equipment shall be secured properly to prevent damage. • All overhead tanks shall be filled with water. • Temporary drums storage if any shall be secured properly. • Ensure enough quantity of fuel maintained or arranged for DG operation. • All temporary electrical cables if any shall be removed and secured properly. • Ensure water reactive or moisture sensitive chemicals are stored securely to prevent contact with water or moisture. • Ensure enough quantity of fire water storage. • Arrange minimum manpower to handle the emergency. • Arrange transportation and food for personnel engaged in emergency handling operations. • Ensure all unwanted materials are removed from building terrace. • Ensure key personnel availability during emergency. • Switch off the electrical power during heavy wind and/or rainfall. • Maintain firefighting, first-aid and leak arresting team to handle the emergency. • Report any damages immediately and isolate the location of damage possibly. • Isolate the electrical power supply to the affected location or area. • Provide first aid if any persons injured and move the victim to nearby hospital if required. • Check and ensure the damages after cyclone and prepare corrective actions if required.	

Case#10	FOOD POISONING	
1.1	*Type of Incident*	Food Poisoning
1.2	*Material*	Food
1.3	*Main Hazards*	External food contamination
1.4	*Location*	Across the factory premises
1.5	*Incident Scenario*	The food is being supplied from third party caterer. There could be a potential for food poisoning due to external food contamination.
1.6	The severity of impact depends on the toxicity of the external contamination.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to food poisoning. • Main controller shall decide for emergency declaration after evaluating the number of illness cases reported. • Give first aid to the affected personnel immediately. • Arrange transport facility to shift the affected personnel to hospital if required. • Take the food sample and send for analysis. • Shut down or slow down the process if required. • Prepare a plan to run the processes with limited manpower. • Monitor the affected personnel treatment and health until resume their duties.	

Case#11	SPILLAGE / LEAKAGE IN TANK FARM AREA	
1.1	*Type of Incident*	Fire / Explosion/Chemical vapors accumulation in work place
1.2	*Material*	Flammable Solvents & Non-Flammable Solvents
1.3	*Main Hazards*	Personnel exposure, Potential for exceeding the LEL and/or IDLH, solvent flash fire, Environmental Damage
1.4	*Location*	PESO & Non-PESO Tank Farm area
1.5	*Incident Scenario*	Flammable solvents/Non-flammable solvents are stored in PESO & Non-PESO Tank farm area and transfer to manufacturing area through pipelines & drums. pipelines, drums and tanks leakage/spillage/tank overflow will increase the solvent/chemical exposure at PESO/Non-PESO tank farm area and form enough concentrations of flash mixture to catch fire or chemical vapors exposure to the environment may lead to fire / explosion /environmental damage.
1.6	The extent of release depends on the quantity, vapor pressure, density of the solvent, nature of hazardous process and degree of the ventilation.	
1.7.0	*Emergency Response Plan:*	
	The emergency response plan is applicable to fire and explosion during the spillage/leakage/overflow. • Use nearby first-aid fire extinguishers to mitigate the fire initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • The process operations, pumping/transfer of solvents shall be stopped. • Emergency response team should reach the incident location for firefighting. • Identify the source and contain the fire. • Operate Water cum foam monitor/water sprinklers to mitigate the fire. • Use fire proximity suit for firefighting. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Storm water gutter drains shall be closed with sandbags if fire water not contained at the workplace. • EHS coordinator shall support / guide for firefighting. • Incident controller shall inform the status after mitigation of fire. • All clear shall be announced after verification of head count at emergency assemble point.	
1.7.1	*Emergency Response Plan:*	
	The emergency response plan is applicable to Non-flammable chemicals/corrosive chemicals during the spillage/leakage/overflow. • Use nearby spill control kit to mitigate the spill/leak initially if know the operation. • Activate manual call point or other means of communication to get attention from neighboring department / personnel if the fire not controlled or unattended. • The process operations, pumping/transfer of Non-flammable chemicals/Corrosive chemicals shall be stopped. • Emergency response team should reach the incident location for control the spill/leak containment. • Identify the source and contain the leakage/spillage. • Leak arresting team shall support to contain the leaks in any.	

	• Spillage/Leakage materials transfer to drums by using AOD pump mitigate the chemical exposure. • Use SCBA & Respiratory protection equipment's for control the spill/leak containment. • Chemical exposure persons shifted to OHC using stretcher/ambulance. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Storm water gutter drains shall be closed with sandbags spillage/leakage chemical not contained at the workplace. • EHS coordinator shall support / guide for containment of spill/leak chemical. • Incident controller shall inform the status after mitigation. • All clear shall be announced after verification of head count at emergency assemble point.

Case#12	ELECTRICAL SHOCK/ELECTROCUTION	
1.1	*Type of Incident*	Flash fire/Electrical Shock
1.2	*Material*	Electrical equipment's & Live Electrical cables
1.3	*Main Hazards*	Electrical shock & Arch Flash
1.4	*Location*	Electrical panel rooms/HT Yard/DG set/Fabrication work shop.
1.5	*Incident Scenario*	During the inspection of Electrical panels / Live electrical cable work/Transformer inspection/DG set inspection/Fabrication area working with welding machine may lead to arch flash fire/Electrical shock.
1.6	The severity of impact depends on the electrical supply volts .	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to fire and explosion during the spillage/leakage/overflow. • Activate manual call point or other means of communication to get attention from electrical in-charge/electrical persons. • Electrical in-charge/Electrical team should reach the incident location for control for shutoff supply. • Use nearby first-aid fire extinguishers to mitigate the arch flash fire initially if know the operation. • Emergency response teams should reach the incident location to support injured persons. • Identify the source of power supply. • Use Arch flash suit /face shield/electrical rated gloves. • Incident controller and main controller shall decide for emergency declaration. • ERT members injured persons shifted to OHC using stretcher/ambulance. • Arrange the transport facility to shift the affected personnel to hospital if required. • EHS coordinator shall support / guide for firefighting. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#13	STRUCTURAL COLLAPSE	
1.1	*Type of Incident*	Injury/Fatal
1.2	*Material*	Building collapse / Structural collapse
1.3	*Main Hazards*	Personnel injury/Fatal or Property loss
1.4	*Location*	Construction activities /Structural or building modification work area/Heavy equipment erection work area.
1.5	*Incident Scenario*	Building/ Structure collapse
1.6	The severity of impact depends on building/structure collapse.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to Building/Structure collapse during construction activities / heavy equipment erection. • Remove the injured personnel immediately from the place. • Activate manual call point or other means of communication to get attention from neighboring department/ Other key persons. • Emergency response team/First Aid team should reach the incident location rescue the injured persons. • Incident controller and main controller shall decide for emergency declaration. • Neighboring and/other area personnel shall evacuate through nearby emergency exit during emergency. • Call occupational health center or security gate to send ambulance van. • EHS coordinator shall support / guide for first aid treatment and further shifting of affected personnel. • Arrange transport facility to shift the affected personnel to hospital if required. • Incident controller shall inform the status after controlling the emergency. • All clear shall be announced after verification of head count at emergency assemble point.	

Case#14	VEHICLE ACCIDENT INSIDE THE PLANT	
1.1	*Type of Incident*	Injury
1.2	*Material*	--
1.3	*Main Hazards*	Personnel injury/ Property loss
1.4	*Location*	Vehicle movement inside the roads
1.5	*Incident Scenario*	Personnel injury vehicle movement
1.6	The severity of impact depends on vehicle speed.	
1.7	*Emergency Response Plan:*	
	The emergency response plan is applicable to vehicle accident inside the plant. • Identify the injured personnel immediately from the vehicle accident place. • Activate manual call point or other means of communication to get attention from neighboring department/ Other key persons. • Emergency response team/First Aid team should reach the incident location rescue the injured persons. • Call occupational health center or security gate to send ambulance van. • EHS coordinator shall support / guide for first aid treatment and further shifting of affected personnel. • Arrange transport facility to shift the affected personnel to hospital if required. • Monitor the affected personnel treatment and health until resume their duties.	

Case#15	ETP/AGT TANKS LEAKAGE	
1.1	*Type of Incident*	Injury
1.2	*Material*	Effluent water
1.3	*Main Hazards*	Environmental pollution due to Effluent leakage
1.4	*Location*	ETP
1.5	*Incident Scenario*	ETP/AGT tanks leakage
1.6	The severity of impact depends on quantity of effluent storage in tanks.	
1.7.0	*Emergency Response Plan:*	
	The emergency response plan is applicable to ETP/AGT tanks leakage at ETP area. • Identify the source of leakage. • Activate manual call point or other means of communication to get attention from neighboring department/ Other key persons. • Emergency response team & Emergency First Aid team should reach the incident location rescue the injured persons & mitigate the emergency. • Spillage/Leakage effluent transfer to HDPE tank by using AOD pump . • Storm water gutter drains shall be closed with sandbags if leakage/spillage effluent not contained at the workplace. • Call occupational health center or security gate to send ambulance van. • EHS coordinator shall support / guide for first aid treatment and further shifting of affected personnel.	

2. AIM

The aim of this emergency response plan is to detail the various preventive measures and operational actions that need to be undertaken by the company to contain any hazmat leaks, spill and control or extinguish any fire in the event of an emergency situations that occur within the Production areas / warehouse so to prevent and reduce injury to personnel and minimize property damage and loss.

As a part of regulatory requirement Sections 7-A, 41-B (4) of factories Act and Rule 13 of Manufacture, Storage and Import of Hazardous Chemicals Rule 1989 promulgated under Environment Protection Act 1986.

3. EXECUTION

3.1 Concept of Operations

The emergency operation shall be conducted in phases as follows:-

Phase	Alert Code	Activities
I	Alert I	**Localized emergency** - Company personnel to carry out initial response (conduct initial containment of spills or fire suppression or rescue operations). Alert the ERT.
II	Alert II	**Plant wide Emergency** - ERT pre-determined turnout response to the scene for mitigation, containment, and security cordoning, evacuation, and rescue activities (Organize on-site ERT and conduct localized containment of spills or fire or rescue operations).
III	Alert III	**Rescue Operations** - Conduct major operations for containment and minimize risks with other related agencies (On-site ERT conduct joint operations with Fire Services and other external emergency agencies and industrial neighbors with evacuation).
IV	All Clear	**All Clear** - Clean-up / decontaminate and resume normal operations (declare 'All Clear' and clean up and decontaminate and resume normal operations upon confirmation that it is safe to do so.

3.1 Emergency Actions by installation

Detailed description of the emergency actions shall be carried out by Emergency Response Team (ERT)

ERT Flow Chart Annexure XV

3.1.1 Procedure to notify

3.1.1.1.1 Notification procedure during office hour and after office hour and during Holidays

In the event of Emergency in The Factory after office hours and holidays the shift in charge in the production area shall immediately rush to the scene of emergency and take over the Incident controller responsibility, till Incident controller arrives the spot.

Communication to the important persons to be made by the Security officer in the shift to the following persons through telephone.

In the event of communication system failure, security officer shall send a vehicle to any of the above officer's residences, in concurrence with shift in charge. The

officer who receives the information must immediately pass on the information to the others over phone from residence and rush to factory immediately.

S. No	Key Persons	Roles
1	Head Operations / Designee	Site Main controller (SMC)
2	Head Production	Site Incident Controller (SIC)
3	Head EHS / Designee	Fire Coordinator
4	Head – HR & Admin / Designee	Liaison and Transport

3.1.1.2.1 Workers population during day and night shifts

S. No.	Shift Timings	Number of People
1	09:00 hours to 18:00 hours	350
2	Night shifts	50

3.2.2 Emergency Procedure

3.2.2.1 Incident Notification:

The person who first notices an emergency in the factory will contact the shift-in-charge and intimate about the emergency.

The person should give following information

1. **Name of the person reporting**
2. **Location of the emergency**
3. **Nature of the emergency**

Further he/she will activate the manual call point and intimate to Emergency Control Center/EHS/Security.

To be furnished:

The informer and receiver must identify each other's first. The informer then gives the detail about the exact nature of the incident and location and any other relevant information. The communication must be brief and precise.

E.g.: There is a fire of Material through a leak from pump/source in area /plant.

Declaration of emergency

The shift-in-charge on receipt of the information will initiate the following action

a) **Take steps to contain and control the emergency**
b) **Inform the key personnel about the incident**
c) **Perform the duties of SMC / SIC till their arrival at the scene and decides about declaration of emergency based on the severity of the incident**

Emergency Assembly point

During the time of emergency, if an area or more than one area needs to be shut down and the personnel required to vacate such area / areas. Then those personnel on instructions from plant / department should move to the assembly point depending upon the wind direction.

3.2.2.5 Emergency assembly points are:

- Near Security Main gate 1 (East side vacant land)

3.2.2.6 Emergency control center

The security room in the main gate has been designated as **Emergency Control Center.**

3.2.2.7 Emergency actions

The following actions need to be taken during an emergency.

1. Initiate safe shut down of the plant or equipment
2. Ensure safety of personnel and property
3. Act for controlling the emergency
4. Take suitable measures to avoid spreading of emergency

3.2.2.8 General Procedure:

3.2.2.8.1 In case of fire:

1. Isolate and contain the leakage of flammable liquids.
2. Initiate Evacuation.
3. Remove or Transfer the material depending upon the circumstances.
4. Try to approach with caution from an upwind direction and use an extinguisher or water or foam arrangements based on the nature of fire.
5. If the chances of escalation exist and to save the surroundings, steps must be taken to cool the surroundings and storages.
6. Nearby source of ignition can be removed.
7. Isolate power sources nearby.
8. Always use the appropriate personal protective equipment for firefighting like fire proximity suite/fire retardant suite with hood, SCBA.
9. If the fire is uncontrollable, the firefighters inside the building shall evacuate safely and shall maintain a safe distance from the vicinity or area to extinguish the fire by using fire hydrant points/fire tenders.

3.2.2.9 Grouping and Tasks

The grouping of people is done depending on their work-related responsibilities and are fixed with responsibilities during the emergency.

1. Unit Head – Operations/ Designee is nominated as the Site Main Controller (SMC), Head – Production will officiate as Site Main Controller in the absence of Unit Head – Operations and SMC will be the overall command of emergency organization.
2. Head – Production is designated as the Site Incident Controller (SIC) and in his absence, the Shift In charge will function as SIC. He will oversee the efforts of various emergencies.
3. After general shift hours (from 18:00 hrs.), Shift in charge officiate as Site Main controller (SMC).
4. Head – EHS / Designee
5. Head – Engineering

6. Head – HR & Admin
7. Other Departmental heads

Apart from the key personnel certain employees in general shifts are identified as essential employees to combat emergencies.

1. Production Operators, electrician, and mechanics in shift

2. Electrical supervisor, firefighters, security guards, chemist in Q.C. lab, employees in warehouse and engineering stores, Engineers of Instrumentation Department and drivers have been designated as essential personnel during general shift timings

Roles and responsibilities of various groups (Site Main Controller, Site Incident Controller, ERT, Security and other Key personnel) are given in **Annexure III.**

3.4 Coordinating Instructions

3.1.2 Key Personnel Emergency Contact Numbers - Annexure IV

3.1.3 Contacts of Neighboring Companies - Annexure IV

3.1.4 Other Important Phone Numbers–Regulatory/Govt. authorities – Annexure V

3.1.5 Control Points

(1) Assembly Point – this is the area where all employees are to report for roll call during any evacuation.
(2) Occupational Health Centre – the area where first aid station available to provide immediate first aid treatment to any casualties.
(3) Emergency Control Centre – the station where SMC and SIC operate for the emergency procedure.

(Assembly Point, Occupational Health Centre and Emergency Control Centre are identified in the Layout attached in Annexure I)

Safety and Others

ERT members are trained both internally and externally (HAZMAT, Emergency Response, Fire Fighting, First Aid etc.) on dealing with any possible emergency. Qualified First Aiders are trained to provide the necessary assistance during any emergency.

All employees and contractors are trained internally with the orientation training (First aid and Fire Fighting) and are identified as Trained First Aiders and Fire Fighters specific to the Shifts/Departments.

First Aid and Fire Fighting Team members list is attached in **Annexure VI**

3.1.6 Emergency Procedures

3.3.5.1 Emergency Shutdown Procedure

Emergency Shutdown procedures are developed individually for individual departments depending on the process/activity. **Available in respective departments.**

3.3.5.2 Evacuation Procedure

In the event of activation of siren, everyone will stop work immediately and evacuate through the nearest EMERGENCY EXIT and assemble at the Assemble Area for roll call and instructions. The detail instruction is provided in the Emergency Evacuation Procedure along with the Team Members **Annexure VII**

3.3.6 Containment of Hazardous Substances (Spill, Leak and Vapor Release)

3.3.6.1 Containment Procedure

In the event of chemical spill, the in-house ERT members shall be activated to contain, decontaminate and clean-up the spillage. The detail instruction is specified in Chemical Spill Emergency Procedure **Annexure VIII**

3.3.6.2 List of containment equipment

A minimum quantity of emergency spill control items is always maintained individually in each department.

3.3.7 Monitoring of Release Hazardous Substances (Spill, Leak and Vapor Release)

3.3.7.1 Monitoring Procedure

pH neutralization and monitoring system for chemical waste discharged in to the ETP.

Emission or toxic release to atmosphere.

3.3.7.2 List of monitoring equipment

1. Portable VOC meter (PID type)
2. Multi-gas Detector (H_2S, CO, O_2 & CH_4)
3. Portable HCN detector

3.3.8 Fire Fighting and Rescue

3.3.8.2 Firefighting and Rescue Procedures

The in-house ERT shall be activated to assist in putting out the fire if it is safe to do so and would initiate the total ERT team for further action and intimate the external Firefighting team requirements if necessary.

3.3.8.3 List of firefighting and rescue equipment

Listed in the Table of Section 6 of **Annexure XII**

3.3.9 Mitigation Operations

3.3.9.1 Clean up Procedure

In the event of chemical spill, the in-house ERT shall be activated to contain, decontaminate, and clean up the spillage. The detail instruction is specified in Chemical spill Emergency Procedure **Annexure VIII**

4 SERVICE SUPPORT

4.1 Equipment

4.1.1 Fire Protection Facilities

4.1.1.1 Detection System

Drawing Detection system (Fire Alarm System) in **Annexure XI**

4.1.1.2 Extinguishment System

The following extinguishing systems available.

1. Fire Hydrant System
2. Fire Sprinkler System
3. Hose Reel
4. Fire Extinguishers

Details of extinguishing system are attached in Annexure XII

4.1.2 Containment equipment (leak control, spill control, Absorbents, etc.)

A minimum quantity of spill containment kit is always maintained.

4.1.4 Other Protection and General Equipment

The other protection and general equipment available for during Fire Emergency are

4.1.4.1 Emergency Escape Route

The ground level and elevated floors in all the process areas are provided emergency exit and secondary emergency exits so that the people will evacuate to the nearest emergency exits available.

Emergency Exit Marking in layout available as **Annexure - XVII**

4.1.4.2 Windsock

Wind indicators are provided on top of production block, engineering block, warehouse and ETP building to provide guidance for the people to reach the emergency assemble point based on wind direction.

Windsock Location identified in Layout **Annexure - I**

4.1.4.3 Personnel Protection Equipment

The Personnel Protection Equipment available in the facility during emergency are given in **Annexure XIII**

4.1.4.4 Other Facilities

The Other Facilities available for during the Fire Emergency are

a. Jet Nozzle

b. Multi-purpose Nozzle

c. Foam containers

4.1.5 Occupational Health Centre

The OHC is working round the clock in the premises. We have a fully equipped occupational health center for treating the injured arising out of emergencies and accidents. Trained Dresser-cum-compounder available round the clock. Further we also have employees been trained and are certified as First Aiders. The OHC is provided with medical oxygen cylinder and Automatic External Defibrillator (AED). Adequate stock of essential medicines is BEING maintained. A dedicated ambulance vehicle is available and maintained for transporting the injured/sick personnel. In addition, a bus with capacity of 40 passengers and one car available and can be pressed into service during emergency.

The First Aid equipment available in Occupational Health Centre are given in **Annexure XIV**

4.2 Manpower

4.2.1 In-house Emergency Response Team

Organization structure of the in-house emergency response team (ERT) and their roles, responsibilities and functions are given in **Annexure III & Annexure VI**

4.3 Mutual Aid

In certain cases of emergency, it is possible that one may fall short of equipment / materials required for handling emergencies. It is also beneficial to enter an understanding with the neighboring industries as mutual aid, so that the resources available with them will be used during emergencies. This arrangement also helps in avoiding duplication and overstocking.

Mutual Aid will be pressed from Vasant Chemicals Private Limited or Laurus Labs Limited during emergency.

5 COMMAND AND SIGNAL

5.1 Command

5.1.1 Incident Organization Chart

Annexure XV

5.1.2 Location of Emergency Control Centre

Annexure I

5.2 Signal

Communication

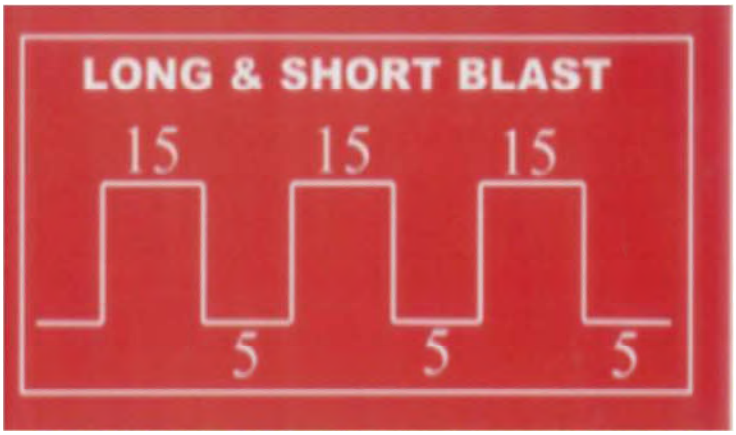
Whoever notices any accident or fire immediately shout loudly that FIRE, FIRE, FIRE OR ACCIDENT, ACCIDNT, ACCIDENT and inform immediately to the area in-charge and seek help.

Loud Shouting the situation by a group of people to alert all in the vicinity

The Sounder in Fire Alarm System is used to intimate everyone about the existence of an emergency in the premises. The sounder of the Fire Alarm System could be activated by breaking the Manual Call Point. Security/EHS Personnel receives the information from SMC, SIC or shift-in-charge depending upon the nature of emergency. Followed by alarm, type of emergency and location will be announced through Public Address System. Fire alarm panel has a power backup to combat in case of power failure.

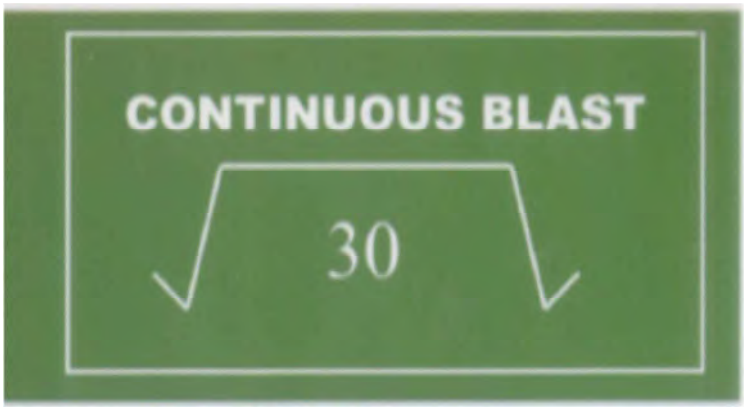
Emergency Declaration Siren

Interrupted wailing sound of siren for 15 seconds duration with a gap of 5 seconds for 1 minute.



All Clear Siren (Restoration to normal condition)

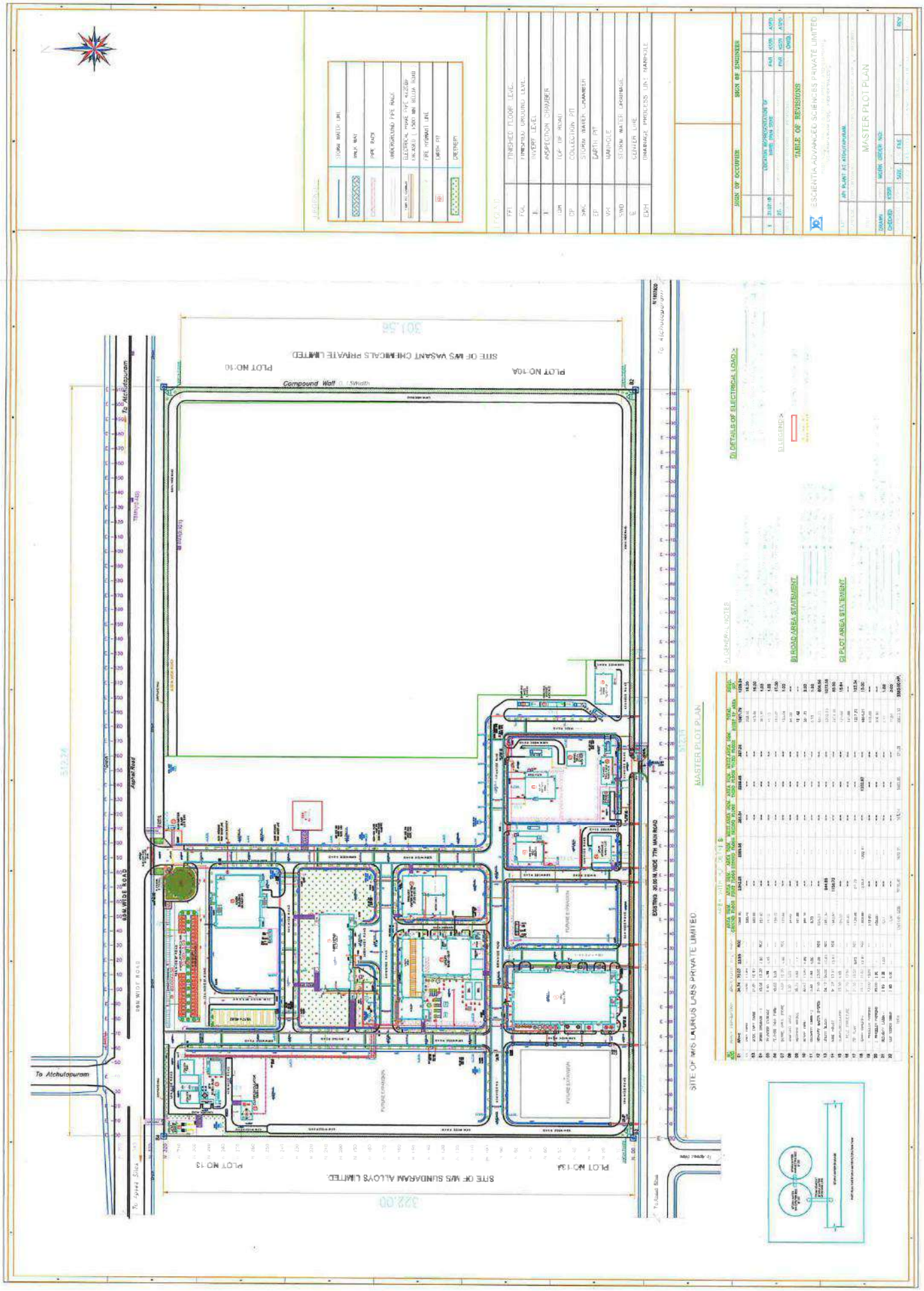
30 seconds continuous sound of siren will indicate all clear.



ANNEXURES

ANNEXURE I

I. MASTER LAYOUT – ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED


MASTER PLOT PLAN
ESCENTIA ADVANCED SCIENCES PRIVATE LIMITED
TABLE OF REVISIONS
SIGN OF OCCUPIER
SIGN OF ENGINEER
DETAILS OF ELECTRICAL LOAD :-
ROAD AREA STATEMENT
PLOT AREA STATEMENT
GENERAL NOTES
LEGENDS
SITE OF M/S VASANT CHEMICALS PRIVATE LIMITED
SITE OF M/S SUNDARAM ALLOYS LIMITED
SITE OF M/S LAKURUS LABS PRIVATE LIMITED
PLOT NO-10
PLOT NO-10A
PLOT NO-13
PLOT NO-13A
Compound Wall
To Atchutapuram
To Atchutapuram
Asphalt Road
30.00 M WIDE ROAD
EXISTING 30.00 M WIDE 7TH MAIN ROAD
FUTURE EXPANSION
FUTURE EXPANSION
FUTURE EXPANSION
SCALE : 1:500

II. GENERAL INFORMATION – ESCIENTIA

S.No	General	Information
1	Company's Name	Escientia Advanced Sciences Private Limited
2	Chairman/Occupier address	Mr. Kiran Pendri Reddy,
3	Unit Head	Mr. Sanjay Kumar, Senior Vice President – Operations, Escientia Advanced Sciences Private Limited Office : 08924 - 665155 Mobile : 9849001107
4	Factory Manager	Mr. U A N Raju, General Manager – Production, Escientia Advanced Sciences Private Limited Office : 08924 - 665050 Mobile : 9849002336
5	HR Personnel	Mr. Srinivas Pragada Escientia Advanced Sciences Private Limited
6	Safety Manager	Mr. Satyanarayana A
7	Total Number of Employees	320
8	Total Number of Contract Workers	170
9	Number of Shifts	General, A,B & C
10	Number of Entry & Exit to the Factory	Two
11	Condition of the Approach Road	The main approach is from the APSEZ roads (North & South) Cement Concrete Road at the entrance and inside the factory
12	Industry Activity	Manufacture of Active Pharmaceutical Ingredients (APIs), Advanced Intermediates and Key Starting Materials
13	Nature of Identified Hazards	Fire/Explosion from the process, Emergency due to hazardous chemicals leakage or spillage, Emergency due to Electrocution hazards, and Emergency due to Natural Calamity like Cyclone, Earthquake and Flood etc.

III. ROLES AND RESPONSIBILITIES OF VARIOUS GROUPS

ROLES	RESPONSBILITIES
Site Main Controller (SMC)	1. In-charge of the emergency response operations in the installation and liaises with officials of Government agencies such as Fire Services, District collector, Factories inspectorate and APPCB etc. 2. Coordinate the activities of external organizations and work closely with the Site Incident Controller (SIC) during emergency response. 3. Review and approve tactical plan and decide on area evacuation. 4. Report to responding Fire Services personnel to explain situation. 5. Communicate with SIC and mobilize supporting groups for assistance. 6. Direct site emergency response. 7. Provide technical advice and other support to Fire Services personnel. 8. Decide on site-wide evacuation. 9. Monitor personnel accounting status and activate rescue operations through Site Incident Controller if necessary. 10. Assess on/off-site impact and alert neighboring companies/communities if necessary. 11. Approve the recovery of the facility/site. 12. Announce All Clear message. 13. Site recovery and post incident critique.
Site Incident Controller (SIC)	1. In-charge of the actual ground response operations. 2. Aid and information to Fire Services ground commander 3. Establish the on-site ERT for the emergency and setting up field incident command post. 4. Deploy emergency equipment and appliances. 5. Report situation to Site Main Controller. 6. Size-up emergency and decide response strategy and tactical plan. 7. Size up control zones and determine incident control zones. 8. Command and direct emergency response actions. 9. Work with Fire Services emergency officer in-charge at the incident command post. 10. Ensuring emergency responders' safety and monitor their fatigue and stress. 11. Constant communication with Site Main Controller and update on incident status. 12. Coordinate the recovery and decontamination of the site.
Emergency Response Team Coordinators	1. Take instructions from Site Incident Controller. 2. Implement tactical assignments. 3. Ensure proper selection and use of PPE. 4. Continually evaluate situation, status, and safety. 5. Monitor personnel fatigue and stress. 6. Aware of control zone locations. 7. Assure proper positioning of personnel. 8. Ensure water supply and backup systems are sufficient. 9. Ensure decontamination of exposed equipment and PPE. 10. Mobilize rescue equipment and conduct search and rescue operations if necessary. 11. Coordinate with First Aid Team.
First Aid Team	1. Take instructions from the SMC. 2. Render first aid / medical treatment. 3. Evacuate the casualty or dispatch ambulance to the incident site if needed. 4. Assist in rescue operations if necessary. 5. Coordinate and assist medical team and Hand over casualty to Ambulance (evacuation from site to the hospital).

ROLES	RESPONSBILITIES
Support Groups	**Shift – In charge of all Department:** 1. They report to SIC on hearing the emergency siren. 2. The shift-in-charge of the affected area attends to the plant needs. 3. The shift-in-charge of other process areas will assume responsibilities as per the function of teams. 4. Since the shift-in-charge is expected to receive the first message about any emergency, he is considered to hold greater responsibility in controlling the emergency situation till the arrival of SIC and other key personnel at the scene of emergency.
	Key Personnel – Engineering Services – Communication Coordinator: 1. On hearing about the emergency, report at the control center and to SMC. 2. He will maintain the communication link with the incident controller. 3. Based on the information received he will interact with SMC and communicate the further action to the concerned. 4. Maintains contact with the firefighting crew, rescue team, security, first aid requirements, evacuation requirements etc. 5. Maintain the inventory of items in the control center. 6. Ensures availability of runners in case of power failure. 7. They also obtain the prevailing meteorological data from the local offices. 8. They maintain log of the events.
	HR Personnel - Liaison and Transport Coordinator: 1. He/She will report to the SMC. at control center. 2. Under instructions from SMC, he/she interacts with statutory authorities like police, factory inspectorate, etc. 3. He/she will obtain information about head count at assembly points. 4. Interacts with the first aid / medical officer and ensures proper attention to the casualties and ensures additional help as required. 5. Co-ordinates with security for control of the traffic movement. 6. Ensures that necessary refreshments and welfare measures are provided for the people. 7. He/she informs the relatives of the injured about the condition. 8. In the event of fatalities, he will co-ordinate for all the formalities. 9. He/she will co-ordinate all relief / rehabilitation measures. 10. On receipt of the emergency, he/she will intimate the incident controller about his arrival. 11. He/she makes all arrangements for transport. 12. Co-ordinates action for additional vehicle requirements and ensure proper condition of ambulance. 13. He/she will also ensure adequate stock of fuel. 14. He/she will be in touch with emergency co-coordinator (communications) and informs about the position on transportation of the injured to first aid / hospital and transportation of evacuated people. 15. He/she will also be responsible for making available cash in case of need.
	EHS personnel – Fire Coordinator: 1. EHS personnel (Head/Designee) reports to SIC at the scene of emergency. 2. Assesses the situation and in consultation with SIC, decides the plan of action to mitigate the emergency. 3. Co-ordinate for firefighting and other activities. 4. Ensures adequate supplies of firefighting requirements and personal protective equipment. 5. Maintains close contact with SMC and advises him about the mutual aid need, etc. 6. Co-ordinate to all rescue and first aid operations and ensure proper medical attention in consultation with communication coordinator and coordinator liaison and transport.

ROLES	RESPONSBILITIES
	Medical Officer / Para Medical Staff: 1. On receipt of information, reports at first aid center. 2. Checks up and confirm availability of all essential medicines, dressings, stretchers, etc. 3. Arranges for necessary first aid for the injured. 4. Co-ordinates with the control center and advise about persons requiring medical treatment. 5. Establishes contact with medical officers of government and other private hospital and intimate them in advance about the injured people being sent to them. 6. Arranges for antidotes, wherever necessary and ensures that is made available to outside hospitals also, in case they do not have stocks.
	Fire Officer/Fire Guards/Fire Squad (internal trained contract agency/personnel): 1. They will report at the scene of emergency to SIC. 2. Support for firefighting operations. 3. Liaises with site safety and ensures adequate supply of hoses, nozzles etc. 4. Co-ordinates with fire water / raw water pump house operator and makes sure that water supply is available continuously.
	Security Officers: 1. Close the Gate and Restrict the Entry. 2. Stop the vehicle movement /Loading and Unloading activities inside the plant and move the vehicle into Safer Location. 3. Evacuate the Contractors/Casual Laborers to Assembly point. If any emergency occurred after normal working hours ('G' shift), inform to key personnel. 4. Direct the Public fire Brigade to the scene of emergency. 5. Activate emergency siren/sound alarm as per SMC instruction.
	Main Gate Security: 1. Closes the main gate and restrict the entry of visitor / others. 2. Allow only emergency service vehicles like ambulance, fire engine. 3. Ensure the traffic in the roads are clear. 4. To have the total number of the persons and vehicle available in the company premises, Instruct the drivers to park the vehicle in safe location and switch off the engine, leave the key in the vehicle itself and then instruct them to assemble at assembly point. 5. Leading head count in emergency assembly point.
	Other Department Heads: 1. All the department heads will report to the incident controller by wearing suitable personal protective equipment and follow the instructions of SIC. 2. Decide to enlist the help of additional persons required and complete the jobs entrusted to them. 3. Ensure persons with pre-assigned responsibilities will not be taken away.
	Key personnel - EHS: 1. Upon hearing the alarm / receipt of information he will report to incident controller at the scene of emergency. 2. He will check up the ETP and ensure that it will be able to accommodate additional quantities of water. 3. He will also make necessary arrangements to impound the firewater from reaching the public drain. 4. He will also co-ordinate activities for control of spills in co-ordination with Engineering Services HOD/Designee. 5. Monitor the area with portable VOC meter for respective chemicals and report to SIC before declaring "All Clear" siren.

S/NO	GROUPING	GENERAL TASKS	PHASE	DETAILED TASKS
1	**Site Main Controller (SMC)**	1. SMC is the person who is overall in-charge of the emergency response operations in the installation and liaises with senior officials of government agencies 2. SMC will Coordinate the activities of external organizations and work closely with the Site Incident Controller during emergency response.	**I**	1. Alert/Instruct the activation of ERT 2. Alert Fire squad/ERT 3. Review and approve tactical plan 4. Decide on area evacuation
			II	5. Activate Fire squad/ERT 6. Liaise with Fire squad/ERT and external emergency organizations 7. Report to responding Fire squad/ERT personnel to explain situation 8. Communicate with SIC and mobilize supporting groups and equipment for assistance 9. Call out and mobilize key personnel
			III	10. Direct facility emergency response 11. Provide technical advice and other support to Fire squad/ERT 12. Decide on facility-wide evacuation 13. Monitor personnel accounting status and activate rescue operations through Site Incident Controller if necessary 14. Assess on/off-site impact and alert neighboring companies if necessary
			IV	15. Approve the recovery of the facility/site 16. Announce All Clear message 17. Site recovery and post incident critique

S/NO	GROUPING	GENERAL TASKS	PHASE	DETAILED TASKS
2	**Site Incident Controller (SIC)**	1. SIC is overall of the actual ground response operations. 2. SIC will aid and information to FS ground commander during operation. 3. Sizing up incident situation and recommending response strategy and tactical plan 4. Determining incident control zones 5. Commanding and directing emergency response team 6. Support/Assist FS	**I**	Establishing the on-site ERT for the emergency To report situation to SMC Size-up emergency and decide response strategy and tactical plan Determining incident control zones
			II	Command and direct emergency response actions Setting up field incident command post Assist and support responding ERT
			III	Working closely with FS emergency officer in charge at the incident command post Deploy emergency equipment and appliances Ensuring emergency responders' safety and monitor personnel fatigue and stress Constant communication with Site Main Controller update on incident status
			IV	Coordinate the recovery and decontamination of the site.
3	**Emergency Response Team (ERT)**	1. Carry out the initial action to contain the spillage. 2. Assist FS to contain the leakage/fire 3. Provide specialized advice and equipment (if any) to contain spillage/fire 4. Implement recovery activities when situation is under control	**I**	Conduct initial containment of spills or fire suppression or rescue operations) Contain or minimize spillage if possible
			II	Conduct localized containment of spills or fire or rescue operations with FS
			III	Conduct joint operations with FS and other external emergency agencies and industrial neighbors with evacuation. Provide specialized advice and equipment (if any) to contain spillage/fire
			IV	Implement recovery activities when situation is under control Carry out recovery and decontamination of the facility.

IV. KEY PERSONNEL EMERGENCY CONTACT NUMBERS

VA. KEY PERSONNEL INTERCOM NUMBERS

S. No.	Name/Location	Extn. No
1	Unit Head – Operations	**5155**
2	Head – Production	**5050**
3	Production Office (Large scale)	**5221**
4	Head – EHS	**5108**
5	EHS Office	**5208**
6	Occupational Health Center	**5130**
7	Head – HR	**5058**
8	Head – Engineering services	**5053**
9	Security Main Gate	**5000/5001**
10	Head – Warehouse	**5066**
11	Head – QC	**5020**
12	Head – QA	**5060**
13	Head – IT	**5111/5222**

VB . KEY PERSONNEL EMERGENCY CONTACT NUMBERS

S.No.	Name	Designation	Contact No.
1	**Mr. U A N Raju**	Head – Production	9849002336
2	**Mr. Vasudeva Raju Datla**	Head – Engineering Services	9849002483
3	**Mr. V Rameswara Sharma**	Head – Warehouse	9849002208
4	**Mr. G N Murthy**	Head – QC	9849003558
5	**Mr. P V Ravikanth**	Head – QA	9849005869
6	**Mr. A Satyanarayana**	Head – EHS	9849004808
7	**Mr. N Rama Jogeswara Rao**	Head – IT	9849008662
8	**Mr. P Srinivas**	Asst Manager – HR	9849003551

VC. CONTACTS OF NEIGHBOURING COMPANIES

S. No.	Name of the Neighboring Industries	Phone No.
1	Vasant Chemicals Private Limited	9000281381
2	Laurus Labs Limited, Unit – 2	0891-3072100

V. IMPORTANT TELEPHONE NUMBERS OF REGULATORY AUTHORITY & EXTERNAL AGENCIES

S.NO	NAME OF THE DEPARTMENT	TEL. NO
1	DISTRICT ADMINSTRATION	
	District Collector – Visakhapatnam	0891-2563121
	Tahsildar-Atchutapuram	9963366922
	Revenue	0891-2564426
2	POLICE DEPARTMENT	
	Commissioner of Police, Visakhapatnam	0891-2562709
	Jt. Commissioner of Police, Visakhapatnam	0891-2735549
	Dy. Commissioner of Police (L & O), Visakhapatnam	0891-2565194, 2765766
	Dy. Commissioner of Police (Crimes), Visakhapatnam	0891-2560532
	Control room number - Visakhapatnam	0891-2565454
	Police station - Atchutapuram	08924-253605
3	FIRE DEPARTMENT	
	District Fire Officer – Visakhapatnam	0891-2568905
	Fire station - Yelamanchili	08931-231101
4	HEALTH & MEDICAL DEPARTMENT	
	Government Hospital - Atchutapuram	08924-234226
	ESI Dispensary – Atchutapuram	--
	ESI Dispensary – Gajuwaka	0891-2756068
	NTR Government Hospital – Anakapalle	--
5	SANITARY DEPARTMENT	
	Zonal Commissioner, Anakapalli Municipality	9849905796
6	TRANSPORT DEPARTMENT	
	RTO – Anakapalle	098485 28315
7	ELECTRICAL DEPARTMENT	
	33/11KV Substation APEPDCL – Atchutapuram	
8	POLLUTION CONTROL DEPARTMENT	
	Andhra Pradesh Pollution Control Board	0891-2755353
9	FACTORY INSPECTORATE	
	Deputy Chief Inspector of factories	0891-2550294
	Joint Commissioner of Labor	9492255522

VI. EMERGENCY RESPONSE TEAM MEMBERS

FIRE FIGHTING TEAM

LIST OF FIRE FIGHTERS				
S. No	Name	Emp ID	Designation	Department
1	T HARI PRASAD	E0217	ASSISTANT MANAGER	PRODUCTION
2	S SESHAGIRI	E0194	CHEMIST	QUALITY CONTROL
3	G SAI KUMAR	E0114	ASSISTANT MANAGER	WAREHOUSE
4	L TATABABU	E0206	ASSISTANT MANAGER	HR
5	K SURIBABU	NA	SECURITY OFFICER	HR
6	D RAMESH	E0148	ASSISTANT MANAGER	PRODUCTION
7	P MURALI KRISHNA	E0142	DEPUTY MANAGER	PRODUCTION
8	K GANESH	E0329	JUNIOR ASSOCIAT	WAREHOUSE
9	D SIVAJI	E0334	JUNIOR ASSOCIAT	WAREHOUSE
10	P SREENIVASA RAO	E0109	DEPUTY MANAGER	PRODUCTION
11	P JAGADEESWARA RAO	E0037	DEPUTY MANAGER	PRODUCTION
12	P DEMUDU	E0227	SENIOR ENGINEER	ENGINEERING SERVICES
13	K KANAKA RAJU	E0120	ASSISTANT MANAGER	PRODUCTION
14	P RAMESH	E0131	ASSISTANT MANAGER	PRODUCTION
15	A PARAMESWAR RAO	E0316	EXECUITVE	PROCESS DEVELOPMENT LAB
16	B LAKSHMANA RAO	NA	FIRE & SAFETY OFFICER	EHS
17	G RAMANA	E0215	SENIOR CHEMIST	QUALITY CONTROL
18	M YERUKU NAIDU	NA	FIRE & SAFETY OFFICER	EHS
19	M SURENDRA	E0041	ASSISTANT MANAGER	PRODUCTION
20	D SRINIVAS	E0326	ASSISTANT MANAGER	ENGINEERING SERVICES
21	J SREENIVASA RAO	E0031	ASSISTANT MANAGER	PRODUCTION
22	M DASARADHA RAMARAO	E0054	ASSISTANT MANAGER	PRODUCTION
23	K KARTHEEK	E0060	ASSISTANT MANAGER	ENGINEERING SERVICES
24	V MANIKANTA	E0294	DEPUTY MANAGER	WAREHOUSE
25	K RAMESH	E0017	ASSISTANT MANAGER	PRODUCTION
26	A VEERENDRA SAGAR	E0421	ASSISTANT MANAGER	QUALITY ASURANCE
27	M SATYANARAYANA	NA	FIRE & SAFETY OFFICER	EHS
28	D NARESH REDDY	E0141	ASSISTANT MANAGER	PRODUCTION
29	L NARASINGA RAO	E0226	SENIOR ENGINEER	ENGINEERING SERVICES
30	I KRISHNA PRASAD	E0043	ASSISTANT MANAGER	PRODUCTION
31	R V S S N RAJU	E0019	SENIOR MANAGER	ENGINEERING SERVICES
32	S RAMA KRISHNA	EBP139	EXECUITVE	PRODUCTION
33	K CHANDRA SEKHAR	E0132	ASSISTANT MANAGER	ENGINEERING SERVICES
34	A VISALI	E0385	SENIOR CHEMIST	QUALITY CONTROL
35	DR. SAHITHI MUDILI	E0419	ASSISTANT MANAGER	QUALITY ASURANCE
36	B NAGENDRA KUMAR	EBP125	EXECUITVE	EHS
37	S KRANTHI KUMAR	E0315	SENIOR CHEMIST	EHS

FIRST AID TEAM

LIST OF FIRST AIDERS				
S. No	Name	Emp ID	Designation	Department
1	T HARI PRASAD	E0217	ASSISTANT MANAGER	PRODUCTION
2	S SESHAGIRI	E0194	CHEMIST	QUALITY CONTROL
3	G SAI KUMAR	E0114	ASSISTANT MANAGER	WAREHOUSE
4	L TATABABU	E0206	ASSISTANT MANAGER	HR
5	K SURIBABU	NA	SECURITY OFFICER	HR
6	D RAMESH	E0148	ASSISTANT MANAGER	PRODUCTION
7	P MURALI KRISHNA	E0142	DEPUTY MANAGER	PRODUCTION
8	K GANESH	E0329	JUNIOR ASSOCIAT	WAREHOUSE
9	D SIVAJI	E0334	JUNIOR ASSOCIAT	WAREHOUSE
10	P SREENIVASA RAO	E0109	DEPUTY MANAGER	PRODUCTION
11	P JAGADEESWARA RAO	E0037	DEPUTY MANAGER	PRODUCTION
12	P DEMUDU	E0227	SENIOR ENGINEER	ENGINEERING SERVICES
13	K KANAKA RAJU	E0120	ASSISTANT MANAGER	PRODUCTION
14	P RAMESH	E0131	ASSISTANT MANAGER	PRODUCTION
15	A PARAMESWAR RAO	E0316	EXECUITVE	PROCESS DEVELOPMENT LAB
16	B LAKSHMANA RAO	NA	FIRE & SAFETY OFFICER	EHS
17	G RAMANA	E0215	SENIOR CHEMIST	QUALITY CONTROL
18	M YERUKU NAIDU	NA	FIRE & SAFETY OFFICER	EHS
19	M SURENDRA	E0041	ASSISTANT MANAGER	PRODUCTION
20	D SRINIVAS	E0326	ASSISTANT MANAGER	ENGINEERING SERVICES
21	J SREENIVASA RAO	E0031	ASSISTANT MANAGER	PRODUCTION
22	M DASARADHA RAMARAO	E0054	ASSISTANT MANAGER	PRODUCTION
23	K KARTHEEK	E0060	ASSISTANT MANAGER	ENGINEERING SERVICES
24	V MANIKANTA	E0294	DEPUTY MANAGER	WAREHOUSE
25	K RAMESH	E0017	ASSISTANT MANAGER	PRODUCTION
26	A VEERENDRA SAGAR	E0421	ASSISTANT MANAGER	QUALITY ASURANCE
27	M SATYANARAYANA	NA	FIRE & SAFETY OFFICER	EHS
28	D NARESH REDDY	E0141	ASSISTANT MANAGER	PRODUCTION
29	L NARASINGA RAO	E0226	SENIOR ENGINEER	ENGINEERING SERVICES
30	I KRISHNA PRASAD	E0043	ASSISTANT MANAGER	PRODUCTION
31	R V S S N RAJU	E0019	SENIOR MANAGER	ENGINEERING SERVICES
32	S RAMA KRISHNA	EBP139	EXECUITVE	PRODUCTION
33	K CHANDRA SEKHAR	E0132	ASSISTANT MANAGER	ENGINEERING SERVICES
34	A VISALI	E0385	SENIOR CHEMIST	QUALITY CONTROL
35	DR. SAHITHI MUDILI	E0419	ASSISTANT MANAGER	QUALITY ASURANCE
36	B NAGENDRA KUMAR	EBP125	EXECUITVE	EHS
37	S KRANTHI KUMAR	E0315	SENIOR CHEMIST	EHS

VII. EMERGENCY EVACUATION PROCEDURE

1. The person who first notices an emergency in the factory shall activate the nearest MCP and/or contact the shift-in-charge and intimate about the emergency immediately.

2. The shift-in-charge shall initiate the following action on receipt of the information.

   - **Take steps to contain and control the emergency**
   - **Inform the key personnel about the incident**
   - **Perform the duties of SMC / SIC till their arrival at the scene and decides about declaration of emergency based on the severity of the incident**

3. During the time of emergency, an area or more than one area needs to be shut down and the personnel required to vacate such area / areas. Then those should move to any one of the assembly points depending up on the wind direction upon emergency declaration/instruction.

4. On declaration of emergency, all persons who have not been designated as essential persons should leave their respective places of work and reach the assembly point through nearest emergency escape route. Auto-glow emergency exit way finding, and direction signs are provided to guide to reach the assembly point. All employees/contract employees shall be familiar with the emergency escape routes so they can reach the assembly point without panic.

5. A separate team will act as Evacuation Team in case of Emergency

6. Persons gathered at the assembly points will be transported to the safe locations by available transports if off-site evacuation required. Nearby Escientia Guest house will be used as the safe area.

7. Head count will be taken by the HR & Admin department at the emergency assembly point and will be communicated to the site main controller. Verification will be made with the persons present inside the plant and suitable action for search / rescue will be initiated for the missing persons

ANNEXURE VIII

IX. CHEMICAL SPILL EMERGENCY PROCEDURE

1.0 PURPOSE:

1.1 Procedure for safe handling, decontamination/detoxification of spilled chemicals without any harm/damage to person, work area and the environment.

2.0 SCOPE:

2.1 To eliminate the workplace exposure, incident/accident due to the spilled chemicals and contain/detoxify the work environment.

3.0 RESPONSIBILITIES:

3.1 The respective department personnel who caused the spill are responsible to contain/detoxify the workplace by following the procedure.

3.2 The area-in-charge of the respective department is the secondary responsible person to contain/detoxify the spill.

3.2 EHS personnel is responsible for providing the appropriate PPE for the area and cross check the implementation of the procedure during the process.

4.0 PROCEDURE:

4.1 IMMEDIATE ACTIONS

The immediate actions are:

CLEAR THE AREA

ISOLATE/CONTAIN THE SOURCE (e.g.: Valve/Drum/Lines etc.)

BARRICADE THE AREA

CONTAIN THE SPILL

IDENTIFY THE CHEMICAL/GAS

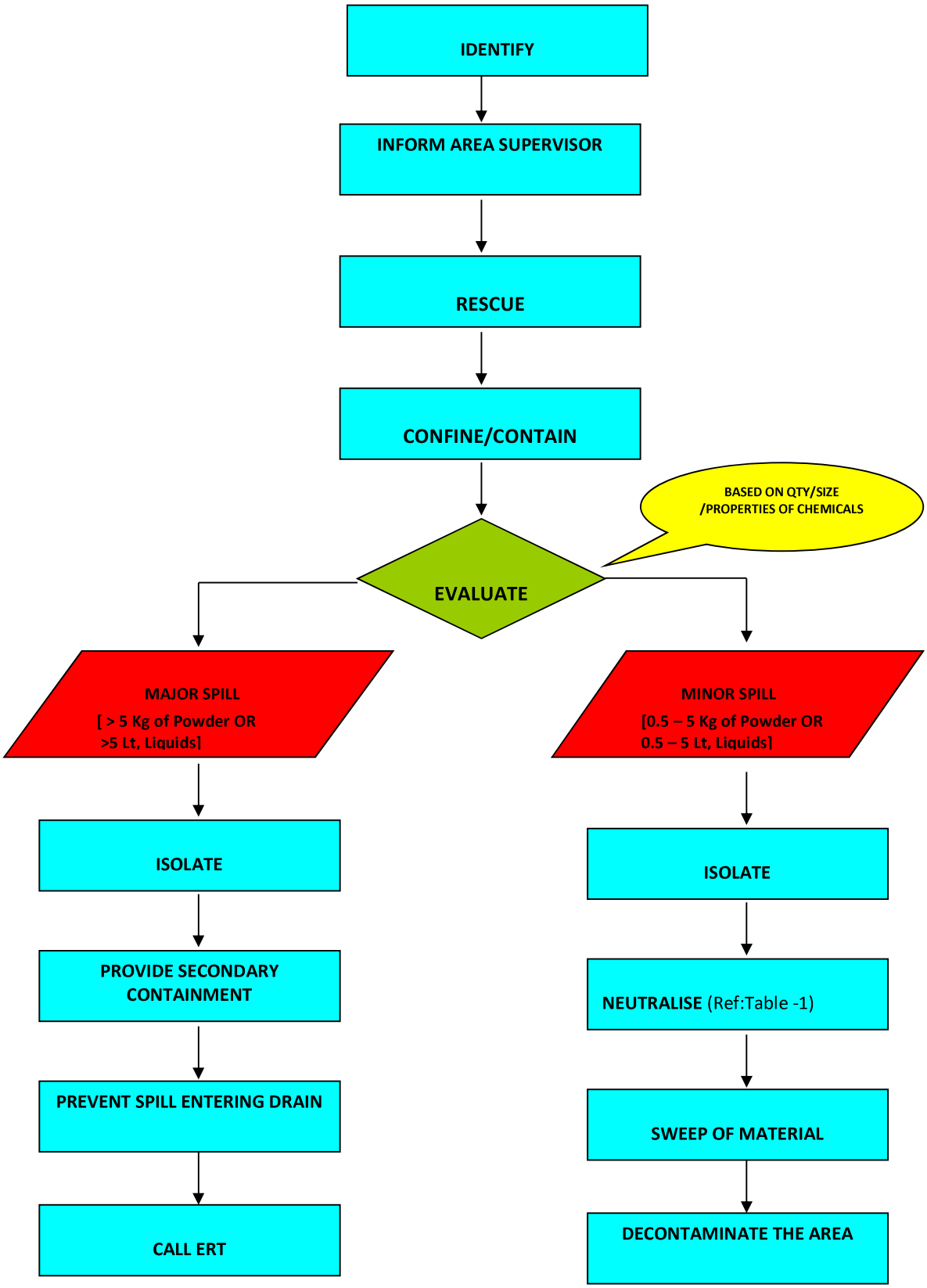

IDENTIFY
INFORM AREA SUPERVISOR
RESCUE
CONFINE/CONTAIN
BASED ON QTY/SIZE /PROPERTIES OF CHEMICALS
EVALUATE
MAJOR SPILL [> 5 Kg of Powder OR >5 Lt, Liquids]
MINOR SPILL [0.5 – 5 Kg of Powder OR 0.5 – 5 Lt, Liquids]
ISOLATE
PROVIDE SECONDARY CONTAINMENT
PREVENT SPILL ENTERING DRAIN
CALL ERT
ISOLATE
NEUTRALISE (Ref:Table -1)
SWEEP OF MATERIAL
DECONTAMINATE THE AREA

TABLE – 1: CHEMICALS SPILL CONTROL / NEUTRALISING TABLE

CHEMICALS * / NEUTRALISING	ACID (EXCEPT PERCHLORIC ACID)	WATER REACTIVE	CAUTICS	OXIDIZER	REDUCER	POISON	AIR REACTIVE	FLAMMABLE	ALKALI METALS	POWDERS
ABSORBING AGENT	Polypropylene pad/Vermiculate	Polypropylene pad	Polypropylene pad/Liquid caustic for dilution	Polypropylene pad	Dry sand/ Zorb-all	Polypropylene pad/Vermiculate	Polypropylene pad	Polypropylene pad/vermiculate	Dry sand /Powdered graphite/Mineral oil	Nil
NEUTALIZER	Soda Ash/ Neutrasorb	Acid neutralizer	Weak acid	5% sodium thio Sulphate in water	5% sodium hypo chlorite solution	Nil	Mineral oil	Activate Charcoal	Nil	Water (Depends on the material)
PPE	Neoprene/Nitrile gloves, Tyvek suit, Half face mask with acid gas cartridge, Goggles, Boots & Helmet	Nitrile gloves, Tyvek suit, Half face mask with acid gas cartridge, Goggles, Boots & Helmet	Neoprene/PVC gloves PVC suit Half face mask with bases cartridge, goggles, boots & Helmet	Neoprene gloves Tyvek suit Half face mask with acid/organic cartridge, goggles, boots & Helmet	Neoprene gloves Tyvek suit Half face mask with acid/organic cartridge, goggles, boots & Helmet	Neoprene gloves Tyvek suit SCBA/Airline mask with multi gas cartridge, boots, and Helmet	Neoprene gloves Tyvek suit Half face mask with acid/organic cartridge, goggles, boots & Helmet	Neoprene gloves, Fire proximity suit, SCBA/Airline mask with organic cartridge, boots & Helmet	Neoprene gloves, Fire proximity suit, SCBA/Airline mask with organic cartridge, boots & Helmet	Encapsulating Suit (Toxic/ Sensitizer) Full suit, Organic / Dust Cartridge, Goggles, Safety Shoes
DECONTAMINATER	Soap & Water and to be checked by pH paper	Soap & Water and to be checked by pH paper	Soap & Water and to be checked by pH paper	Soap & Water	Soap & Water	Solvent for water reactive and then with soap and water	Soap & Water	Soap & Water	Mineral oil and then with soap and water	0.5% Caustic, IPA etc (Depends on the material)
SPECIAL	Solid (To be dilute with glycol)	Extreme heat may generate	Solid (Removed using dustpan)	Nil	Nil	Exposure limit may not be known, to be severe, more severe under fire/ antidote must be made readily available	Nil	To be away from Ignition sources/May vaporize immediately	Sore in dry location	Powder not to be dispersed with air, To be immediately contained / covered
AVOID	Contact with strong base	Contact with water	Contact with strong acid	Nil	Contact with water/sodium bicarbonate	Contact with other chemicals	Open atmosphere/air	Contact immiscible solvents/water	Contact with water/moist air/alcohols/hydrocarbons/hydroge	Air dispersion

IX. FIRE EMERGENCY PROCEDURE

FIRE FIGHTING OPERATIONS:

01. The person who first notices an emergency (Incident Identifier) shall contact the shift- In-charge and intimate about the emergency. Further he will break/pull the manual call point of fire alarm system to intimate the emergency in the area.

02. The EHS person / person at the Fire alarm control panel shall immediately respond to the area to check the emergency, acknowledges the alarm, and shall makes the announcement using Public Address System after emergency declaration.

03. On hearing the alarm and announcement, persons not identified as key persons must reach the Assembly point(s) through nearest emergency escape route.

04. On hearing the alarm, the key personnel as identified in onsite emergency plan, report to the scene of emergency / emergency control center.

05. Assess the nature and extent of emergency.

06. Find out the material present in the area/fire and its properties.

07. Examine possibilities of arresting the source of leak in a safe manner.

08. Select a suitable medium of firefighting e.g., Dry powder, foam, water, etc... to mitigate the fire

09. Plan to segregate / isolate the other storage/material from the source to avoid spreading and provide cooling, if necessary.

10. Make sure that firewater pumps are in service.

11. Start firefighting exercise with trained personnel from a safe distance and approach the scene from the windward direction.

12. Use proper protection like fire proximity/retardant suit with respiratory protection, if any rescue or approach to proximity is warranted or chance of toxic gas release.

13. Adopt proper firefighting techniques to avoid splash/ boil over.

14. Ensure that the fire/water is impounded and does not get into public drain.

15. Isolate source of power supply.

16. Do not use incompatible materials for firefighting.

17. Do not get panic.

18. Do not approach the scene without proper personal protection.

19. Summon the help of public fire brigade if needed.

20. Do not approach the fire against the windward direction.

RESCUE OPERATIONS:

01. If fire on clothes, the person should roll down on the ground or can be wrapped in woolen blanket to put-off the flames.

02. Remove the victim from the affected area.

03. The firefighter/rescuer shall wear fire proximity/retardant suit and breathing apparatus and approach the fire by using water spray fog nozzle.

04. Any person with burn injuries will have to be given cold water wash in large quantities for at least 15 minutes.

05. Apply water jell dressing on the affected skin.

06. Cover the affected skin portion with sterilized white cotton cloth.

07. Administer oxygen in case of breathing difficulties.

08. Do not try to remove the clothes from the hot burn.

09. Do not touch the hot burn affected skin portions.

10. Do not apply any ointment or lotions on hot burn skin portions.

11. Do not break the blisters formed on the skin.

12. Do not give anything orally.

13. Take the victim to the hospital for further treatment (take SDS in case of chemical burn).

ANNEXURE X

X. MITIGATION/CLEANUP PROCEDURE

Purpose

This procedure explains how to control and contain water and other sources used during emergency without polluting the land and air.

Containment of contaminated water:

During fire emergency, water and water foam mixture will be used to control the fire, the same will be contained from entering rainwater storm by using sandbags. The entire quantity of water and foam used will be collected and transferred to ETP collection tank, for further treatment and disposal.

Containment during Toxic Gas Release:

In the event of toxic gas release, water spray will be used to contain the spreading of gas into atmosphere by using necessary personal protective equipment and according to wind direction.

The Contaminated water will be collected and transferred to ETP after checking pH by EHS personnel for further treatment and disposal. Also, TLV value of the chemical will be checked before allowing the people to resume work.

Containment of DCP powder:

Dry Chemical Powder will be used only for small fires. The area will be cleaned, and the material will be collected to send ETP for neutralizing purpose.

Containment of contaminated water during corrosive and toxic chemicals Leakage

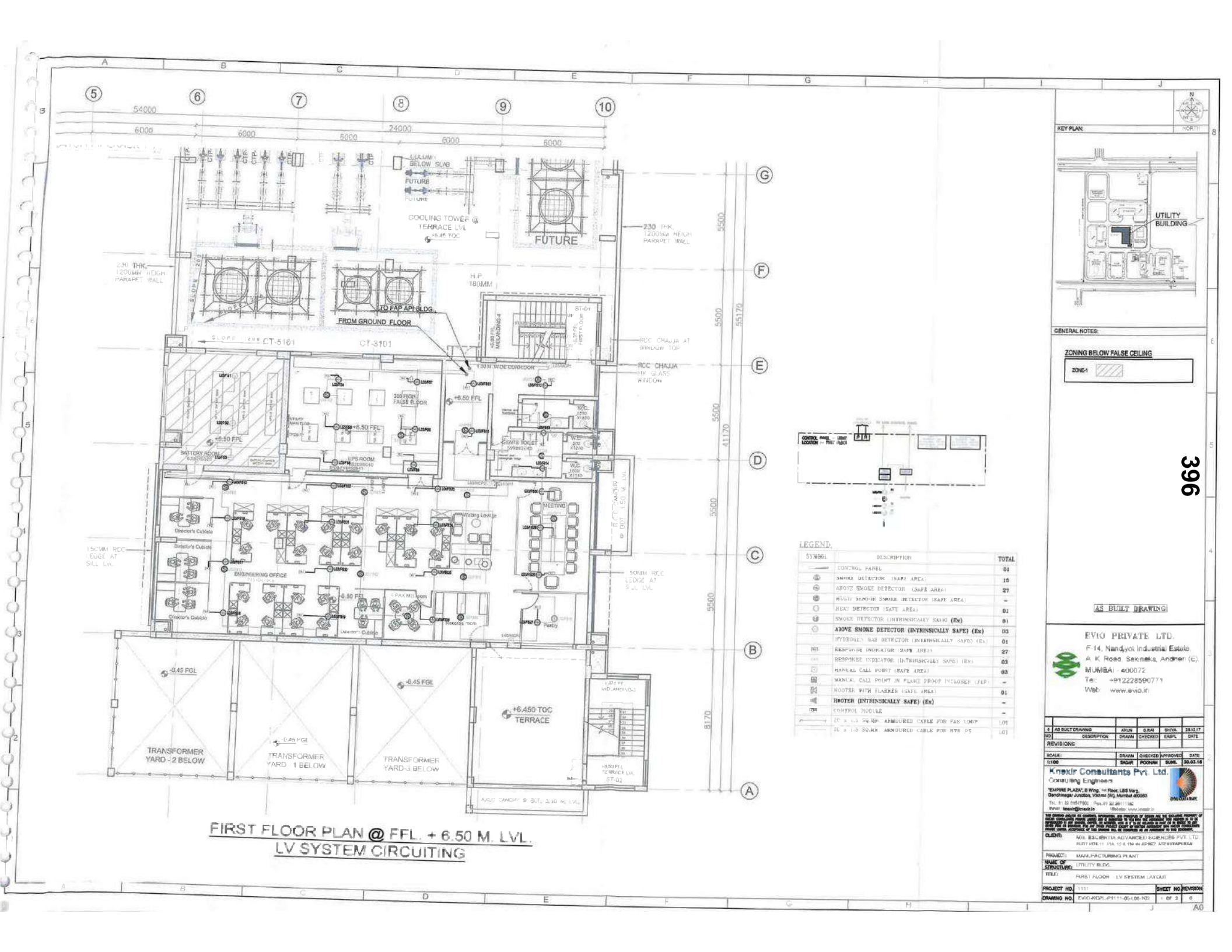
The Corrosive chemicals will be stored in secondary containment pallet and kept in dedicated acid storage area to accommodate the drums leakage due to damage. In case of leakage of drums in the storage area, the same will be collected in suitable drum using portable pumps with adequate safety precaution.

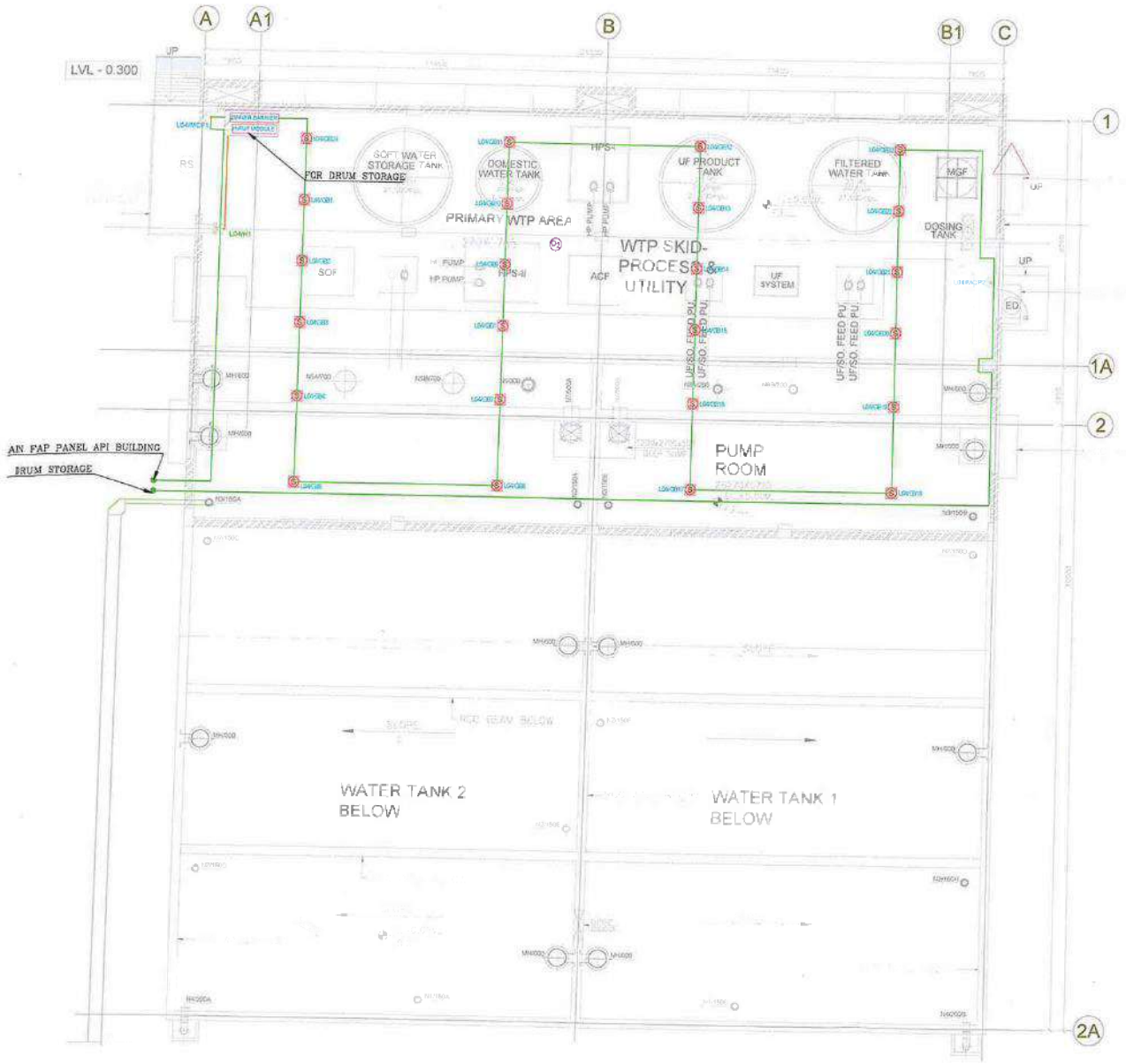
In case of minor leakage, naturalizing agent provided in the spill kit will be used to contain and collect the leakage and the same will be sent to ETP for further treatment.

In case of hose damage during transfer of chemicals, immediately close the delivery valve of the pump and naturalize the area with suitable neutralizing agent with due safety precaution.

ANNEXURE XI

LAYOUT & DETAILS OF FIRE DETECTION SYSTEM

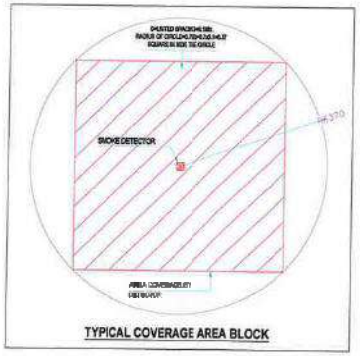

FIRST FLOOR PLAN @ FFL. + 6.50 M. LVL.
LV SYSTEM CIRCUITING
TRANSFORMER YARD - 2 BELOW
TRANSFORMER YARD - 1 BELOW
TRANSFORMER YARD-3 BELOW
-0.45 FGL
+6.450 TOC TERRACE
COOLING TOWER @ TERRACE LVL
FUTURE
TO FAP API BLDG.
FROM GROUND FLOOR
CT-5101
CT-3101
230 THK. 1200MM HEIGH PARAPET WALL
RCC CHAJJA AT WINDOW TOP
RCC CHAJJA
BATTERY ROOM
UPS ROOM
ENGINEERING OFFICE
MEETING
Waiting Lounge
Pantry
Director's Cubicle
Manager's Cubicle
GENTS TOILET
LADIES TOILET
1.20 M. WIDE CORRIDOR
300 HIGH FALSE FLOOR
+6.50 FFL
+6.30 FFL
54000
6000
24000
5000
5500
55170
41170
8170
LEGEND
SYMBOL
DESCRIPTION
TOTAL
CONTROL PANEL 01
SMOKE DETECTOR (SAFE AREA) 15
ABOVE SMOKE DETECTOR (SAFE AREA) 27
BEAM SENSOR SMOKE DETECTOR (SAFE AREA) -
HEAT DETECTOR (SAFE AREA) 01
SMOKE DETECTOR (INTRINSICALLY SAFE) (Ex) 01
ABOVE SMOKE DETECTOR (INTRINSICALLY SAFE) (Ex) 03
HYDROGEN GAS DETECTOR (INTRINSICALLY SAFE) (Ex) 01
RESPONSE INDICATOR (SAFE AREA) 27
RESPONSE INDICATOR (INTRINSICALLY SAFE) (Ex) 03
MANUAL CALL POINT (SAFE AREA) 03
MANUAL CALL POINT IN FLAME PROOF ENCLOSER (FEP) -
HOOTER WITH FLASHER (SAFE AREA) 01
HOOTER (INTRINSICALLY SAFE) (Ex) -
CONTROL MODULE -
20 x 1.5 SQ.MM. ARMOURED CABLE FOR FAS LOOP 101
2C x 1.5 SQ.MM. ARMOURED CABLE FOR RTR PS 101
KEY PLAN:
NORTH
UTILITY BUILDING
GENERAL NOTES:
ZONING BELOW FALSE CEILING
ZONE-1
AS BUILT DRAWING
396
EVIO PRIVATE LTD.
F-14, Nandjyot Industrial Estate,
A. K. Road, Sakinaka, Andheri (E),
MUMBAI - 400072
Tel: +912228590771
Web: www.evio.in
3 AS BUILT DRAWING ARUN S.RAN SHIVA 28.02.17
NO. DESCRIPTION DRAWN CHECKED E&PL DATE
REVISIONS
SCALE: 1:100
DRAWN SAGAR
CHECKED POONAM
APPROVED SUNIL
DATE 30.03.16
Knexir Consultants Pvt. Ltd.
Consulting Engineers
"EMPIRE PLAZA", B Wing, 1st Floor, LBS Marg,
Ganchinagar Junction, Vikhroli (W), Mumbai 400083
CLIENT: M/S. EZAGENTIA ADVANCED SCIENCES PVT. LTD.
PLOT NOS. 11, 11A, 12 & 13A IN APSEZ, ATCHUTAPURAM
PROJECT: MANUFACTURING PLANT
NAME OF STRUCTURE: UTILITY BLDG.
TITLE: FIRST FLOOR - LV SYSTEM LAYOUT
PROJECT NO. 1111
SHEET NO./REVISION
DRAWING NO. EVIO/400/PL/P/1111/05/L/06-ND2
1 OF 2
0
A0



GROUND FLOOR PLAN @ ±0.00 M. LVL.
LV SYSTEM CIRCUITING

LEGEND

SYMBOL	DESCRIPTION	TOTAL
	SMOKE DETECTOR (SAFE AREA)	84
	MANUAL CALL POINT (SAFE AREA)	02
	MANUAL CALL POINT N FLAME PROOF ENCLOSER (FLP)	-
	HOOTER WITH FLASHER (SAFE AREA)	01
	OXYGEN DETECTOR (INTRINSICALLY SAFE)	01
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FAS LOOP	LOT
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR HTR PS	LOT



TYPICAL COVERAGE AREA BLOCK

KEY PLAN: NORTH

GENERAL NOTES:

AS BUILT DRAWING

397

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A. K. Road, Sakinaka, Andheri (E),
MUMBAI - 400072.
Tel: +912228560771
Web: www.evio.in

NO.	DESCRIPTION	DRAWN	CHECKED	EAE/PL	DATE
0	AS BUILT DRAWING	SHANKAR	AMIT		20.11.17
	PREVISIONS				

SCALE:	DRAWN	CHECKED	APPROVED	DATE
1:75	SHANKAR	ROOSAM	SUNIL	05.03.16

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Consulting Engineers

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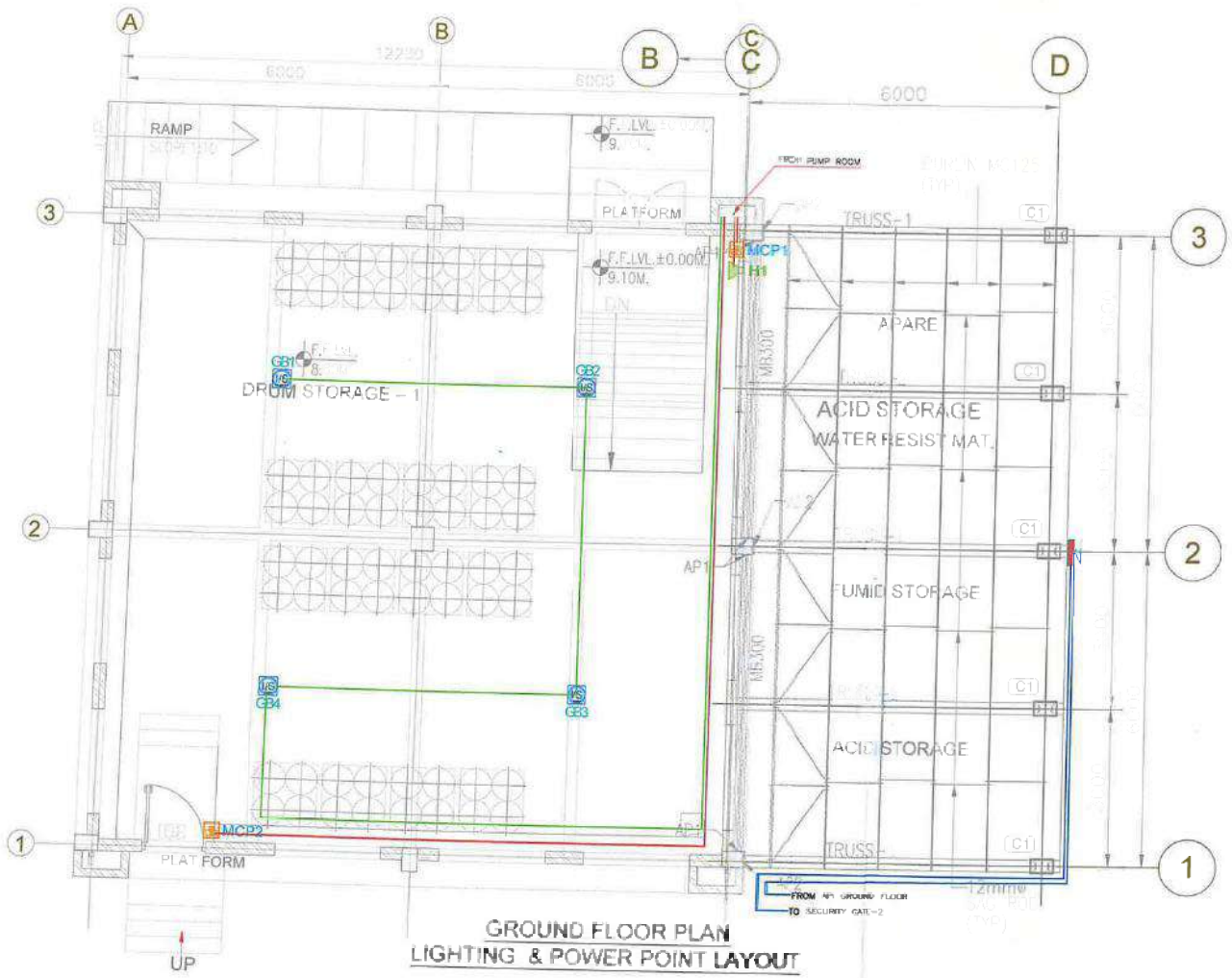
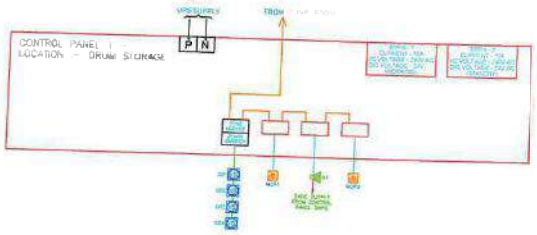
CLIENT: M/S. SUBSENTIA ADVANCED SCIENCES (P) LTD.
PLOT NOS.11, 11A, 12 & 12A IN APSEZ, ATCHUTAPURAM.

PROJECT: MANUFACTURING PLANT
NAME OF STRUCTURE: PUMP ROOM
TITLE: PUMP ROOM - FAS SYSTEM LAYOUT

PROJECT NO.	1111	SHEET NO.	REVISION
DRAWING NO.	EVIO-KCPL-P1111-00-L06-101	2 OF 2	0



GROUND FLOOR PLAN
LIGHTING & POWER POINT LAYOUT



LEGEND

SYMBOL	DESCRIPTION	BELOW	TOTAL
	SMOKE DETECTOR (INTRINSICALLY SAFE) (Ex)	04	04
	MANUAL CALL POINT IN FLAME PROOF ENCLOSER (FLP)	02	02
	HOOTER (INTRINSICALLY SAFE) (Ex)	01	01
	6W WALL MOUNTED SPEAKER FLP	01	01
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FIRE LOOP		
	3C x 1.0 SQ.MM. ARMOURED CABLE FOR FIRE CORE	60MTRS.	
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR PAS	80MTRS.	
	2C x 1.0 SQ.MM. ARMOURED CABLE FOR HOOTER PS	120MTRS.	

KEY PLAN: NORTH

GENERAL NOTES:

AS BUILT DRAWING

NO	DESCRIPTION	DRAWN	CHECKED	EASPL	DATE
0	AS BUILT DRAWING	ARUN	B.RAI	SHIVA	04.12.17
REVISIONS					

SCALE:	DRAWN	CHECKED	APPROVED	DATE
1:00	SAGAR	POONAM	SUNIL	03.03.15

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Web: www.evic.in

Knexir Consultants Pvt. Ltd.
Consulting Engineers

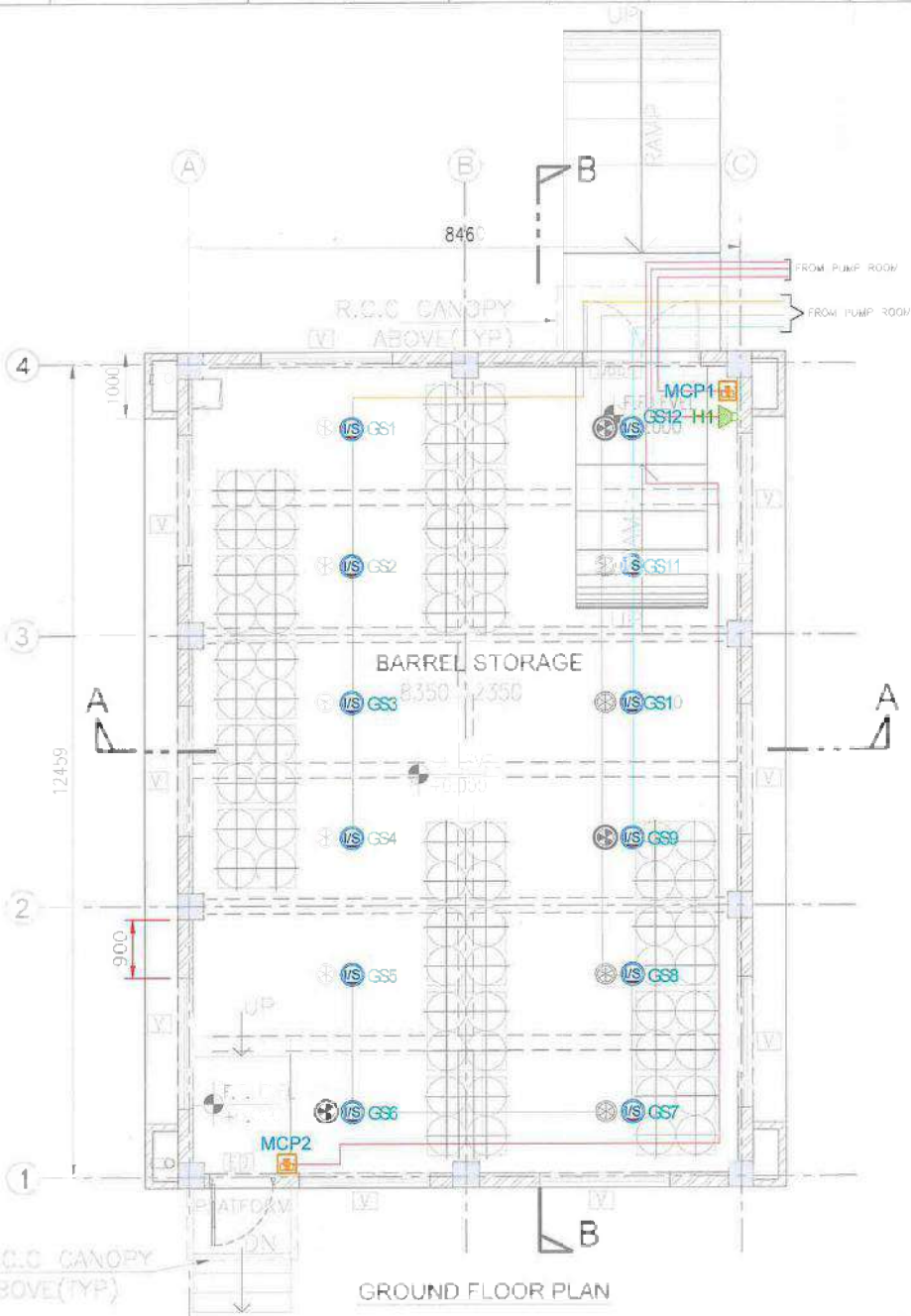
CLIENT: M/s. BIOGENTIA ADVANCED SCIENCES PVT. LTD.
PLOT NOS. I-1, I-1A, I-2 & I-3, M.I.D.C., PUNE-PIRANGUT,

PROJECT: MANUFACTURING PLANT
NAME OF STRUCTURE: DRUM STORAGE
TITLE: DRUM STORAGE LV SYSTEM LAYOUT

PROJECT NO.	SHEET NO.	REVISION
DRAWING NO.		

A1

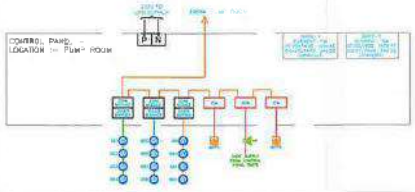
398

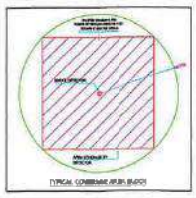


GROUND FLOOR PLAN

LEGEND

SYMBOL	DESCRIPTION	TOTAL
	SMOKE DETECTOR (INTRINSICALLY SAFE) (Ex)	12
	MANUAL CALL POINT (FLAME PROOF ENCLOSURE (FLP)	02
	HOOTER (INTRINSICALLY SAFE) (Ex)	01
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FIRE LOOP	----
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FIRE ZONE	150MTRS
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR HOOTER PS	150MTRS





KEY PLAN: NORTH

GENERAL NOTES:

AS BUILT DRAWING

NO.	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
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REVISIONS					

SCALE:	DRAWN	CHECKED	APPROVED	DATE
1:40	NILESH	POONAM	SUNIL	19.09.17

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Tel: +91222859077
Web www.evio.in

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Consulting Engineers

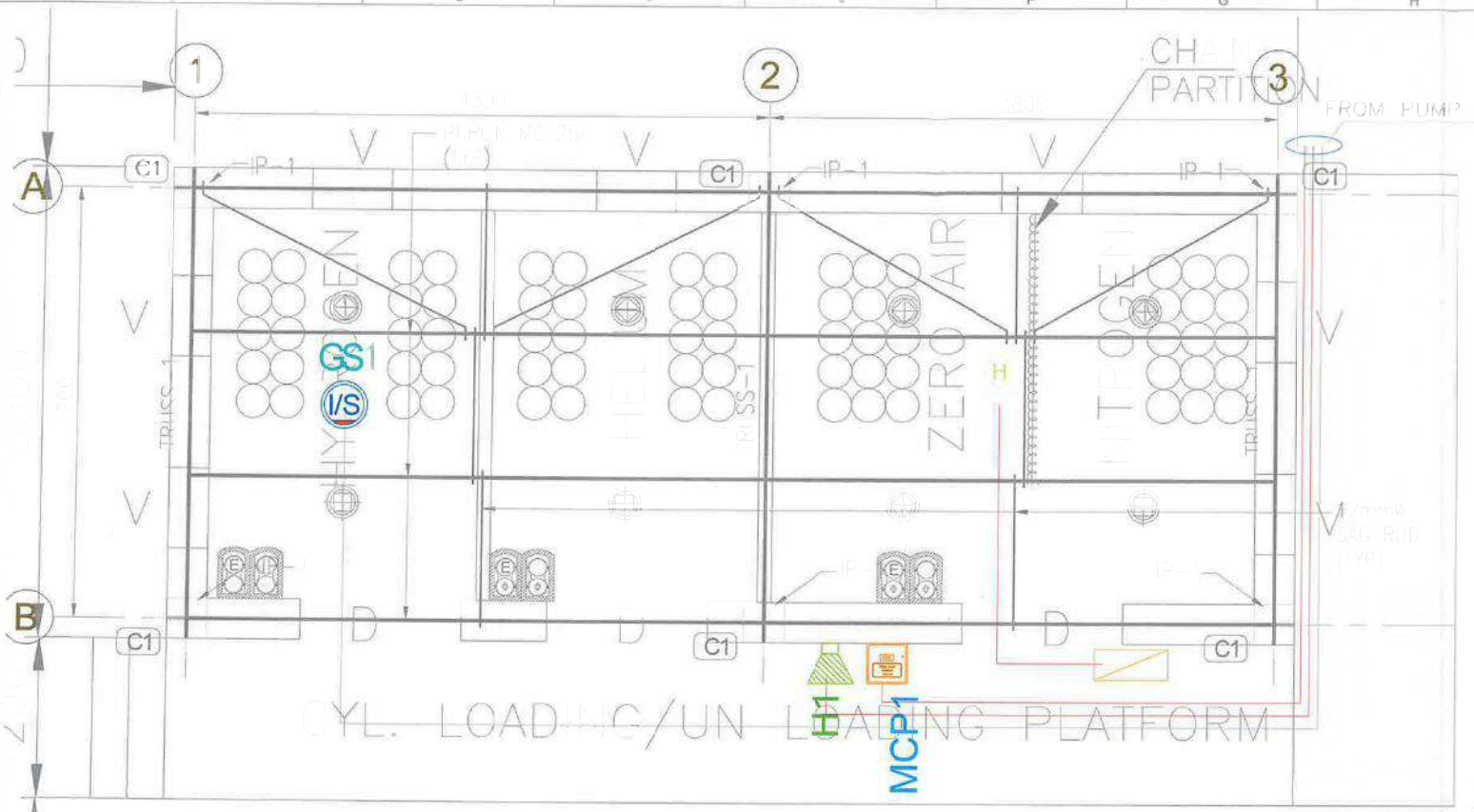
CLIENT: M/S. EGCENTRA ADVANCED SCHENGER PVT. LTD.
PLOT NO.(1), 1A, 1B & 1C(1), KRIPEE, KTGUTTAPURAM.

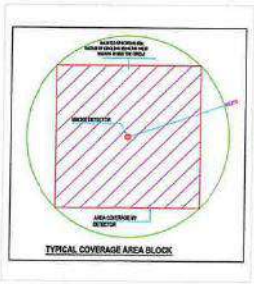
PROJECT: MANUFACTURING PLANT
NAME OF STRUCTURE: BARREL STORAGE SHED
TITLE: BARREL STORAGE SHED - LV SYSTEM LAYOUT

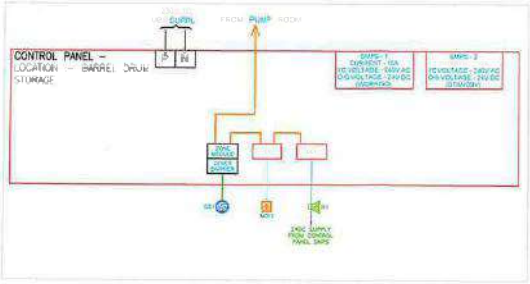
PROJECT NO.	SHEET NO.	REVISION
1111		
DRAWING NO. EVIO-KCPL-P(1)-11-LL-101	1 OF	0

A1

399







LEGEND:

SYMBOL	DESCRIPTION	TOTAL
	SMOKE DETECTOR (INTRINSICALLY SAFE) (Ex)	01
	HYDROGEN GAS DETECTOR (INTRINSICALLY SAFE) (Ex)	01
	MANUAL CALL POINT IN FLAME PROOF ENCLOSER (FLP)	01
	HOOTER (INTRINSICALLY SAFE) (Ex)	01
	HYDROGEN PANEL (INTRINSICALLY SAFE) (Ex)	01
	2C x 1.5 SQ.MM ARMOURED CABLE FOR FIRE LOOP	---
	2C x 1.5 SQ.MM ARMOURED CABLE FOR FIRE ZONE	60MTRS
	2C x 1.5 SQ.MM ARMOURED CABLE FOR PAS	60MTRS
	2C x 1.5 SQ.MM ARMOURED CABLE FOR HOOTER PS	100MTRS

KEY PLAN: NORTH

GENERAL NOTES:

AS BUILT DRAWING

NO	DESCRIPTION	DRAWN	CHECKED	EASPL	DATE
0	AS BUILT DRAWING	ARUN	S.RAI	SHAIL	24.12.17
REVISIONS					

SCALE	DRAWN	CHECKED	APPROVED	DATE
1:25	NILESH	PRANAV	SUNIL	21.09.17

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Tel: +91 22 28590771
Web: www.evio.in

Knexir Consultants Pvt. Ltd.
Consulting Engineers

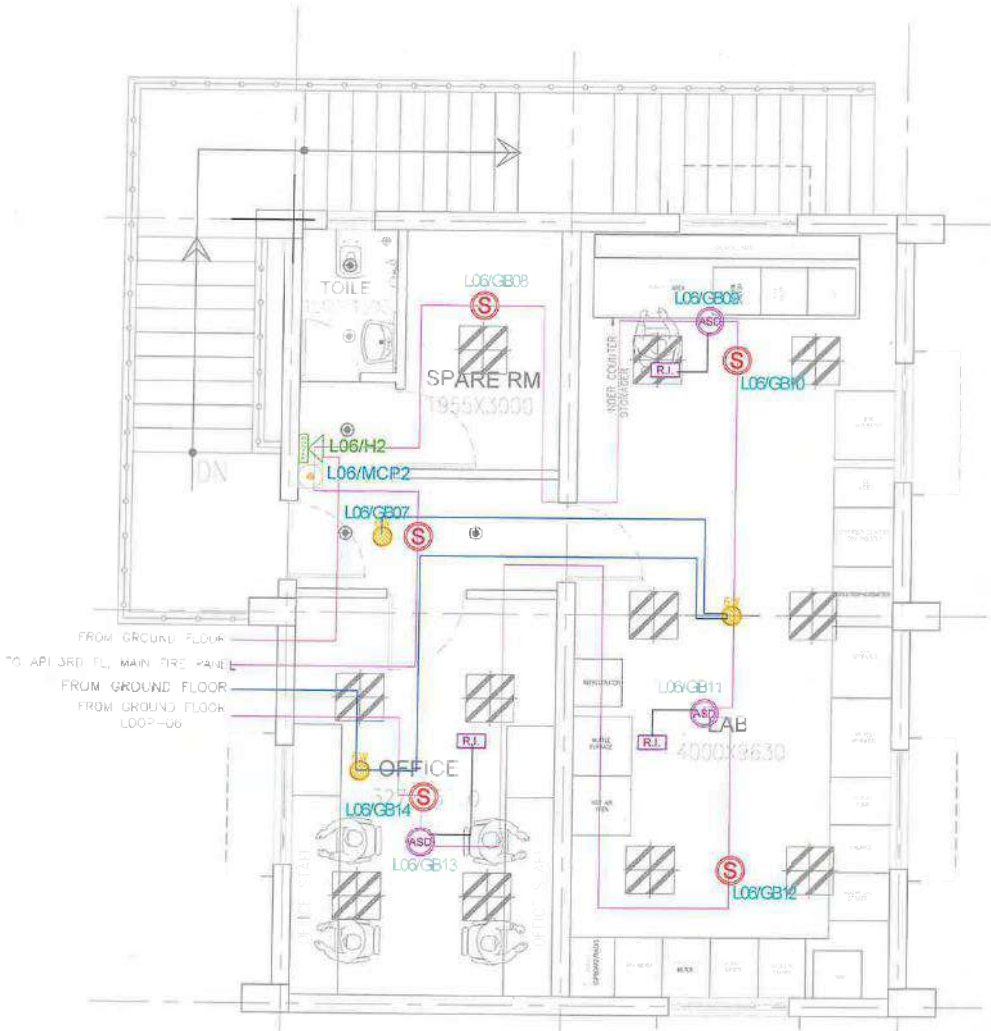
CLIENT: M/s. ESCIENTIA ADVANCED SCIENCES PVT. LTD

PROJECT: MANUFACTURING PLANT
NAME OF STRUCTURE: CYLINDER STORAGE
TITLE: CYLINDER STORAGE LV SYSTEM LAYOUT

PROJECT NO.	SHEET NO.	REVISION
EVIO-KCPL-PH111-00-L06-101	01	0

DRAWING NO.

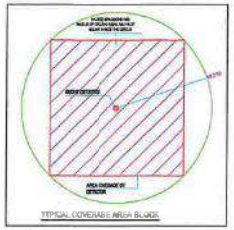
400



FIRST FLOOR - LV SYSTEM BELOW FALSE CEILING LAYOUT

LEGEND

SYMBOL	DESCRIPTION	BELOW	ABOVE	TOTAL
S	SMOKE DETECTOR (SAFE AREA)	05	–	05
S	ABOVE SMOKE DETECTOR (SAFE AREA)	–	03	03
ASD	RESPONSE INDICATOR (SAFE AREA)	03	–	03
	MANUAL CALL POINT (SAFE AREA)	01	–	01
R.I.	ROUTER WITH FLASHER (SAFE AREA)	01	–	01
	8W CEILING MOUNT SPEAKERS	03	–	03
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FIRE LOOP	85MTRS.		
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR FIRE ZONE	-----		
	3C x 1.5 SQ.MM. ARMOURED CABLE FOR PAS	25MTRS.		
	2C x 1.5 SQ.MM. ARMOURED CABLE FOR ROUTER PS	25MTRS.		



KEY PLAN: NORTH

GENERAL NOTES:

401

AS BUILT DRAWING

NO	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
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REVISIONS					

SCALE	DRAWN	CHECKED	APPROVED	DATE
1:50	NILESH	POONAM	SUNIL	21.09.17

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F-14, Mandjyot Industrial Estate,
A. K. Road, Saki Naka, Andheri (E),
MUMBAI - 400072
Tel: +912228590771
Web www.evio.in

Knexir Consultants Pvt. Ltd.
Consulting Engineers

CLIENT: M/s. BIOCAD PHARMACEUTICALS PVT. LTD.

PROJECT: MANUFACTURING PLANT

NAME OF STRUCTURE: ETP

TITLE: ETP FIRST FLOOR - LV SYSTEM LAYOUT

PROJECT NO.	SHEET NO.	REVISION
1111		

DRAWING NO. EVI/UNIT-I/P1111/SK/ETP/LV/100

LIST OF MANUAL CALL POINTS				
S. No	**Building / area**	**Floor**	**Device ID**	**Location**
1	API Block	Ground Floor	L1/GF/MCP01	L1/GF/MCP02/188 API GF North staircase
2	API Block	Ground Floor	L1/GF/MCP02	L1/GF/MCP02/194 API GF High Portent Area FG Room
3	API Block	Ground Floor	L1/GF/MCP03	L1/GF/MCP03/173 API GF High Portent RM Entry
4	API Block	Ground Floor	L1/GF/MCP04	L1/GF/MCP04/193 API GF High Portent Main Air Lock Room-3
5	API Block	Ground Floor	L1/GF/MCP05	L1/GF/MCP05/126 API GF Change Room-1
6	API Block	Ground Floor	L1/GF/MCP06	L1/GF/MCP06 API GF Change Room-2
7	API Block	Ground Floor	L1/GF/MCP07	L1/GF/MCP07/182 API GF Meddle Staircase
8	API Block	Ground Floor	L1/GF/MCP08	L1/GF/MCP08/190 API GF corridor Near Emergency Door
9	API Block	Ground Floor	L1/GF/MCP09	L1/GF/MCP09/181 API GF Kilo lab Corridor Near Future Area
10	API Block	Ground Floor	L1/GF/MCP10	L1/GF/MCP10 API GF Technical area entrance
11	API Block	Ground Floor	L1/GF/MCP11	L1/GF/MCP11/175 API GF North Tech Area Near HWT-0101
12	API Block	Ground Floor	L1/GF/MCP12	L1/GF/MCP12/184 API GF North Tech Area Near Emergency Exit
13	API Block	Ground Floor	L1/GF/MCP13	L1/GF/MCP13/127 API GF South Tech Area Near Emergency Door
14	API Block	Ground Floor	L1/GF/MCP14	L1/GF/MCP14/170 API GF Large Scale Main Air Lock Inside
15	API Block	Ground Floor	L1/GF/MCP15	L1/GF/MCP15/130 API GF South Tech Area Near Electrical Panel
16	API Block	First Floor	L1/FF/MCP01	L1/FF/MCP1/235 API FF QC Entrance Air Lock Room
17	API Block	First Floor	L1/FF/MCP02	L1/FF/MCP02/230 API FF Near Middle Staircase
18	API Block	First Floor	L1/FF/MCP03	L1/FF/MCP03/227 API FF North Technical Area Near North staircase
19	API Block	First Floor	L1/FF/MCP04	L1/FF/MCP04/229 API FF North Tech Area Near Emergency Door
20	API Block	First Floor	L1/FF/MCP05	L1/FF/MCP05/228 API FF Corridor Near Emergency Door South Tech Area Inside
21	API Block	First Floor	L1/FF/MCP06	L1/FF/MCP06/232 API FF South Tech Area Near Emergency Door
22	API Block	First Floor	L1/FF/MCP07	L1/FF/MCP07/226 API FF Suite-1 Washroom

LIST OF MANUAL CALL POINTS				
S. No	**Building / area**	**Floor**	**Device ID**	**Location**
23	API	Second Floor	L2/SF/MCP01	L2/SF/MCP01/ API SF QC Cross over Bench
24	API	Second Floor	L2/SF/MCP02	L2/SF/MCP02/ API SF North Technical Area Staircase
25	API	Second Floor	L2/SF/MCP03	L2/SF/MCP03/ API SF North Technical Area Near Wide Corridor Entrance Door
26	API	Second Floor	L2/SF/MCP04	L2/SF/MCP04/ API SF South Technical Area Near Wide Corridor Entrance Door
27	API	Second Floor	L2/SF/MCP05	L2/SF/MCP05/448 API SF South Technical Area Near Staircase Door
28	API	Second Floor	L2/SF/MCP06	L2/SF/MCP06/ API SF Suite-1 Near Washroom
29	API	Second Floor	L2/SF/MCP07	L2/SF/MCP07/450 API SF Crystalizing Room Near R-2140
30	API	Third Floor	L2/TF/MCP01	L2/TF/MCP01/385 API TF Pilot Plant Near in Charge Table
31	API	Third Floor	L2/TF/MCP02	L2/TF/MCP02/386 API TF Wide Corridor Near Middle Staircase
32	API	Third Floor	L2/TF/MCP03	L2/TF/MCP03/377 API TF North Tech Area Inside Nearby Door
33	API	Third Floor	L2/TF/MCP04	L2/TF/MCP04/384 API TF Powder Translation Room Entrance Door Inside
34	API	Third Floor	L2/TF/MCP05	L2/TF/MCP05/376 API TF Suite-1 Near R-3110
35	API	Third Floor	L2/TF/MCP06	L2/TF/MCP06/457 API TF South Side Tech Area Near Emergency Door Exit
36	Utility	Ground Floor	L3/GF/MCP01	L3/GF/MCP01/139 Utility GF Boiler Area
37	Utility	Ground Floor	L3/GF/MCP02	L3/GF/MCP02/138 Utility GF Boiler Area Emergency Exit Door
38	Utility	Ground Floor	L3/GF/MCP03	L3/GF/MCP03/136 Utility GF Near HVAC Chiller
39	Utility	Ground Floor	L3/GF/MCP04	L3/GF/MCP04/ Utility GF Near HVAC Chiller
40	Utility	Ground Floor	L3/GF/MCP05	L3/GF/MCP05/134 Utility GF Near Emergency Exit Door
41	Utility	Ground Floor	L3/GF/MCP06	L3/GF/MCP06/150 Utility GF Engineering Store Inside
42	Utility	Ground Floor	L3/GF/MCP07	L3/GF/MCP07/133 Utility GF Engineering Store Near Maintenance Store
43	Utility	Ground Floor	L3/GF/MCP08	L3/GF/MCP08/131 Utility GF Powerhouse Near Fire Alarm Repeater Panel
44	Utility	Ground Floor	L3/GF/MCP09	L3/GF/MCP09/130 Utility GF Powerhouse Near Utility MCC-C-SEC 5 of 5 Panel

LIST OF MANUAL CALL POINTS				
S. No	**Building / area**	**Floor**	**Device ID**	**Location**
45	Utility	Ground Floor	L3/GF/MCP10	L3/GF/MCP10/129 Utility GF Powerhouse Panel Room Exit Door
46	Utility	Ground Floor	L3/GF/MCP11	L3/GF/MCP11/128 Utility GF Powerhouse Panel Back Side Door
47	Utility	Ground Floor	L3/GF/MCP12	L3/GF/MCP12/142 Utility GF HT Braker Room
48	Utility	First Floor	L3/FF/MCP01	L3/FF/MCP01 Utility FF Engineering office near washroom
49	Utility	First Floor	L3/FF/MCP02	L3/FF/MCP02/144 Utility FF Near conference hall
50	Utility	First Floor	L3/FF/MCP03	L3/FF/MCP03/145 Utility FF Near pantry room
51	Pump House	Ground Floor	L4/GF/MCP01	L4/GF/MCP01/379 Pump House Fire alarm control panel
52	Pump House	Ground Floor	L4/GF/MCP02	L4/GF/MCP01/378 Pump House near emergency exit door
53	Security gate-2	Ground Floor	L4/GF/MCP01	L4/GF/MCP01/382 Security gate-2 room inside
54	NON CCOCE Drum store	Ground Floor	L4/GF/MCP02	L4/GF/MCP02/383 NON COCE Drum inside near emergency door
55	Gas cylinder store	Ground Floor	L4/GF/MCP01	L4/GF/MCP01/376 Gas cylinder store entrance
56	WHD	Ground Floor	L5/GF/MCP01	L5/GF/MCP01/135 Warehouse GF Corridor near dispensing room entrance
57	WHD	Ground Floor	L5/GF/MCP02	L5/GF/MCP02/137 Warehouse GF RM/PM out
58	WHD	Ground Floor	L5/GF/MCP03	L5/GF/MCP03/136 Warehouse GF FG Loading dock
59	WHD	Ground Floor	L5/GF/MCP04	L5/GF/MCP04/139 Warehouse GF FG Near emergency break panel
60	WHD	Ground Floor	L5/GF/MCP05	L5/GF/MCP05/126 Warehouse GF RM Near emergency break panel
61	WHD	Ground Floor	L5/GF/MCP06	L5/GF/MCP06/135 Warehouse GF RM Near DE Dusting room
62	WHD	First Floor	L5/FF/MCP01	L5/FF/MCP01/142 Warehouse FF Near staircase- Entrance door
63	WHD	First Floor	L5/FF/MCP02	L5/FF/MCP02/141 Warehouse FF Near entrance lobby
64	WHD	Ground Floor	L6/GF/MCP01	L6/GF/MCP01/377 ETP GF MCC Panel entrance
65	WHD	Ground Floor	L6/GF/MCP02	L6/GF/MCP02/376 ETP GF Drum Storage Inside
66	WHD	Ground Floor	L6/FF/MCP01	L5/FF/MCP01/378 ETP FF Near Toilets

XII. FIRE PROTECTION SYSTEM

XIIA. DETAILS OF FIRE HYDRANT SYSTEM

FIRE PUMP HOUSE DETAILS						
Water Sump Capacity -1000KL						
S. No	**Pump Details**	**Make**	**Motor (HP)**	**Pump Capacity**	**Operation Status**	
					Start	**Stop**
1	Hydrant jockey pump	Kirloskar	20	15 m^3/hr	Auto start @ 07 kg/cm^2	Auto stop @ 08 kg/cm^2
2	Hydrant electrical main pump	Kirloskar	270	410 m^3/hr	Auto start @ 6 kg/cm^2	Manual stop
3	Hydrant diesel engine pump	Kirloskar	243	410 m^3/hr	Auto start @ 5 kg/cm^2	Manual stop
4	Sprinkler jockey pump	Kirloskar	20	10.8 m^3/hr	Auto start @ 07 kg/cm^2	Auto stop @ 08 kg/cm^2
5	Sprinkler electrical main pump	Kirloskar	170	273 m^3/hr	Auto start @ 06 kg/cm^2	Manual stop

XIIB. DETAILS OF FIRE HYDRANT POINTS

S. No.	ID No.	Location / Area
1	SH-01	Pump house north side
2	SH-02	Pump house east side
3	SH-03	Opposite to Engg. Store
4	SH-04	Near 33 KV indoor H.T. breaker room
5	SH-05	Near to D.G. 01
6	SH-06	Utility powerhouse backside
7	SH-07	Boiler backside near feed water tank
8	SH-08	Boiler house front side
9	SH-09	Utility shed corner near door
10	SH-10	Near warehouse isolator room
11	SH-11	Warehouse backside near OHC
12	SH-12	Warehouse backside north side
13	SH-13	Warehouse entrance
14	SH-14	API highly potent LTDS/HTDS tanks
15	SH-15	API packing material entrance FG exit
16	SH-16	API south staircase
17	SH-17	API near to PD lab
18	SH-18	API day storage tanks near SSDT-103
19	SH-19	API north staircase
20	SH-20	API south west corner near CC camera
21	DH-01	Near CCOE storage entrance
22	DH-02	FO/HSD unloading platform
23	DH-03	Non-CCOE drum storage tank back side
24	DH-04	Non-CCOE drum storage tank west side
25	DH-05	Non-CCOE storage west side
26	WFM-01	Non-CCOE storage entrance
27	WFM-02	Opposite to weigh bridge

S. No.	ID No.	Location / Area
28	WFM-03	Opposite to gas cylinder storage
29	WFM-04	Non-CCOE storage south entrance door
30	FEH-01	API first floor south staircase
31	FEH-02	API second floor south staircase
32	FEH-03	API third floor south staircase
33	FEH-04	API first floor middle staircase
34	FEH-05	API second floor middle staircase
35	FEH-06	API third floor middle staircase
36	FEH-07	API first floor north staircase
37	FEH-08	API second floor north staircase
38	FEH-09	API third floor north staircase
39	FEH-10	Utility office first floor south staircase
40	FEH-11	Utility office first floor
41	FEH-12	Warehouse first floor

XIIC. DETAILS OF HOSE REEL DRUMS

S. No.	ID No.	Location / Area
1	HR-01	API first floor south staircase
2	HR-02	API second floor south staircase
3	HR-03	API third floor south staircase
4	HR-04	API first floor middle staircase
5	HR-05	API second floor middle staircase
6	HR-06	API third floor middle staircase
7	HR-07	API first floor north staircase
8	HR-08	API second floor north staircase
9	HR-09	API third floor north staircase
10	HR-10	Utility office first floor south staircase
11	HR-11	Utility office first floor
12	HR-12	Warehouse first floor

XIID. DETAILS OF FIRE EXTINGUISHERS

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
1	FE01	Near pump house Fire pump panel	CO_2	4.5 Kg
2	FE02	Near pump house emergency exit	DCP	25 Kg
3	FE03	Near FG storage Emergency break panel	ABC	9 Kg
4	FE04	Near FG storage palletization area	ABC	9 Kg
5	FE05	Near FG storage Entry/Exit door	ABC	9 Kg
6	FE06	Near WH office room	ABC	9 Kg
7	FE07	WH washing area outside	ABC	9 Kg
8	FE08	WH catalyst storage outside	ABC	9 Kg
9	FE09	Primary Packing material storage room outside	ABC	9 Kg
10	FE10	Near RM storage Emergency break panel	ABC	9 Kg
11	FE11	WH first floor office outside	ABC	9 Kg
12	FE12	WH first floor AHU area	ABC	9 Kg
13	FE13	WH first floor AHU area	ABC	9 Kg
14	FE14	WH first floor AHU area	ABC	9 Kg
15	FE15	Near WH first floor electrical panel	Co_2	4.5 Kg
16	FE16	Near WH first floor west side staircase	ABC	9 Kg
17	FE17	Near Utility Shelter	CO_2	4.5 Kg
18	FE18	Near Nitrogen plant	ABC	9 Kg
19	FE19	Near Air drier	ABC	9 Kg
20	FE20	Near Chiller unit	CO_2	4.5 Kg
21	FE21	Near Utility emergency exit	DCP	25 Kg
22	FE22	Near Boiler shelter	DCP	25 Kg

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
23	FE23	Near Boiler operation panel	ABC	9 Kg
24	FE24	Near Boiler emergency exit	ABC	9 Kg
25	FE25	Engineer Stores	ABC	9 Kg
26	FE26	Engineer Stores	ABC	9 Kg
27	FE27	Utility - electrical panel room shelter	Co_2	6.5 Kg
28	FE28	Utility - electrical panel room	ABC	9 Kg
29	FE29	Utility - near electrical panel room emergency exit	ABC	9 Kg
30	FE30	Electrical HT panel room outside	CO_2	4.5 Kg
31	FE31	Transformer area	ABC	9 Kg
32	FE32	Utility office data center entrance	Co_2	6.5 Kg
33	FE33	Utility office UPS room outside	Co_2	6.5 Kg
34	FE34	IT server room inside	Co_2	6.5 Kg
35	FE35	Near Cooling tower	ABC	9 Kg
36	FE36	Near cooling tower pumps	Co_2	4.5Kg
37	FE37	Utility terrace AHU room	Co_2	6.5 Kg
38	FE38	API II Ground floor main corridor near lift	Clean Agent	6 Kg
39	FE39	API II Ground floor main corridor	Clean Agent	6 Kg
40	FE40	API II Ground floor kilo lab corridor	Co_2	4.5 Kg
41	FE41	API II Ground floor kilo lab entry	Co_2	4.5 Kg
42	FE42	API II Ground floor kilo lab VTD room outside	Clean Agent	6 Kg
43	FE43	API II Ground floor kilo lab	Clean Agent	6 Kg
44	FE44	API II Ground floor - Tech Area (North) - near Emergency door	Co_2	4.5 Kg
45	FE45	API II Ground floor - Tech Area (North) - near VTD room break panel	Co_2	4.5 Kg

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
46	FE46	API II Ground floor - Tech Area (South) - near Emergency door	Co_2	4.5 Kg
47	FE47	API II Ground floor - Tech Area (South) - near Electrical panel	Co_2	4.5 Kg
48	FE48	API II - Suite I - Ground floor - large scale powder process area	Clean Agent	6 Kg
49	FE49	API II - Suite I - Ground floor - large scale powder process area	Clean Agent	6 Kg
50	FE50	API II - Suite I - Ground floor - large scale powder process area	Clean Agent	6 Kg
51	FE51	API II - Suite I - Ground floor - large scale powder process area	Clean Agent	6 Kg
52	FE52	API II - Ground floor - HPAPI - near to ANFD	Clean Agent	6 Kg
53	FE53	API II - Ground floor - HPAPI - near to Reactor	Clean Agent	6 Kg
54	FE54	API II - West side - near to Emergency Door	Foam	9 L
55	FE55	API II - West side - near to HTDS tank	Foam	9 L
56	FE56	API II - Ground floor - PD Lab inside	Clean Agent	6 Kg
57	FE57	API II - 1st floor Corridor - QC outside	ABC	9 Kg
58	FE58	API II - 1st floor Corridor - near to Emergency door	ABC	9 Kg
59	FE59	API II - 1st floor - Tech Area (North) - near Emergency door	Co_2	4.5Kg
60	FE60	API II - 1st floor - Tech Area (North) - near to pipeline entry cut-out	Co_2	4.5Kg
61	FE61	API II - 1st floor - Tech Area (South) - near to Emergency door	ABC	9 Kg
62	FE62	API II - 1st floor - Tech Area (South) - near to ANFD room break panel	ABC	9 Kg
63	FE63	API II - Suite I - 1st floor - Wash room outside	ABC	9 Kg
64	FE64	API II - Suite I - 1st floor - near to Crystallization room entry	ABC	9 Kg
65	FE65	API II - Suite I - 1st floor - Crystallization area	Clean Agent	6 Kg
66	FE66	API II - Suite I - 1st floor - Crystallization area ANFD room outside	Co_2	4.5 Kg
67	FE67	API II - 1st floor - QC - near to IR room	Clean Agent	6 Kg
68	FE68	API II - 1st floor - QC office room outside	Co_2	4.5 Kg

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
69	FE69	API II - 1st floor - QC - near to GC room	Clean Agent	6 Kg
70	FE70	API II - 2nd floor Corridor - QC outside	ABC	9 Kg
71	FE71	API II - 2nd floor Corridor - near to Emergency door	ABC	9 Kg
72	FE72	API II - 2nd floor - Tech Area (North) - near Emergency door	Co_2	4.5 Kg
73	FE73	API II - 2nd floor - Tech Area (North) - near to pipeline entry cut-out	Co_2	4.5 Kg
74	FE74	API II - 2nd floor - Tech Area (South) - near Emergency door	Co_2	4.5 Kg
75	FE75	API II - 2nd floor - Tech Area (South) - near staircase door	Co_2	4.5 Kg
76	FE76	API II - Suite I - 2nd floor - near to HMI panel	ABC	9 Kg
77	FE77	API II - Suite I - 2nd floor - near to pass box	Co_2	4.5 Kg
78	FE78	API II - Suite I - 2nd floor -Crystallization area	ABC	9 Kg
79	FE79	API II - Suite I - 2nd floor - Crystallization area	Co_2	4.5 Kg
80	FE80	API II - 2nd floor - QC - near to chemical storage	Clean Agent	6 Kg
81	FE81	API II - 2nd floor - QC - outside isolator room	Clean Agent	6 Kg
82	FE82	API II - 3rd floor Corridor - near to lift	ABC	9 Kg
83	FE83	API II - 3rd floor Corridor - near to Emergency door	ABC	9 Kg
84	FE84	API II - 3rd floor - Tech Area (North) - near to hot water system	ABC	9 Kg
85	FE85	API II - 3rd floor - Tech Area (North) - DCS room outside	Co_2	4.5 Kg
86	FE86	API II - 3rd floor - Tech Area (North) - DCS room inside	Co_2	6.5 Kg
87	FE87	API II - 3rd floor - Tech Area (South) - Water system outside	ABC	9 Kg
88	FE88	API II - 3rd floor - Tech Area (South) - Water system outside electrical panel	Co_2	4.5 Kg
89	FE89	API II - 3rd floor - Tech Area (South) - near to electrical panel area	Co_2	6.5 Kg
90	FE90	API II - 3rd floor - Tech Area (South) - near to LAF room break panel	ABC	9 Kg
91	FE91	API II - Suite I - 3rd floor - PTS room inside	Clean Agent	6 Kg

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
92	FE92	API II - Suite I - 3rd floor - near to HMI panel	ABC	9 Kg
93	FE93	API II - Suite I - 3rd floor - wash room outside	ABC	9 Kg
94	FE94	API II - 3rd floor - medium scale manufacturing – Pilot plate area	Co_2	4.5 kg
95	FE95	API II - 3rd floor - medium scale manufacturing - Pilot plate area	Clean Agent	6 kg
96	FE96	API II - 3rd floor - medium scale manufacturing - Pilot plate area	Co_2	4.5 kg
97	FE97	API II - 3rd floor - medium scale manufacturing - Pilot plate area	Clean Agent	8 kg
98	FE98	API II - Terrace - Scrubber entry (North)	ABC	9 Kg
99	FE99	API II - Terrace - Scrubber entry (South)	ABC	9 Kg
100	FE100	API II - Terrace - Lift room outside	ABC	9 Kg
101	FE101	Drum Storage outside	FOAM	9 L
102	FE102	Drum Storage inside	ABC	9 Kg
103	FE103	ETP office entrance	ABC	9 Kg
104	FE104	ETP electrical panel room inside	Co_2	4.5 Kg
105	FE105	ETP area - near to LTDS air blowers	FOAM	9 L
106	FE106	Transformer yard - near to ETP	DCP	25 Kg
107	FE107	Non-CCOE storage area - east side	Co_2	6.5 Kg
108	FE108	Non-CCOE storage area - east side	FOAM	50 L
109	FE109	Non-CCOE storage area - east side	DCP	50 Kg
110	FE110	Fabrication shed (workshop)	FOAM	9 L
111	FE111	Fabrication shed (workshop)	Co_2	4.5 Kg
112	FE112	Canteen	Co_2	4.5 kg
113	FE113	Non-CCOE storage area - northwest corner (dyke wall)	Co_2	4.5 Kg
114	FE114	Non-CCOE storage area - southwest corner (dyke wall)	FOAM	9 L

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
115	FE115	CCOE Drum storage room in side	AFFF	50 L
116	FE116	CCOE storage area - East side (near tanker unloading)	DCP	9 Kg
117	FE117	Non -CCOE storage area - East side (near dyke wall)	FOAM	9 L
118	FE118	CCOE storage area - East side (near pumps area)	Co_2	6.5 Kg
119	FE119	CCOE storage area - Northeast corner (dyke wall)	FOAM	9 L
120	FE120	CCOE storage area - Northeast corner (dyke wall)	Co_2	4.5 Kg
121	FE121	CCOE storage area - Northwest corner (dyke wall)	Co_2	4.5 Kg
122	FE122	CCOE storage area - Southwest corner (dyke wall)	FOAM	9 L
123	FE123	CCOE storage area - Southwest corner (dyke wall)	Co_2	4.5 Kg
124	FE124	CCOE storage area - Southeast corner (near to dyke wall)	FOAM	9 L
125	FE125	CCOE Drum storage outside near door	FOAM	50 L
126	FE126	FO & HSD storage - near tanker unloading platform	DCP	50 Kg
127	FE127	FO & HSD storage - East side (dyke wall)	FOAM	9 L
128	FE128	FO & HSD storage - North side (near to pumps)	CO_2	6.5 Kg
129	FE129	FO & HSD storage - North side (dyke wall)	FOAM	9 L
130	FE130	FO & HSD storage - Northeast corner	FOAM	9 L
131	FE131	FO & HSD storage - Southeast corner	Co_2	4.5 Kg
132	FE132	Scrap yard near emergency door	DCP	9 Kg
133	FE133	Acid drum storage	DCP	9 Kg
134	FE134	API-II 1st floor Suit- 2 washroom out side	CO_2	4.5 KGS
135	FE135	API-II 1st floor Suit- 2 near crystallization area	FOAM	9 L
136	FE 136	API-II 1st floor Suit- 2 crystallization area near staircase	FOAM	9 L
137	FE 137	API-II 1st floor Suit -2 centrifuge area near CF-1200	CLEAN AGENT	6 KGS

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
138	FE 138	API-II 2nd floor QA office	CLEAN AGENT	6 KGS
139	FE 139	API-II 2nd floor Suit -2 near to R -2200	CO_2	4.5 KGS
140	FE 140	API-II 2nd floor suit -2 near dynamic pass box	FOAM	9 L
141	FE 141	API-II 2nd floor Suit-2 Crystallization area near staircase	CLEAN AGENT	6 KGS
142	FE 142	API II 2nd floor Suit-2 Crystallization area	CO_2	4.5 KGS
143	FE 143	API-II 3rd floor Suit-2 near to R-3230	CO_2	4.5 KGS
144	FE144	API-II 3rd floor Suit-2 near wash room.	FOAM	9 L
145	FE145	Scrap yard inside near emergency door	DCP	25 KG
146	FE146	Scrap yard near filter bag room out side	CO_2	6.5 KG
147	FE147	Scrap yard inside near entrance	CO_2	4.5 KGS
148	FE-148	API -II 1st floor suit-3 near HMI panel	CO_2	4.5 KG
149	FE149	API -II 1st floor suit-3 near crystallization entrance	ABC	9 KG
150	FE150	API -II 1st floor suit-3 near crystallization area near to Washroom outside	Clean agent	6 KG
151	FE151	API -II 1st floor suit-3 near weight machine	CO_2	4.5 KG
152	FE152	API -II 2nd floor suit-3 entrance door	ABC	9 KG
153	FE153	API -II 2nd floor suit-3 near pass box	ABC	9 KG
154	FE154	API -II 2nd floor suit-3 crystallization area near to HMI panel	Clean agent	6KG
155	FE155	API -II 2nd floor suit-3 crystallization area pass box	CO_2	4.5 KG
156	FE156	API -II 3rd floor suit-3 entrance door	ABC	9 KG
157	FE157	API -II 3rd floor suit-3 near washroom	CO_2	4.5 KG
158	FE158	Administration block near QA documentation area inside	CO_2	4.5 KG
159	FE159	API II - Suite II - Ground floor - large scale powder process area -2 Near washroom	FOAM	9 L
160	FE160	API II - Suite II - Ground floor - large scale powder process area -2	Clean Agent	6 Kg

S. No.	FE No.	Location / Area	Type of Fire Extinguisher	Capacity
161	FE161	API II - Suite II- Ground floor - large scale powder process area -2	Clean Agent	6 Kg
162	FE162	API II - Suite II - Ground floor - large scale powder process area -2 Entrance door	Clean Agent	6 Kg
163	FE163	Were house forklift charging area	CO_2	6.5 KGS
164	FE164	Canteen near notice board	CO_2	6.5 KGS
165	FE165	Admin building panel area	CO_2	6.5 KGS
166	FE166	Security main gate	CO_2	6.5 KGS
167	FE167	HT yard	CO_2	6.5 KGS
168	FE168	API-II GROUND FLOOR SMALL scale powder process area	CLEAN AGENT	6 KGS
169	FE169	Transformer yard - near to ETP	ABC	9 KGS
170	FE170	Primary Water Plant Near Ecc Room	CO_2	6.5 KGS
171	FE171	Primary Water Plant Near Ecc Room	CO_2	6.5 KGS
172	FE172	Primary Water Plant Near Ecc Room	FOAM	9 KGS
173	FE173	Primary Water Plant Near Ecc Room	FOAM	9 KGS
174	FE174	Primary Water Plant Near Ecc Room	ABC	9 KGS
175	FE175	Primary Water Plant Near Ecc Room	Clean Agent	6 kgs
176	FE176	Non CCOE Storage Area	FOAM	130 Ltr
177	FE177	FO & HSD Storage Area	FOAM	45 Ltr
178	FE178	Solvent Sampling Shed Area	FOAM	45 Ltr
179	FE179	CCOE Storage Area	FOAM	45 Ltr
180	FE180	Non CCOE Storage Area	FOAM	45 Ltr
181	FE181	Primary Water Plant Near Ecc Room	FOAM	45 Ltr
182	FE182	Primary Water Plant Near Ecc Room	FOAM	45 Ltr
183	FE183	Primary Water Plant Near Ecc Room	ABC	9 KGS

ANNEXURE XIII

XIII. DETAILS OF PERSONNEL PROTECTIVE EQUIPMENT

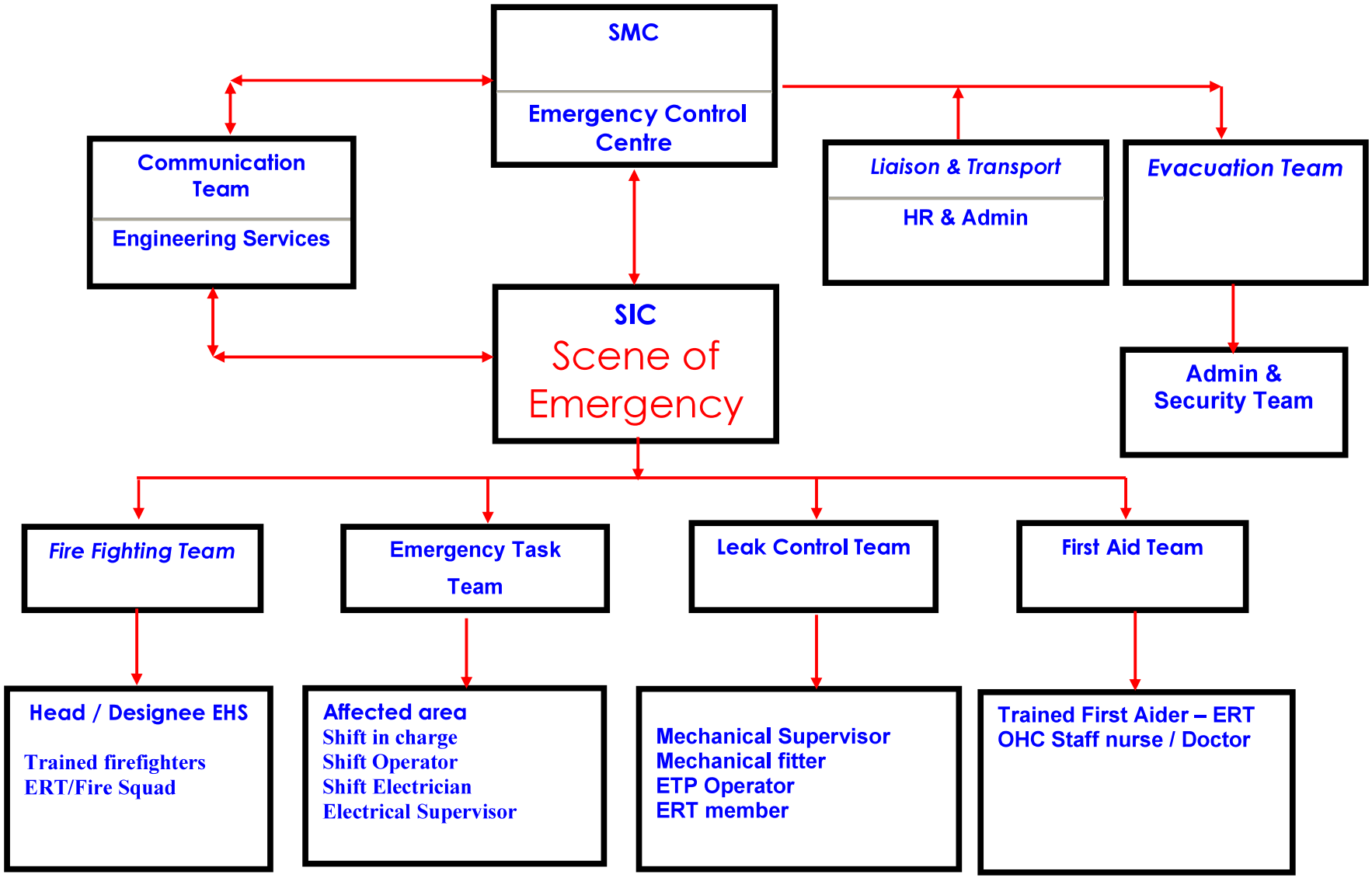
S. No	ITEM	QUANTITY
1	Helmet	20
2	Goggles	50
3	Earmuff and plugs	05/50
4	Disposal mouthpiece	100
5	Full/Half face mask with cartridges	Full face mask 2 Half face mask 5
6	Hand gloves Nitrile Electrical Neoprene Cut resistant Cotton PVC Rubber Leather	 50 2 20 50 50 20 20 10
7	PVC suit/apron	PVC suit 5 Apron 5
8	Gumboots	5
9	Safety Shoes	10
10	Tyvek/Tychem suit	50
11	Disposable cap and shoe cover	100
12	Safety belt	5

ANNEXURE XIV

XIV. DETAILS OF FIRST AID FACILITIES AVAILABLE IN OHC

S.NO	EQUIPMENTS	Qty
1	First aid box	1
2	Stretcher	1
3	AED	1
4	BP apparatus	1
5	Torch light	1
6	Oxygen cylinder	1
7	SDS	1

XV. EMERGENCY RESPONSE TEAM FLOWCHART



XVA. EMERGENCY RESPONSE TEAM RESPONSIBILITIES

Emergency Services

As per the instructions of SMC the team will initiate steps to control the emergency to safely shut down the operations and to minimize the damage effects.

Emergency task team

This team comprises of the following

Leader -	Shift in charge (affected area)	1 no.
Team –	Shift operators (affected area)	3 nos.
	Shift electrician	1 nos.
	Shift mechanic	1 nos.
	Electrical supervisor	1 no.

On hearing the announcement of emergency, the leader will reach the scene of emergency with his team and with necessary personnel protective equipment like SCBA, gloves, PVC suits, etc., and report to the works incident controller.

Leak control team

This team comprises of the following

Leader – Shift In charge (Mechanical - Supervisor)	- 1 no
Team Shift Mechanical Fitters	- 1 no
ETP operator	- 1 no
Trained fire fighters – ERT	- 3 no

The team reports to S.I.C. at the scene of emergency and based on the instructions of S.I.C. carry out suitable actions like firefighting with appropriate equipment, cooling of adjacent equipment and structures containing the spread and firefighting.

First Aid Team

First aid trained employees in shift	- 2 nos.
First aider in the occupational health center	- 1 No.

This team reports to the S.I.C. with ambulance and necessary things like stretcher and as per the instructions, carry out the first aid and rescue requirements for the injured.

Communication team:

Engineering services Head/Designee will be the leader of the Communication team. Instrumentation personnel will report to the SIC and act as messenger and carry out the instructions.

Security personnel:

The security guards on duty and the driver on duty will respond to the emergency call.

The security persons on hearing the emergency siren will ensure the following.

1. Close all gates,
2. Restrict entry of persons and vehicles into the premises
3. To ensure evacuation of all trucks to the outside parking area and contract people to assembly point.
4. To arrange for head count of people at the assembly point
5. Direct all calls and enquiries to the SMC
6. The driver in duty the ambulance and report to the scene of emergency and bring the injured to the OHC and then transport the injured to hospital based on the need.

Evacuation:

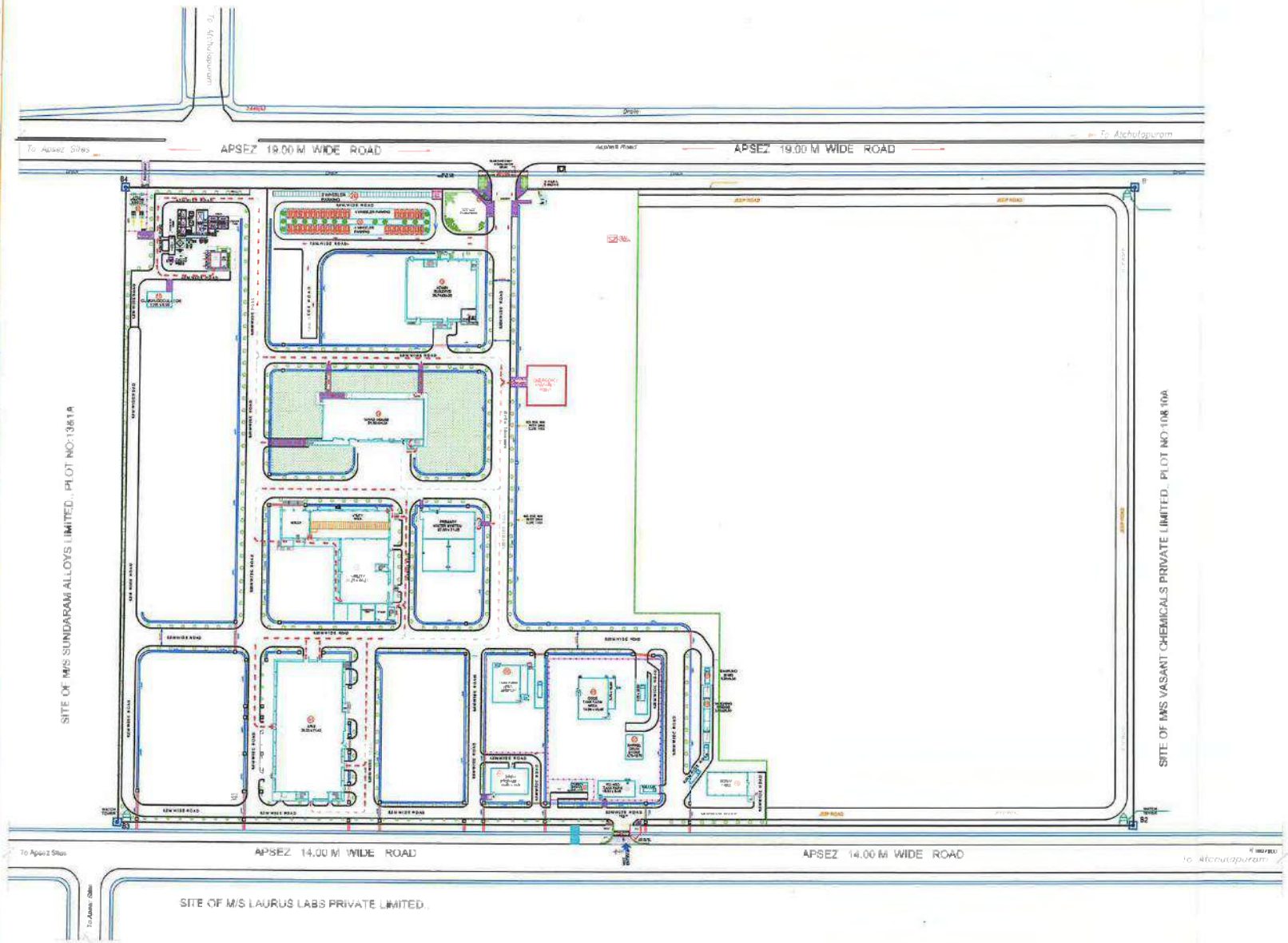
If any evacuation becomes necessary, persons gathered at the assembly points will be transported to the predetermined shelters by available transports. Guest house of Escientia will be used as the shelter area.

Head count:

At the assembly point, the head count will be taken by the HR & Admin department and will be communicated to the site main controller. Verification will be made with the persons present inside the plant and suitable action for search / rescue will be initiated for the missing persons.

First aid:

All the injured will be brought to the first aid center where the doctor / para medical staff will render necessary first aid and refer the cases to hospital for further medical attention depending upon the severity. Necessary transport will be made available for transporting the patients to hospitals.



ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Title	SITE EMERGENCY EXIT MASTER LAYOUT
Layout No.	
Prepared By/ Date	
Reviewed By/ Date	
Approved By/ Date	
Effective Date	

422

Annexure - 16

ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

Order No.852/APPCB/HO/ECS/VSP/2024-315 **Date:23/08/2024.**

STOP PRODUCTON ORDER

Sub: APPCB – HO - ECS - **M/s. Escientia Advanced Sciences Pvt., Ltd.,** Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District – Fire accident took place on 21.08.2024 – Causing pollution problems – **Stop Production Order - Issued - Reg.**

Ref:
1. Consent Order No: APPCB/VSP/VSP/418/HO/CTO/2024 dt. 25.05.2024.
2. Fire accident took place on 21.08.2024 at 02:15 PM at M/s. Escientia Advanced Sciences Pvt., Ltd., APSEZ, Atchutapuram & Rambilli (M), Anakapalli District.
3. Monitoring of Air and Water quality by the Board officials on 21.08.2024 at the industry premises.
4. RO, Visakhapatnam preliminary report dt: 22.08.2024.

* * *

WHEREAS you are operating a industry in the name & style of M/s. Escientia Advanced Sciences Pvt., Ltd., located at Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District and engaged in manufacturing of bulk drug and intermediates.

WHEREAS the Board vide ref. 1st cited issued CTO & HWA to your industry vide order dt. 25.05.2024 valid up to 31.12.2028, subjected to compliance to the conditions.

WHEREAS it was reported vide ref. 2nd cited, that fire accident took place at about 02:15 PM on 21.08.2024 in the premises of M/s. Escientia Advanced Sciences Pvt., Ltd., located at Plot No.11, 11 A, 12 & 12 A, APSEZ, Atchutapuram & Rambilli (M), Anakapalli District in production block.

WHEREAS the Board Officials inspected your industry and monitored Air and Water quality in the surroundings due to the fire accident at the industry and reported the following –

1. The industry is having one production block with Suit – 1, 2, 3 divisions for manufacturing, QA, QC and Process Development lab.
2. The Process development Lab is established in ground floor.
3. Upon the preliminary enquiry, it came to knew that Methyl Tertiary Butyl Ether (MTBE) was leaked from Suit 1 at 1st floor and drained into technical area, electrical panel section and lead to explosion.
4. Immediately firefighting was taken up by neighboring industries i.e., M/s Laurus Laboratories, M/s Pidilite Industries, M/s Cohance Life Sciences, M/s Asian Paints, Abhijeet Ferro Tech, APSDRS, NDRM Team with their firefighting equipment to control the fire. The fire was stopped around 3.30 PM
5. Lot of smoke was emanated from the block till 07.00 PM.
6. During the incident, initially 17 persons were deceased and 15 injured persons were shifted to the Hospital for treatment.
7. The Board officials started monitoring of VOCs in 4 directions continuously to ascertain the dispersion of process emissions from the accident site to monitor the volatile organic compound.

8. Undertaken VOC monitoring outside the accident site with handy VOC meter from 03:00 PM and the monitored values are as follows -
VOC Monitoring data on 21.08.2024

S. No	LOCATION	Range of VOC Values monitored (in ppm)							
	Time	3:00 PM	4:00 PM	5:00PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10.30 PM to 2.0 AM
1.	Security Back Gate (East side)	BDL	BDL	0.1-0.2	BDL	BDL	BDL	BDL	BDL
2.	Security Main gate (North side)	0.3-0.6	0.4-0.5	0.4-0.5	0.3-0.4	0.3-0.4	0.2-0.4	0.1-0.2	0.1 - 0.2
3.	Drum storage area(West side)	0.1-0.2	0.1-0.2	0.1-0.2	BDL	BDL	BDL	BDL	BDL
4.	Laurus Unit- 2 Road(South side)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5.	Near Production Block	0.3-0.8	0.4-0.6	0.3-0.6	0.2-0.4	0.2-0.3	0.1-0.2	0.1-0.2	0.1 – 0.3

Note: BDL – Below detectable Limit (<0.1 ppm)

9. It was observed that the maximum VOC concentration was found 0.8 ppm near production block during monitoring at 03.00 PM. The VOC were also monitored outside the factory premises and the VOC concentrations are found in the range of 0.3 ppm to 0.8 ppm.
10. Further, it was observed that the industry drained out the waste water generated from firefighting into a unlined sump, which is potential to cause contamination of ground water.
11. During the monitoring, samples of contaminated firefighting water at front side of the production block and back side of the production block were collected. The monitoring details are as follows –

S.No.	Parameter	Sample of contaminated firefighting water at front side of the production block	Sample of contaminated firefighting water at back side of the production block
1.	pH	6.36	9.04
2.	Total Suspended Solids	127 mg/lit	118 mg/lit
3.	Total Dissolved Solids	1428 mg/lit	1352 mg/lit
4.	Chemicals Oxygen Demand	336 mg/lit	320 mg/lit

12. From the above, it is observed that the incident of fire accident resulted in discharge of air and water pollutants into the surroundings.
13. The debris and leftover mass in the reactors and other wastes generated due to the fire accident are yet to be cleared and disposed safely as per norms.
14. The operational status of the industry is not suitable to continue further operations of the industry and Potential to cause pollution problems into surrounding environment.

WHEREAS the Board is under the obligation to stop further discharges of air and water pollutants into surrounding environment, since operational status of your industry is not suitable to continue further operations and potential to cause pollution problems.

In view of the above, the Board with the powers vested under section 32 of the Water (Prevention & Control of Pollution) Act, 1974 and section 23 (2) of the Air (Prevention & Control of Pollution) Act, 1981 and amendments thereof, hereby issues **STOP PRODUCTION ORDER** to M/s. Escientia Advanced Sciences Pvt., Ltd., located at APSEZ, Atchutapuram & Rambilli (M), Anakapalli District to immediately stop further operation of the industry in the interest of safeguarding public health and environment protection.

You are hereby directed to note that, should you violate this order and operate the unit, you will be liable for prosecution in the Court of Judicial Magistrate First Class under Sec.41 (2) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec.37 of Air (Prevention and Control of Pollution) Amendment Act, 1987, the punishment for which includes imprisonment for a term which shall not be less than one year six months and which may be extended to six years and with fine, besides imposing Environmental Compensation.

This Order comes into effect from today i.e., 23/08/2024.

B Sreedhar Ias
MEMBER SECRETARY

To
The Occupier,
M/s. Escientia Advanced Sciences Pvt., Ltd.,
Plot No.11, 11 A, 12 & 12 A, APSEZ,
Atchutapuram & Rambilli (M),
Anakapalli District.

Copy to:

1. The Collector & District Magistrate, Anakapalli District for information.
2. The CEE, APPCB, Head Office for information.
3. The JCEE, ZO, Visakhapatnam for information and necessary action.
4. The EE, RO, Visakhapatnam for information and necessary action.

gitally Signed by B
eedhar Ias
ıte: 23-08-2024 18:59:38
ason: Approved

escientia
Escientia Advanced Sciences Private Limited
Plot No. 11, 11A, 12 & 12A, APSEZ, Atchutapuram,
Anakapalli - 531 011, Andhra Pradesh, INDIA.
Telephone : +91 8924 665000
Facsimile : +91 8924 665299
Website : www.escientia.com

23rd September 2024,
Visakhapatnam.

To,
The Environmental Engineer
AP Pollution Control Board
Regional office
Visakhapatnam.

Respected Sir,

Subject: Submission of compliance status against the stop production order

Reference: Order No.852/APPCB/HO/ECS/VSP/2024-315 Dated on 23/08/2024

With reference to the above subject, herewith we are submitting the compliance report for your kind information and reference.

S. No	Observation	Action	Status
09	It was observed that the maximum VOC concentration was found 0.8 ppm near production block during monitoring at 03.00 PM. The VOC were also monitored outside the factory premises and the VOC concentrations are found in the range of 0.3 ppm to 0.8 ppm.	VOC Monitoring is carried out API building through MoEF approved 3rd party on 06.09.2024. Details are enclosed as **Annexure -1**	Compiled
10	Further, it was observed that the industry drained out the wastewater generated from firefighting into a unlined sump, which is potential to cause contamination of ground water.	We Collected approximately 100 KL of firefighting contaminated water from the storm water drain pit to effluent storage tank. Same was send to AETL through online manifest. Details are enclosed as **Annexure -2**	Compiled

We are requesting your good office to acknowledge our letter submission.

Thanking you

Yours Faithfully

For ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

23/09/2024

AUTHORIZED SIGNATORY.

Escientia Advanced Sciences Pvt. Ltd. Atchutapuram (A.P.)

A.P. Pollution Control Board * Regional Office, Visakhapatnam *

Enclosure:

1. Annexure-1 (VOC monitoring reports)
2. Annexure-2 (Effluent disposal manifest copies)

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/09/VOC/1250
	Sample Registration No	: SLPL/VOC/001-010
	Issue Date	: 09.09.2024
	Date of completion of testing	: 06.09.2024
	Date of commencement of testing	: 06.09.2024
Discipline: Chemical	Date of Registration	: 06.09.2024
Group: Atmospheric Pollution	Date of Receipt	: 06.09.2024
Product: VOC Monitoring	Date of Sampling	: 06.09.2024
Packing : --	Location of Sampling	: As given below
Sample Collected Person Details: Mr. K. Gopal	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Partly Cloudy		

S. No.	Sample Code	Name of the Equipment	Units	Result
1	001	Third floor South technical area	PPM	0.1
2	002	Third floor suite -1 Large scale	PPM	0.1
3	003	Third floor suite -1 Intermediate area	PPM	0.1
4	004	Third floor Corridor	PPM	0.1
5	005	Third floor Medium scale production	PPM	1.5
6	006	Third floor Suite -2	PPM	0.1
7	007	Third floor Suite -2 Intermediate storage area	PPM	0.1
8	008	Third floor production	PPM	0.1
9	009	Third floor North Technical Area	PPM	0.1
10	010	Third floor D.C.S Room	PPM	0.1

Note: As per CPCB guidelines no components were detected more than the standard values of 3000ppm and5000ppm.
Equipment Details: Make: Honeywell; Model: MiniRAE 3000
Sr. No: 592-928110; Calibrated On: 14.06.2024 Due On: 13.06.2025.

Verified by
D. Krishna Kalyani
Technical Manager

Authorized Signatory
Allam Satyanarayana
Managing Director

*****End of report*****

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/09/VOC/1251
	Sample Registration No	: SLPL/VOC/011 -023
	Issue Date	: 09.09.2024
	Date of completion of testing	: 06.09.2024
	Date of commencement of testing	: 06.09.2024
Discipline: Chemical	Date of Registration	: 06.09.2024
Group: Atmospheric Pollution	Date of Receipt	: 06.09.2024
Product: VOC Monitoring	Date of Sampling	: 06.09.2024
Packing : --	Location of Sampling	: As given below
Sample Collected Person Details: Mr. K. Gopal	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Partly Cloudy		

S. No.	Sample Code	Name of the Equipment	Units	Result
11	011	Second floor North technical area	PPM	0.1
12	012	Second floor suite -3 Crystalization	PPM	0.1
13	013	Second floor suite 3 Production	PPM	0.1
14	014	Second floor suite 2 Production	PPM	1.1
15	015	Second floor suite -3 Crystalization	PPM	0.1
16	016	Second floor Corridor	PPM	0.1
17	017	Second floor Production Office	PPM	0.1
18	018	Second floor Q C Stability chamber	PPM	0.1
19	019	Second floor Q C Office	PPM	0.1
20	020	Second floor Q C	PPM	0.1
21	021	Second floor suite - 1 Production	PPM	0.1
22	022	Second floor suite - 1 Crystalization	PPM	2.1
23	023	Second floor South Technical	PPM	0.1

Note: As per CPCB guidelines no components were detected more than the standard values of 3000ppm and5000ppm.
Equipment Details: Make: Honeywell; Model: MiniRAE 3000
Sr. No: 592-928110; Calibrated On: 14.06.2024 Due On: 13.06.2025.

Verified by
D. Krishna Kalyani
Technical Manager

***End of report**

Authorized Signatory
Allam Satyanarayana
Managing Director

Note : This report is subject to terms and conditions mentioned overleaf

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No	: SLPL/2024/09/VOC/1252
	Sample Registration No	: SLPL/VOC/024-040
	Issue Date	: 09.09.2024
	Date of completion of testing	: 06.09.2024
	Date of commencement of testing	: 06.09.2024
Discipline: Chemical	Date of Registration	: 06.09.2024
Group: Atmospheric Pollution	Date of Receipt	: 06.09.2024
Product: VOC Monitoring	Date of Sampling	: 06.09.2024
Packing : --	Location of Sampling	: As given below
Sample Collected Person Details: Mr. K. Gopal	Sample collected by	: Sai Laboratories Pvt Ltd
General Environment conditions : Partly Cloudy		

S. No.	Sample Code	Name of the Equipment	Units	Results
24	**024**	First floor Hydronization area	PPM	0.1
25	025	First floor South Technical Area	PPM	0.1
26	026	First floor suite -1 Crystalization	PPM	3.5
27	027	First floor suite -1 Production	PPM	0.1
28	028	First floor suite -1 Centrifreeze	PPM	0.1
29	029	First floor suite -1 Dryer room	PPM	0.1
30	030	First floor QC IAF Room	PPM	6.5
31	031	First floor QC Wash Room	PPM	0.9
32	032	First floor Mechanical Room	PPM	0.1
33	033	First floor suite -3 A.N.F.D Room	PPM	1.7
34	034	First floor suite - 3 Crystalization	PPM	1.0
35	035	First floor suite -3 Centrifreeze Room	PPM	0.1
36	036	First floor suite – 3 Production	PPM	0.1

ISO 9001 - 2015 & OHSAS
Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Sample Registration No : SLPL/VOC/024-040

S. No.	Sample Code	Name of the Equipment	Units	Results
37	037	First floor suite -3 Dryer Room	PPM	0.2
38	038	First floor suite -2 Production	PPM	0.1
39	039	First floor suite -1 Centrifreeze	PPM	0.1
40	040	First floor suite -2 Crystalization	PPM	3.6

Note: As per CPCB guidelines no components were detected more than the standard values of 3000ppm and5000ppm.
Equipment Details: Make: Honeywell; Model: MiniRAE 3000
Sr. No: 592-928110; Calibrated On: 14.06.2024 Due On: 13.06.2025.

Verified by
D. Krishna Kalyani
Technical Manager

End of report

Authorized Signatory
Allam Satyanarayana
Managing Director

Sai Laboratories Pvt. Ltd.

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi
Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Name of the Customer **M/s. Escientia Advanced Sciences Pvt Ltd.** Plot no.11, 11A, 12 and 12A, A.P.S.E.Z, Atchutapuram, Visakhapatnam 531011.(A.P)	Test Report No : SLPL/2024/09/VOC/1253 Sample Registration No : SLPL/VOC/041 -054 Issue Date : 09.09.2024 Date of completion of testing : 06.09.2024 Date of commencement of testing : 06.09.2024
Discipline: Chemical	Date of Registration : 06.09.2024
Group: Atmospheric Pollution	Date of Receipt : 06.09.2024
Product: VOC Monitoring	Date of Sampling : 06.09.2024
Packing : --	Location of Sampling : As given below
Sample Collected Person Details: Mr. K. Gopal	Sample collected by : Sai Laboratories Pvt Ltd
General Environment conditions : Partly Cloudy	

S. No.	Sample Code	Name of the Equipment	Units	Result
41	041	Ground Floor Suite – 1 Powder Processing Area	PPM	0.1
42	042	Ground Floor Hypotent area	PPM	1.1
43	043	Ground Floor Raw Material Storage Area	PPM	0.8
44	044	Ground Floor Small Scale Production Area	PPM	0.1
45	045	Ground FloorNorth Technical Area	PPM	1.3
46	046	Ground Floor South Technical Area	PPM	0.1
47	047	Ground Floor Changing Room	PPM	0.1
48	048	Ground Floor Corridor	PPM	0.1
49	049	Ground Floor Entrance Exit	PPM	0.1
50	050	Ground Floor P.D Room	PPM	0.1

ISO 9001 - 2015 & OHSAS Certified Company

Sai Laboratories Pvt. Ltd.

Recoginized by : M.o.E.F., G.O.I., New Delhi

Flat No. 211, Challa Estate, Erragadda Main Road, Hyderabad-500 018.
Mobile : 8501880764
Email :sailab2004@gmail.com | Website : www.sailabs.in

TEST REPORT

Sample Registration No : SLPL/VOC/041 -054

51	051	Ground Floor North Side	PPM	0.1
52	052	Ground Floor East Side	PPM	0.1
53	053	Ground Floor South Side	PPM	0.1
54	054	Ground Floor West Side	PPM	0.1

Note: As per CPCB guidelines no components were detected more than the standard values of 3000ppm and5000ppm.

Equipment Details: Make: Honeywell; Model: MiniRAE 3000
Sr. No: 592-928110; Calibrated On: 14.06.2024 Due On: 13.06.2025.

Verified by
D. Krishna Kalyani
Technical Manager

LABORATORIES PVT. Hyderabad

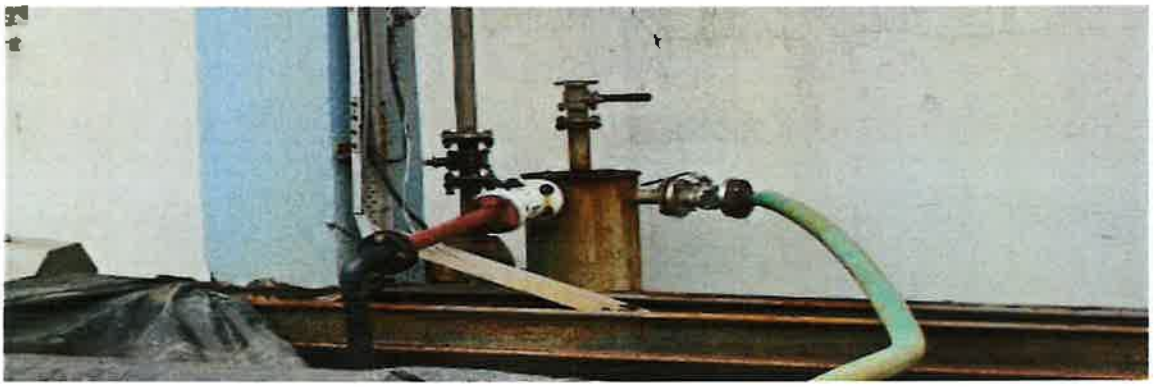
Authorized Signatory
Allam Satyanarayana
Managing Director

End of report

Sai Laboratories Pvt. Ltd.

Note : This report is subject to terms and conditions mentioned overleaf

Annexure-2



Annexure-2

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's Name & Mailing Address (including PhoneNo. and email)	**Name :** ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED **Address:**Plot no. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, **Phone No :**9849004808 **Email:**amballasatyanarayana@escientia.com
2	Sender's Authorisation No:	APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.05.2024
3	Manifest Document No:	153343
4	Transporter Name & Mailing Address: (including PhoneNo. and email):	**Name:** MADHULATHA COMMUNICATION TRAVELS **Address:**37-11-65/9, VIGNESWARA APARTMENT 1, SF 2, PATTABHIREDDY GARDENS, VISAKHAPATNAM 53000 **Phone No :**9866278566 **Email :**madhulatha1971@gmail.com
5	Type of Vehicle:	Tanker
6	VehicleRegistration No:	AP39TG6779
7	Receiver's Name& mailingAddress, (including PhoneNo. and Email:	**Name :** Atchutapuram Effluent Treatment Ltd-AETL **Address:**Atchutapuram, Visakhapatnam District , **Phone No :**9177844638 **Email:**admin@aetltd.org
8	Receiver's Authorisation No:	CFO
9	Waste Description:	a) Effluent Waste - LTDS
10	Total Quantity No. of Containers:	a) 20 - KL
11	Physical Form:	a) Liquid
12	Special Handling Instructions & Additional Information:	Use PPE, use hand glove, use helmet
13	Sender's Certificate:	I hereby declare that the contents of the consignment are fully and accuratelydescribed above by proper shipping name and are categorised, packed, marked and labelled, and are in all respects in proper conditions for transport by roadaccording to applicable national government regulations.
	Name and stamp:	Signature: Acknowledged from IP: 14.97.151.130 D D M M Y Y Y Y 1 0 0 9 2 0 2 4
14	Transporter acknowledgement of receipt of Wastes:	
	Name and stamp:	Signature: Acknowledged from IP: 100.107.194.238 D D M M Y Y Y Y 1 0 0 9 2 0 2 4
15	Receivers certification for receipt of hazardous and other waste:	
	Name and stamp:	Signature: Acknowledged from IP: 103.22.174.78 D D M M Y Y Y Y 1 1 0 9 2 0 2 4

Annexure-2

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's Name & Mailing Address (including PhoneNo. and email)	**Name :** ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED **Address:**Plot no. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, **Phone No :**9849004808 **Email:**amballasatyanarayana@escientia.com
2	Sender's Authorisation No:	APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.05.2024
3	Manifest Document No:	153575
4	Transporter Name & Mailing Address: (including PhoneNo. and email):	**Name:** MADHULATHA COMMUNICATION TRAVELS **Address:**37-11-65/9, VIGNESWARA APARTMENT 1, SF 2, PATTABHIREDDY GARDENS, VISAKHAPATNAM 53000 **Phone No :**9866278566 **Email :**madhulatha1971@gmail.com
5	Type of Vehicle:	Tanker
6	VehicleRegistration No:	AP04TU3186
7	Receiver's Name& mailingAddress, (including PhoneNo. and Email:	**Name :** Atchutapuram Effluent Treatment Ltd-AETL **Address:**Atchutapuram, Visakhapatnam District , **Phone No :**9177844638 **Email:**admin@aetltd.org
8	Receiver's Authorisation No:	CFO
9	Waste Description:	a) Effluent Waste - LTDS
10	Total Quantity No. of Containers:	a) 20 - KL
11	Physical Form:	a) Liquid
12	Special Handling Instructions & Additional Information:	Use PPE, use hand glove, use helmet
13	Sender's Certificate:	I hereby declare that the contents of the consignment are fully and accuratelydescribed above by proper shipping name and are categorised, packed, marked and labelled, and are in all respects in proper conditions for transport by roadaccording to applicable national government regulations.
	Name and stamp:	Signature: Acknowledged from IP: 49.43.225.130 D D M M Y Y Y Y 1 1 0 9 2 0 2 4
14	Transporter acknowledgement of receipt of Wastes:	
	Name and stamp:	Signature: Acknowledged from IP: 100.121.195.212 D D M M Y Y Y Y 1 1 0 9 2 0 2 4
15	Receivers certification for receipt of hazardous and other waste:	
	Name and stamp:	Signature: Acknowledged from IP: 103.22.174.78 D D M M Y Y Y Y 1 2 0 9 2 0 2 4

Annexure-2

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's Name & Mailing Address (including PhoneNo. and email)	**Name :** ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED **Address:**Plot no. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, **Phone No :**9849004808 **Email:**amballasatyanarayana@escientia.com
2	Sender's Authorisation No:	APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.05.2024
3	Manifest Document No:	153882
4	Transporter Name & Mailing Address: (including PhoneNo. and email):	**Name:** MADHULATHA COMMUNICATION TRAVELS **Address:**37-11-65/9, VIGNESWARA APARTMENT 1, SF 2, PATTABHIREDDY GARDENS, VISAKHAPATNAM 53000 **Phone No :**9866278566 **Email :**madhulatha1971@gmail.com
5	Type of Vehicle:	Tanker
6	VehicleRegistration No:	AP31TE2499
7	Receiver's Name& mailingAddress, (including PhoneNo. and Email:	**Name :** Atchutapuram Effluent Treatment Ltd-AETL **Address:**Atchutapuram, Visakhapatnam District , **Phone No :**9177844638 **Email:**admin@aetltd.org
8	Receiver's Authorisation No:	CFO
9	Waste Description:	a) Effluent Waste - LTDS
10	Total Quantity No. of Containers:	a) 20 - KL
11	Physical Form:	a) Liquid
12	Special Handling Instructions & Additional Information:	Use PPE, use hand glove, use helmet
13	Sender's Certificate:	I hereby declare that the contents of the consignment are fully and accuratelydescribed above by proper shipping name and are categorised, packed, marked and labelled, and are in all respects in proper conditions for transport by roadaccording to applicable national government regulations.
	Name and stamp:	Signature: Acknowledged from IP: 14.97.151.130 D D M M Y Y Y Y 1 2 0 9 2 0 2 4
14	Transporter acknowledgement of receipt of Wastes:	
	Name and stamp:	Signature: Acknowledged from IP: 192.168.1.8 D D M M Y Y Y Y 1 2 0 9 2 0 2 4
15	Receivers certification for receipt of hazardous and other waste:	
	Name and stamp:	Signature: Acknowledged from IP: 103.22.174.78 D D M M Y Y Y Y 1 3 0 9 2 0 2 4

Annexure-2

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's Name & Mailing Address (including PhoneNo. and email)	**Name :** ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED **Address:**Plot no. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, **Phone No :**9849004808 **Email:**amballasatyanarayana@escientia.com
2	Sender's Authorisation No:	APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.05.2024
3	Manifest Document No:	154102
4	Transporter Name & Mailing Address: (including PhoneNo. and email):	**Name:** MADHULATHA COMMUNICATION TRAVELS **Address:**37-11-65/9, VIGNESWARA APARTMENT 1, SF 2, PATTABHIREDDY GARDENS, VISAKHAPATNAM 53000 **Phone No :**9866278566 **Email :**madhulatha1971@gmail.com
5	Type of Vehicle:	Tanker
6	VehicleRegistration No:	AP31TW1134
7	Receiver's Name& mailingAddress, (including PhoneNo. and Email:	**Name :** Atchutapuram Effluent Treatment Ltd-AETL **Address:**Atchutapuram, Visakhapatnam District , **Phone No :**9177844638 **Email:**admin@aetltd.org
8	Receiver's Authorisation No:	CFO
9	Waste Description:	a) Effluent Waste - LTDS
10	Total Quantity No. of Containers:	a) 20 - KL
11	Physical Form:	a) Liquid
12	Special Handling Instructions & Additional Information:	Use PPE, use hand glove, use helmet
13	Sender's Certificate:	I hereby declare that the contents of the consignment are fully and accuratelydescribed above by proper shipping name and are categorised, packed, marked and labelled, and are in all respects in proper conditions for transport by roadaccording to applicable national government regulations.
	Name and stamp:	Signature: Acknowledged from IP: 14.97.151.130 D D M M Y Y Y Y 1 3 0 9 2 0 2 4
14	Transporter acknowledgement of receipt of Wastes:	
	Name and stamp:	Signature: Acknowledged from IP: 100.102.180.60 D D M M Y Y Y Y 1 3 0 9 2 0 2 4
15	Receivers certification for receipt of hazardous and other waste:	
	Name and stamp:	Signature: Acknowledged from IP: 103.22.174.78 D D M M Y Y Y Y 1 4 0 9 2 0 2 4

Annexure-2

FORM 10
[See rule 19 (1)]
MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's Name & Mailing Address (including PhoneNo. and email)	**Name :** ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED **Address:**Plot no. 11, 11A, 12 & 12A, APSEZ, Atchutapuram, Visakhapatnam, **Phone No :**9849004808 **Email:**amballasatyanarayana@escientia.com
2	Sender's Authorisation No:	APPCB/VSP/VSP/418/HO/CTO/2024 dated 25.05.2024
3	Manifest Document No:	155369
4	Transporter Name & Mailing Address: (including PhoneNo. and email):	**Name:** MADHULATHA COMMUNICATION TRAVELS **Address:**37-11-65/9, VIGNESWARA APARTMENT 1, SF 2, PATTABHIREDDY GARDENS, VISAKHAPATNAM 5 **Phone No :**9866278566 **Email :**madhulatha1971@gmail.com
5	Type of Vehicle:	Tanker
6	VehicleRegistration No:	AP31TE2499
7	Receiver's Name& mailingAddress, (including PhoneNo. and Email:	**Name :** Atchutapuram Effluent Treatment Ltd-AETL **Address:**Atchutapuram, Visakhapatnam District , **Phone No :**9177844638 **Email:**admin@aetlltd.org
8	Receiver's Authorisation No:	CFO
9	Waste Description:	a) Effluent Waste - LTDS
10	Total Quantity No. of Containers:	a) 20 - KL
11	Physical Form:	a) Liquid
12	Special Handling Instructions & Additional Information:	Use PPE, use hand glove, use helmet
13	Sender's Certificate:	I hereby declare that the contents of the consignment are fully and accuratelydescribed above by proper shipping name and are categorised, packed, marked and labelled, and are in all respects in proper conditions for transport by roadaccording to applicable national government regulations.
	Name and stamp:	Signature: Acknowledged from IP: 14.97.151.130 D D M M Y Y Y Y 2 0 0 9 2 0 2 4
14	Transporter acknowledgement of receipt of Wastes:	
	Name and stamp:	Signature: Acknowledged from IP: 100.121.117.238 D D M M Y Y Y Y 2 0 0 9 2 0 2 4
15	Receivers certification for receipt of hazardous and other waste:	
	Name and stamp:	Signature: Acknowledged from IP: 103.22.174.78 D D M M Y Y Y Y 2 1 0 9 2 0 2 4

Grading of Pharma Industry based on the compliance Assessment for Prevention of Fire, Explosion & Toxic Release Incidents - Year 2023

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R. No, Name & Address of Factory	104374
	Escientia Advanced Sciences Pvt. Ltd., APSEZ, Sy. No. 1P, Gurujalapalem -11.

DCIF Concerned	**Sri. V. Suresh**

Score

S. No Range		Subject	Max Score	Achievement		
From	Up to			1st	2nd	3rd
1	1	Information & Instructions	**3**	3	3	3
2	3	Qualifications& Training	**9**	9	9	9
4	5	House Keeping	**2**	2	2	2
6	7	Risk Assessment	**7**	7	7	7
8	8	Safe Operating Procedures	**4**	1	4	4
9	9	Emergency Management	**5**	3.9	5	5
10	12	Maint. & Condition Monitoring	**3**	2.1	2.1	3
13	13	Work Permit System	**3**	2	2.5	2.5
14	22	Process Safety	**21**	13	17	17.5
23	29	Static Electricity	**5**	5	5	5
30	50	Fire Protection	**21**	19.5	19.5	20
51	62	Storage and Handling	**9**	8	8	8
63	64	Equipment Safety	**5**	4.5	4.5	4.5
65	65	Safety Audit	**3**	2	2	2.5
		Total	**100**	**82**	**90.6**	**93.5**

Grading

Grade	Score Range			
A+	Above	97	Up to	100
A	Above	90	Up to	97
B	Above	80	Up to	90
C	Above	70	Up to	80
D	Above	60	Up to	70
E	Above	50	Up to	60
F	Up to	50		

Assessment History		
Name & Designation of Assessor	**Date of Assessment**	**Grade Achieved**
Sri. V. Suresh, DCIF, VSP.	10-11-2024	**B**
Sri. V. Suresh, DCIF, VSP.	**31-01-2024**	**A**
Sri. P. Chinna Rao, IF, VSP-II.	**30-04-2024**	**A**

Deputy Chief Inspector of Factories,
Visakhapatnam.

Statement showing Grading of Pharma Industry based on the compliance Assessment for Prevention of Fire, Explosion & Toxic Release Incidents - Year 2023				
S. No.	R.NO	Name of the Factory	Achievement Max Score 100	GRADE
1	54795	Pharma Zell (Vizag) (P) Ltd, Plot No. 115, JNPC, Parawada	90.25	A
2	54971	Deccan Fine Chemicals (I) Pvt Ltd, Kesavaram, Venkatanagaram, Payarakaraopeta	94.5	A
3	104530	Deccan Fine Chemicals India Pvt. Ltd,SEZ, Rajavaram and Kesavaram (Villages), Venkatanagaram (Post), Payakaraopeta (M), Visakhapatnam – 531 127.	95.5	A
4	104207	Alivira Animal Health Ltd., Plot No. 104, Part of 112 & 113, Ramky Pharma city, SEZ, JNPC, Parawada, Visakhapatnam -531019.	81.6	B
5	104332	Laurus Labs Ltd, Unit-5, Plot No. 102, 103, Ramky Pharmacity India Ltd, SEZ, Parawada - 531021	82.25	B
6	104211	Pfizer Healthcare India Private Ltd., Plot No.117 SEZ, JNPC, Parawada.	82.25	B
7	54743	Torrent Pharmaceuticals Ltd, Plot No. 77, J.N. Pharmacity, Thanam (v), Parawada (M) Anakapalli – Dist.	85	B
8	104352	Vasudha Pharma Chem (P) Ltd, Unit - 4, Plot No. 1, JNPC, Parawada	82.75	B
9	104391	Escientia Advanced Sciences Pvt. Ltd., APSEZ, Sy. No. 1P, Gurujalapalem -11.	82	B
10	104123	Mahi Drugs (P) Ltd, Plot no. 82, JNPC, Parawada.	81.5	B
11	54865	Mahidhara Chemicals (P) Ltd, Plot No. 81, J.N. Pharma City, Parawada (M)	86.5	B
12	54745	Vijayasri Organics Ltd, Plot No. 9, J.N. Pharmacity, Parawada(M)	81.5	B
13	104666	Biocon Biosphere Limited, Plot No. 95, SEZ, JNPC, Parawada, Anakapalli	83	B
14	104201	Ajonomoto Biopharma Services Pvt Ltd., Plot No.121, JNPC, Parawada	78.75	C

15	104186	Apitoria Pharma Unit-VI, Plot No.17A, E- Bonangi (V), Parawada (M), Visakhapatnam.	70.75	C
16	54773	Laurus Labs Limited, Unit-1, Plot No. 21, J.N. Pharma City, Thadi (V), Parawada(M)	74.25	C
17	104227	M/s. Lupin Manufacturing Solutions Limited, Plot No. 130, Road No. 11, J.N. Pharma city, Parawada (Mandal), Anakapalli-531019.	72.25	C
18	104206	Laurus Labs Ltd.,Unit- III ,Plot No.1B, JNPC, Parawada.	71.25	C
19	104095	Mylan Laboratories Ltd, unit - 10, Plot No. 66, Ramkey Pharma City (India) Ltd, SEZ, JNPC, Parawada(M)	77	C
20	54915	Mylan Laboratories, Unit-9, Plot No. 5, J.N. Pharma City, Thanam (V), Parawada(M)	75	C
21	104428	Asian Paints Ltd, S.no.3,4 ,UDL, IC Pudi, Rambilli.	72.5	C
22	54965	Eisai Pharmaceuticals India Pvt Ltd, Plot No. 96, 97, 98, 124, 126, Ramky Pharma City, Parawada(M) -531301.	78.55	C
23	54985	Avra Laboratories Pvt Ltd, Plot No. 48, Road No.7, JNPC, Parawada (M).	71.25	C
24	104140	JPR Labs (P) Ltd, Plot No. 74-A, JNPC, Thanam (V), Parawada (M).	70.95	C
25	104293	Porus Laboratories (P) Ltd., Plot No. 64, JNPC, Parawada.	77.05	C
26	54892	Smilax Laboratories (P) Ltd, Unit - IV, Plot No. 40, JNPC, Parawada (M).	75.15	C
27	54901	Viyash Life Sciences (P) Ltd, Plot No. 28, J.N. Pharma City, Thanam(V), Parawada (M).	77.5	C
28	104367	Laurus Labs Private Ltd, Unit-IV, Plot no.25,25-K,APSEZ Denotified Area, Lalamkoduru,Rambilli, Atcutapuram.	71.9	C
29	104460	Rakshit Drugs Pvt Ltd, Plot No. 4, JNPC, Parawada (M).	73.6	C
30	54980	SNF India Pvt Ltd, Plot No. 19, JNPC, Parawada(M)	76.5	C

31	104028	Stillbene Biopharma Private Ltd, Plot No. 53, J.N. Pharma City, Parawada(M)	75	C
32	54925	Swetha Industries, Plot No. 158 &159, APIIC, Industrial Park, Parawada (M).	75.75	C
33	104403	Vansh Life Sciences Pvt. Ltd., Plot no.73, NPC, Parawada.	72.95	C
34	104193	Excel Industries Limited, Plot No. 15 & 15A, APSEZ, Atchutapuram (M).	74.95	C
35	104043	Sri Vyjayanthi Labs (P) Ltd, Plot No. 27/9, J.N. Pharma City, Parawada (M)	74.6	C
36	104427	Cohance Life Sciences (Formerly R.A. Chem Pharma Limited), Plot No. 27C, De- Notified area, APSEZ, Gurajapalem Village, Rambilli (M), Atchuthapuram, Anakapalli – Dist.	70.5	C
37	104492	Solara Active Pharma Sciences Limited, Plot no.3B,3C,2d,2p, 2A1, APIIC, APSEZ, Acthutapuram (V), Rambilli.	72.4	C
38	104405	Porus Laboratories Pvt.Ltd., Unit - VI , Plot No. 2 A, 2B, & 2 C, APIIC - SEZ, Atchutapuram & Rambilli (M)	74	C
39	104018	Hetero Labs Ltd, Unit IX, Plot No. 2, Hetero Infrastructure SEZ Ltd, N. Narasapuram (V), Nakkapalli	73.75	C
40	104017	Hetero Drugs Ltd, Unit - IX, Plot No. 1, Hetero Infrastructure SEZ Ltd, N.Narasapuram, Nakkapalli.	74.95	C
41	54782	Hetero Labs Ltd, Unit - III, Sy.No. 126, 150, 151 N. Narasapuram(V), Nakkapalli.	76.5	C
42	104127	Vasant Chemicals (P) Ltd, Plot No. 10 & 10 A , Western Sector, APSEZ, Atchutapuram, VSP.	78	C
43	104145	Sionc Pharma Pvt Ltd, Unit-II, Plot No. 25, JNPC, Parawada,	77	C
44	104638	Spar Pharma LLP, Plot No. 3A, J.N. Pharmacity, Parawada	72.25	C
45	104195	Honour Labs Limited, Unit-III, Plot No.138 & 125, N.Narsapuram (V), Nakkapalli (M).	73	C
46	104354	GMFC Labs Pvt. Ltd, Sy.no.27 B,27 B 15, Denotified Area APSEZ, Rambilli.	71.25	C

47	104630	Ocimum Labs (P) Ltd., Plot No. 27A42, 27A42B, 27A43, APSEZ, De-Notified Area, Rambilli	70.8	C
48	104622	Ritvis Labs (P) Ltd, Plot No. 27AB, 27A34, De-Notified area, APSEZ, Lalamkoduru (V), Rambilli (M)	70.7	C
49	104670	Laurus Synthesis, (p) Ltd., Unit - 2., Plot No.18A1, De - Notified area, APSEZ, Moturupalem & Gurajapalem(V), Rambilli (M).	76.75	C
50	104089	K.R.S.Pharmaceuticals(P) Ltd. Plot no.26, JNPC, Thanam(V), Parawada(M).	71	C
51	104306	Virchow Drugs Ltd, Unit-II Plot No. 13-B, J.N Pharmacity,Parawada	70.65	C
52	104002	Kanoria Chemicals & Industry Ltd, Plot No. 32, J.N. Pharma City, Parawada (M).	73	C
53	104669	Lotus Botanical LLP, Plot No. 27 A 39 A, De- Notified Area, APSEZ, Lalam koduru, Rambilli (M).	75.5	C
54	54667	Divi's Laboratories Ltd, Unit-II, Chippada (v), Bhimili (m)	73.05	C
55	104536	Salvias Pharma Pvt. Ltd., Plot No.5J1, APSEZ, De-Notified area, Atchutapuram, Nakkapalem (v), Rambilli (M), Anakapalli - Dist.	70.75	C
56	2868	M/s. Gland Pharma Limited, Unit -I, Block -C, PHASE -I, VSEZ, Duvvada.	74.4	C
57	104365	Aragen Life Science Pvt Ltd, Unit-II, Plot no.94, SEZ,Ramky pharmacity,Parawada.	66.25	D
58	54966	Arora Mathey Ltd, Plot No. 50 - B, JNPC, Parawada(M)	67.5	D
59	104171	Aurobindo Pharma Ltd., (Unit-17), Plot No: 41, JNPC, Parawada, VSP	66.5	D
60	104199	Gland Pharma Ltd., Plot No.49 & 50, JNPC, Parawada. 531019.	66.5	D
61	104237	M/s Metrochem API Pvt. Ltd, Unit-IV Plot No. 34-B, 40-Br 60B, JNPC, Parawda	64.25	D
62	104227	SuvenPharmaceuticals Ltd, Plot No. 65,66,67, JNPC, Sy. No. 35,36,38,39,41 Part, 37, 60 Thanam(v), Parawada(m)-531019	67.1	D

63	104393	Granules India Limited,Unit-5, Plot. No.30, JNPC, Thanam, Parawada.	64.2	D
64	104372	Innovare Labs P Limited, Sy.no.23 AB, Atchutapuram, Rambilli	60.5	D
65	54773	Laurus Labs Limited, Unit-1, Plot No. 21, J.N. Pharma City, Thadi (V), Parawada(M)	69.75	D
66	104178	M/s. Laurus Synthesis (P) Ltd., Plot No.74 B, JNPC, Parawada(M).	68.25	D
67	54929	Raks Pharma (P) Ltd, Plot No. 68, J.N. Pharma City, Parawada(M)	68.25	D
68	54842	Rakshit Pharmaceuticals Ltd, Plot No. 68-A, JNPC, Parawada(M).	69.5	D
69	54751	Vasudha Pharma Chem Ltd, Unit no. 2, Plot No. 79, J.N. Pharma City, Parawada(M)	68.5	D
70	104006	Vasudha Pharma Chem Ltd, Unit no. III, Plot No. 23-24, J.N. Pharma City, Parawada(M)	65.15	D
71	104184	Actis Generics (P) Ltd., Sy.No.60-C, Thanam (V), JNPC, Parawada (M).	66.5	D
72	104180	Admiron Life Sciences (P) Ltd., Sy.No.118,138,139& 161, Thadi (V), JNPC, Parawada (M).	65.8	D
73	104108	Aktinos Pharma Pvt Ltd, Unit-II Sy.No. 51, 53, 54, 68, 69, 70, 80-D Road No. 20, JNPC, Parawada.	63.2	D
74	54958	Alkali Metals Ltd, Plot No. 38, JNPC, Parawada(M)	62.9	D
75	104158	Azico Biophore India (P) Ltd., Plot No. 40-A, JNPC, Parawada (M).	65.8	D
76	104489	Biocon Limited,Plot 95, Sez Jnpc, Paravada	68.75	D
77	54943	Enanti Labs Pvt Ltd, S.No. 16051, Plot No. 60D, JNPC, Parawada(M)	63.4	D
78	104152	Hygro Chemicals Pharmatek Pvt Ltd, Unit - III, Plot No. 51 - A, Thanam (V), Parawada (M).	10	D

79	104337	Sri Sai Chandana Active Pharmaceuticals ingredient (P) Ltd,SY.no.52,JNPC,Thanam(V),Parawada	68.15	D
80	104250	Laurus Labs Ltd, (Unit-II) Plot No. 19, 20,21, Pudimadaka Road, Western Sector, APSEZ, Atchutapuram	69	D
81	104290	Laurus Labs Limited, Unit-6, Plot No. 22 D & 22 E, Gurajalapalem (V), Rambilli (M).	67.75	D
82	104468	jPR Labs (P) Ltd, Plot No. 74-A, JNPC, Thanam (V), Parawada (M).	65.25	D
83	104485	Synthokem Labs P Ltd, Plot no.75, JNPC, Parawada-531021	64.5	D
84	104107	S.V.R.Drugs (P) Ltd, Plot no. 3, JNPC, Parawada(M).	66.5	D
85	104672	Devi Pharmatech (P)Ltd., Plot No. 12 & 15, APIIC, IP, PHASE –III, parawada.	61	D
86	104326	Assurgen Pharma (P) Ltd, Plot No. 24 P & 25 P Lalamkoduru(V) Rambilli (M)	66.45	D
87	104533	Shodhana Laboratories Limited, Plot No. 69, J.N. Pharmacity, Parawada, Visakhapatnam – 531 021.	67.5	D
88	104229	Srikar Laboratories, Plot No.32A, JNPC, Parawada.	64.25	D
89	54989	Vimal Drugs, Plot No. 39/B, Road No. 1, JNPC, Parawada (M)	61.75	D
90	104535	RANSH PHARMA PRIVATE LIMITED,Plot No.4N, APSEZ, De-Notified Area, Atchutapuram Gurajapalem (V), Rambilli (M)	69	D
91	104557	A.R LIFE SCIENCES PVT LTD,Plot No.1B, De-Notified Area of APSEZ, APIIC, Atchutapuram, Pudi (V), Rambilli (M), Visakhapatnam 531 011	63.75	D
92	104263	Styrax Pharma (p) Ltd, Plot No. 27-B, JNPC, Parawada	66.5	D
93	104441	Optimus Drugs P Ltd Unit-II, JNPC, Parawada.	70	D
94	104444	RUI Laboratories Pvt Ltd, Plot no.4J, 4K, APSEZ, De-notified area, Rambilli (M).	64.1	D

95	104632	Area, APSEZ, Atchutapuam, Lalam Koduru (V), Rambilli (M)	61.75	D
96	104647	Kreative Actives Pvt. Ltd., Sy. No. 195P, 196P, 197P & 203P, Plot No. 15B6, De- Notified Area, APSEZ, Atchutapuram, Rambilli.	67	D
97	104505	Vasista Pharmachem Limited, Plot No. 27B1,B2,B13 & B14, De-Notified Area, APSEZ, APIIC, Lalamkoduru (V), Rambilli (M)	67.65	D
98	104394	Valens Molecuels Pvt Limited (formerly Posh Chemicals P Ltd),S.no.18P,19P, 25P, Plot no.24,Gurajapalem,Atcutapuram	61.5	D
99	104558	CRYSTAL PHARMAA CHEM,Plot No. 41, Industrial Estate,, APIIC, SEZ-De-Notified Area, Atchutapuram, Gurajapalem (V), Rambilli (M), Visakhapatnam 531 011.	65.75	D
100	104500	Lee Pharma Plot No. 22A22B, APIIC, Lalamkoduru	66.2	D
101	104371	Vinta Laboratoies, Plot.no.23 D,APIIC Ltd, Lalamkoduru,Rambilli.	65.25	D
102	104651	Siflon Pharma (P) Ltd, Plot No. 5B & 5B/2, APSEZ, De-Notified area, Gurjupalem (V), Rambilli (M), Anakapalli. Dt.	63.35	D
103	104483	M/s. Symbio Generrics India (p) Ltd., Plot No. 22H, Sy. No. 34P & 35P, Rambilli.	61.25	D
104	104529	Synaptics labs private limited, Plot No. 28-B, Sy. No. 56 Part & 76 Part, De-notified Area, APSEZ, Lalamkoduru (V), Rambilli (M), Visakhapatnam – 531 011	66.45	D
105	104595	Sai Sreyas Pharmaceuticals (P) Ltd, Plot No. 61-A, Road No.2, JNPC, Parawada, Visakhapatnam.	64.25	D
106	104222	Sai Ram Chemicals, Plot No. 80C. JNPC, Parawada	61.1	D
107	104549	Ceyone Life Sciences Private Limited,Plot No.4M, 4M1 & 4L, APSEZ, De-Notified Area, Atchutapuram Lalamkoduru (V), Rambilli (M), Visakhapatnam 531 011	60.25	D
108	104675	Susrutha Bio Sciences Pvt. Ltd., Sy. No. 17 Part, De-Notified Area, APSEZ, Lalamkoduru (V), Rambili (M).	66.5	D
109	104429	Natco Pharma Ltd, Plot no.88 & 90 JNPC,SEZ,Parawada.	61.25	D
110	104436	Biophore India Pharmaceuticals P Ltd, Plot no.80-A, Road no.5,JNPC,Parawada.	65.2	D

111	104642	Snehaa Pharma Chem Private Limited, Plot No. 27C2, APSEZ, De-Notified Area, Rambilli M)	67.75	D
112	104016	Sainor Life Sciences (P) Ltd, Plot No. 59E, J.N. Pharma City, Parawada(M)	61.25	D
113	104344	Srini Pharmaceuticals Pvt Ltd, Plot no.47, JNPC, Parawada,	61.75	D
114	104567	ATCHUTA LABORATORIES PRIVATE LIMITED,Plot No 4I/ B, APSEZ, Denotified area, Atchutapuram, Rambilli (M), Visakhapatnam - 530011.	66.75	D
115	104676	Synac Pharmaceuticals (P) Ltd., Plot No. 31D, JNPC, Thanam (v), Parawada.	61.25	D
116	104674	Azico Pharmaceuticals (P) Ltd., Sy. No. 26,27,28,29, Plot No. 31C, Tadi (V), JNPC, Parawada	66.75	D
117	54986	Synergene Active Ingredients Pvt Ltd, (Unit -II), Plot No. 59-D, JNPC, Parawada(M),	62.5	D
118	54787	Chemeca Drugs Pvt. Ltd., Plot No.7, J.N. Pharma city, Parawada, Visakhapatnam.	59.75	E
119	54926	Corey Organics (P) Ltd, S.No. 4 & 5, Plot No. 35, Road No. 1, J.N. Pharma City, Parawada (M)	53.25	E
120	54747	Granules India Ltd, Plot No. 8, J.N. Pharma City, Tadi(v), Parawada(M), Pin. 531019.	59.5	E
121	104129	Synnat Pharma Pvt Ltd, Plot No 6 A, Thanam (V), JNPC, Parawada - 19.	58.25	E
122	54949	Tagoore pharma (Formerly known as Angels Pharma India P Ltd,) Plot No. 12, JNPC, Parawada (M)	52.45	E
123	104212	Sternchem Pharma LLP, Plot No.59 - C,55. JNPC, Parawada.	56.95	E
124	54945	Verdant Life Sciences Pvt Ltd, Plot No. 55, JNPC, Parawada(M)	59.25	E
125	104611	Stereokem Pharmaceuticals (P) Ltd., Plot No. 27A22, Sy.No. 14P, De-Notified area, APSEZ, Lalamkoduru (V), Rambilli (M),	55.25	E
126	104634	Spansules Pharmatech (P) Ltd., Plot No. 27A23, De-Notified Area, APSEZ, Lalam Koduru (V), Rambilli (M).	52	E

127	104519	Span Life Sciences Private Limited, Plot no.4G & 4H, APIIC, Gurajapalem (V), Denotified area, SEZ, Atchutapuram, Rambilli (M),Visakhapatnam 531011	56.9	E
128	104336	Sanpra Synthesis P Ltd, Plot.no.22- C,APSEZ, Denotified Area,Gurajapalem(V), Rambilli(M).	56.75	E
129	104534	Sanpra Synthesis PVT LTD,Sy.No. 300/P ,301P & 302P, Plot No.1A, APSEZ, De-Notified Area, Atchutapuram, Pudi (V), Rambilli (M) Visakhapatnam - 531 011	50.3	E
130	104677	Alithia Pharmaceuticals (P) Ltd., Sy. No. 26,27, 28 & 29, Plot No. 31 B, JNPC, Parawada.	57.75	E
131	104433	Styrax Life Sciences Pvt. Ltd. Plot No. 5, Gurajapalem, Rambilli (M), Atchutapuram.	56.75	E
132	104480	M/s. Aster Industries (Unit -II), Plot No. 5F, APSEZ, De-notified area, Lalamkoduru (V), Rambilli (M),	53	E
133	104142	Lohitha Life Sciences (P) Ltd, 80 - B, JNPC, Thanam (V), Parawada (M)	52.75	E
134	104217	Deccan Remedies Ltd, Plot No.58A, JNPC, Parawada.	57.75	E
135	104010	Virchow Laboratories Ltd, Unit No. II, Sy.No. 451/1, Wadacheepurapalli (V), Dalaipalem Near NTPC, Parawada(M)	58	E
136	104490	M/S. Connex Pharma Private Limited Apsez Street, Lalamkoduru (V), Rambilli (M).	72.25	E
137	104145	Sionc Pharma Pvt Ltd, Unit-II, Plot No. 25, JNPC, Parawada,	57	E
138	104378	Jaahnavee Life Sciences Pvt Ltd, Plot.no.59-B, JNPC,Thanam,Parawada.	58.5	E
139	54492	Krebs BioChemicals Industries Ltd, Kothapalli (V), Kasimkota (M)	44.1	F
140	104402	Averx Drugs Pvt. Ltd., De- Notified Area, APSEZ, Rambilli.	29	F
141	104046	Emmennar Pharma Pvt Ltd, Plot No. 15, JNPC, Parawada (M)	59.5	F
142	54988	Rampex labs Pvt Ltd, Plot No. 34-C, JNPC, Parawada (M)	58.75	F
143	104423	Myosynth Laboratories P Ltd, S.No.12P,13P, Denotified area, SEZ, Atchutapuram, Rambilli.	47.1	F

Annexure - 19

Government of India
Ministry Of Commerce & Industry
Office of the Development Commissioner
Visakhapatnam Special Economic Zone
Administrative Building ,Duvvada
Visakhapatnam – 530 049 A.P. (INDIA)

PROCEEDINGS OF THE COMMISSIONER FOR EMPLOYEES COMPENSATION ACT,1923 AND DEVELOPMENT COMMISSIONER, VSEZ, DUVVADA.

PRESENT : Shri. Srinivas Muppala
Station: Visakhapatnam Special Economic Zone, Duvvada
Visakhapatnam

No.VSEZ/ADC (L)/ EC/2024 Dated: 02.09.2024

Sub: Employees Compensation Act, 1923-Fatal Accident occurred to 17 Employees-Intimation given by the Management as per sec. 10B of the Act-advice by the Commissioner for Employees Compensation under sec.4a read with 10A (2) of the Act to make deposit of Compensation-Reg.

***

Order:

By vide Reference stated above, intimation of accident occurred on 21.08.2024, around 02.30PM at Escientia Advanced Sciences Pvt. Ltd., Plot No.11,11A,12,12A APSEZ, Atchutapuram, Anakapalli Dist., which resulted in the death of 17 workers was received. Upon enquiry, it is clearly evident that all the workmen died in and during the course of employment making them eligible for compensation under Employees Compensation Act, 1923 except for the 5 workers who were covered under ESIC Scheme.

The details of the deceased eligible for the compensation are here under

S. No	Employee Name	Designation	Date of Birth	Gender	Marital Status	Permanent Address	Employee Compensation
1	RAMI REDDY NEELAPU	Associate General Manager	20-08-1975/49Y	Male	Married	S/o Narasimha Reddy, D.No. 1-1-21, Kotha Venkojipalem, HB Colony, Visakhapatnam	11,73,525/-
2	PRASANTH HAMSA	Senior Executive	22-08-1990/34Y	Male	Married	S/o Satyanarayana, 5-123, Jangala Street, Ponduru, Srikakulam District, 532168	14,95,500/-
3	NARAYANA RAO MAHANTI	Asst.Manager	25-06-1990/34Y	Male	Married	S/O Satyam, D.NO:2-69, Raja Veedhi,Arthamuru,Garividi, Vizianagaram,Andhra Pradesh-535101.	14,95,500/-
4	GANESH KUMAR KOPPARTI	Senior Executive	20-08-1991/33Y	Male	Married	S/O Satyanarayana,D.NO:13-232/1,Juvvala Doddi Street,Biccavolu,East Godavari,Andhra Pradesh-533343.	15,12,450/-
5	RAJASEKHAR PAIDI	Trainee Process Engineer	07-08-2001/23Y	Male	Single	S/O Dharamarao,H.NO:1-368,Vanjangi,Amadalavalasa,Srikakilam,AP-532484.	16,49,625/-
6	SATISH MARISETTI	Senior Executive	03-12-1993/30Y	Male	Married	S/O Srinu,d.no:3-205,Main road,Near Shivalayam,Pasarlapudi Lanka,Mamidikuduru, East Godavari,AP-533247.	15,59,850/-
7	NAGA BABU MONDI	Asst.Manager	20-02-1988/36Y	Male	Married	S/O Satyanarayana,D.NO:18-10-87,Gandhinagara,Samarlakota,East Godavari,AP-533440.	14,59,800/-
8	NAGESWARA RAMACHANDRA RAO BODDU	Assistant Manager / Team leader	02-12-1977/46Y	Male	Married	S/O Ramarao,Flat no:202,Datta Sai Residency,Plot no:69,70,Vuda Phase-6,Kurmannapalem,Visakhapatnam,Andhra Pradesh-530046.	12,47,175/-
9	PARDASARADI JAWADI(Contract Labour)	Fitter	23-03-1997/27Y	Male	Single	S/O Koteswararao,Dokisila, Chamalavalasa,Parvathipuram,AP-535527.	16,01,775/-

10	ANANDA RAO BAMMIDI	Asst.Manager	01-02-1988/36Y	Male	Married	S/O B.Pothayya,H.NO;7-23,Gollapeta,Posapatirega,Vizianagaram,AP-535204.	14,59,800/-
11	SURENDRA MARNI	Assistant Manager	24-12-1987/36Y	Male	Married	S/o Krishna Rao, D.No. 10-11, Gangaram utlapalli Aswaraopet, Khammam, Andhra Pradesh	14,59,800/-
12	VENKATA SAI PUSARLA	Senior Executive	05-07-1997/27Y	Male	Single	S/O Nageswara Rao,H.NO:8-29,S.Rayavaram,Bangarammapalem,Visakhapatnam,Andhra Pradesh-531083.	16,01,775/-

The Commissioner for Employees Compensation by virtue of the powers conferred as per Sec.4(a) read with Sec 10A (2), having considered the facts and circumstances concerning the fatal accident resulting the death of 17workers while in the course of employment, is prima-facie satisfied that the facts of the case justify the making of initial deposit of compensation to the deceased workmen by the employer.

Therefore, in exercise of powers conferred under Section 20 of Employees' Compensation Act, 1923 and as per the details given by the management and the monthly wage earned by the deceased workmen limiting to 15,000/- (in accordance with sub-section (1) of the Section 4 of the Workmen's Compensation Act,1923 read with Notification published in the Gazette order No:69 dated:03.01.2020 issued by the Ministry of Labour and Employment of India,limited the wages to Rs.15,000/- for the purpose of Calculation of the Compensation Amount),the amount payable to the deceased workman =Age factor x wage of the Worker x50 / 100 which is calculated individually is given in the above table.

The Principal Employer (both the Contractor and the Principal Employer in case of contract labour) is liable to pay the compensation amount mentioned accordingly. Therefore you are hereby advised to deposit the compensation amount as indicated above by way of Demand Draft drawn in favour of "Commissioner for Employees Compensation and Development Commissioner, VSEZ, Duvvada", SBI, VSEZ Duvvada Branch, within one month from the date of receipt of this communication.

You are also further required to inform about the particulars of the family members/dependents of the deceased worker, as per the records of the worker, for taking up

necessary enquiry for apportionment of the compensation amount or for transfer of the compensation amount deposited to the concerned Authority at the native place of the deceased worker for taking necessary action at his end.

The process of apportionment/ disbursement to the concerned will be initiated after depositing the compensation amount with "Commissioner for Employees Compensation" and Development Commissioner, VSEZ, Duvvada, Visakhapatnam.

Visakhapatnam Special Economic Zone, Visakhapatnam * Ministry of Commerce & Industry * Govt. of India * Authority & Development Commissioner *

For Commissioner for Employees Compensation Act 1923
& Development Commissioner
VSEZ, Duvvada,

Asst. Development Commissioner
(Labour) VSEZ, Duvvada
VISAKHAPATNAM

To

1. The management
   M/s Escientia Advanced Sciences Pvt. Ltd.,
   Plot No.11,11A,12,12A APSEZ,
   Atchutapuram, Anakapalli Dist.

2. Charan Engineering & Technical works,
   H.No.2-113/2/2,Engineers enclave,
   Chanda Nagar,Hyderabad-500050

Deceased persons list and compensation details

S. No	Name of the Employee	Age	Department	Designation	Compensation Amount
1	SURENDRA MARNI	36	Production	Assistant Manager / Team leader	1,00,00,000.00
2	RAMI REDDY NEELAPU	49	R&D - (PD Lab)	Associate General Manager / Associate Director	1,00,00,000.00
3	PRASANTH HAMSA	34	Production	Senior Executive	1,00,00,000.00
4	NARAYANA RAO MAHANTI	34	R&D - (PD Lab)	Asst. Manager/Team Leader	1,00,00,000.00
5	VENKATA SAI PUSARLA	27	Production	Senior Executive	1,00,00,000.00
6	NAGESWARA RAMACHANDRA RAO BODDU	47	Production	Assistant Manager / Team leader	1,00,00,000.00
7	GANESH KUMAR KOPPARTI	33	Production	Senior Executive	1,00,00,000.00
8	HARIKA CHALLAPALLI	22	R&D - (PD Lab)	Trainee Engineer	1,00,00,000.00
9	NAGA BABU MONDI	36	Production	Asst. Manager	1,00,00,000.00
10	ANANDA RAO BAMMIDI	36	Production	Asst. Manager	1,00,00,000.00
11	SATISH MARISETTI	31	Production	Senior Executive	1,00,00,000.00
12	RAJASEKHAR PAIDI	23	Process Engineering	Trainee Process Engineer	1,00,00,000.00
13	SANYASI NAIDU VEGI	53	Engineering	HK BOY	1,00,00,000.00
14	CHINNARAO YALLABILLI	34	Engineering	PAINTER	1,00,00,000.00
15	PARDASARADI JAWADI	27	Engineering	FITTER	1,00,00,000.00
16	MOHAN DURGA PRASAD PUDI	19	PD Lab	HK BOY	1,00,00,000.00
17	CHIRANJEEVI JAVVADI	24	Engineering	FITTER	1,00,00,000.00

Injured persons list and compensation details

S. No	Name of the Employee	Department	Designation	Injured category	Compensation Amount
1	JAGADEESH PONNADA	Production	Manager / Group leader	Major	50,00,000.00
2	SRINIVASA RAO PANGA	Production	Deputy Manager / Sr Team leader	Major	50,00,000.00
3	SANTHOSH GEDDA	R&D - (PD Lab)	Executive	Major	50,00,000.00
4	BABA SRINIVASA VARMA DANDU	Production	Senior Executive	Major	50,00,000.00
5	JAGADEESWARA RAO PASUPUREDDI	Production	Deputy Manager / Sr. Team leader	Major	50,00,000.00
6	B Siva Venkata Ratnam	Production	HK Helper	Major	50,00,000.00
7	RAMBABU KONDRU	Production	Senior Executive	Major	50,00,000.00
8	K Chandra Sekhar	ESD	Utility Operator	Major	50,00,000.00
9	Y Mahesh Babu	ESD	ESD	Major	50,00,000.00
10	NARAYANA RAO KONDALA	R&D - (PD Lab)	Asst.Manager/Team Leader	Major	50,00,000.00
11	DEMUDU PIKKI	Engineering	Senior Engineer	Major	50,00,000.00
12	KIRAN SATYANARAYANA MANDAPATI	Production	Senior Executive	Major	50,00,000.00
13	G Raja rao	Production	HK Boy	Major	50,00,000.00
14	B Suribabu	Production	HK Boy	Major	50,00,000.00
15	J Vardhan	Production	HK Helper	Major	50,00,000.00
16	R Satyanarayana	Production	HK Helper	Major	50,00,000.00
17	YAAMINI SARAGADAM	R&D - (PD Lab)	Trainee Chemist	Major	50,00,000.00
18	VAMSI SARAGADAM	Production	Junior Chemist	Major	50,00,000.00
19	NalinPrabath Chinnala	R&D - (HYD)	PRE	Major	50,00,000.00
20	N PYDI KALYAN	PD Kalyan	HK	Major	50,00,000.00
21	YANDAVA TEJESWARA RAO	Production	Sr Executive	Major	50,00,000.00
22	GANGADHAR TAMARANA	Quality Control	Junior Chemist-Analytical	Minor	25,00,000.00
23	SASHIKANTH BANDI	Quality Control	Executive	Minor	25,00,000.00
24	SAIKUMAR GUDISA	Production	Executive	Minor	25,00,000.00
25	PRAKASH JAGARAPU	Production	Executive	Minor	25,00,000.00
26	KASI NAIDU JEEREDDI	R&D - (PD Lab)	Senior Executive	Minor	25,00,000.00
27	SATYANARAYANA VARA PRASAD RAJU GANDRAJU	Quality Assurance	Senior Manager / Sr Group leader	Minor	25,00,000.00
28	ARUNA KUMAR POTTASIRI	Quality Assurance	Manager	Minor	25,00,000.00
29	V V LAKSHMI CHAITANYA GANDRETI	Production	Senior Executive	Minor	25,00,000.00
30	SHANMUKHARAO KELLA	Quality Control	Chemist	Minor	25,00,000.00
31	DHANNJAYA BODALA	Quality Control	Trainee Chemist	Minor	25,00,000.00
32	SHANMUKHARAJU KANCHU	Production	Senior Executive	Minor	25,00,000.00
33	BANGARINAIDU CHANDAKA	Production	Executive	Minor	25,00,000.00
34	Ch Apparao	Production	HK Boy	Minor	25,00,000.00
35	N Apparao	Production	HK Helper	Minor	25,00,000.00
36	PARAMESWAR RAO ALLAKA	R&D - (PD Lab)	Executive	Minor	25,00,000.00
37	P Ram Mehar Babu	Production	HK Helper	Minor	25,00,000.00

38	D Apparao	Admin	Security	Minor	25,00,000.00
39	M Nagabushanam	ESD	Painter	Minor	25,00,000.00

Deceased persons list and compensation details

S. No	Name of the Employee	Age	Department	Designation	Compensation Amount	Cheque Numbers
1	SURENDRA MARNI	36	Production	Assistant Manager / Team leader	₹ 1,00,00,000	Indusind - Cheque # 121084
2	RAMI REDDY NEELAPU	49	R&D - (PD Lab)	Associate General Manager / Associate Director	₹ 1,00,00,000	HDFC bank,Banjara Hills branch,RTGS-C78910240824173154, Date:26-August 2024.
3	PRASANTH HAMSA	34	Production	Senior Executive	₹ 1,00,00,000	Indusind - Cheque # 121079
4	NARAYANA RAO MAHANTI	34	R&D - (PD Lab)	Asst. Manager/Team Leader	₹ 1,00,00,000	Indusind - Cheque # 121078
5	VENKATA SAI PUSARLA	27	Production	Senior Executive	₹ 1,00,00,000	Indusind - Cheque # 121074
6	NAGESWARA RAMACHANDRA RAO BODDU	47	Production	Assistant Manager / Team leader	₹ 1,00,00,000	Indusind - Cheque # 121076
7	GANESH KUMAR KOPPARTI	33	Production	Senior Executive	₹ 1,00,00,000	Indusind - Cheque # 121081
8	HARIKA CHALLAPALLI	22	R&D - (PD Lab)	Trainee Engineer	₹ 1,00,00,000	Indusind - Cheque # 121082
9	NAGA BABU MONDI	36	Production	Asst. Manager	₹ 1,00,00,000	Indusind - Cheque # 121083
10	ANANDA RAO BAMMIDI	36	Production	Asst. Manager	₹ 1,00,00,000	Indusind - Cheque # 121077
11	SATISH MARISETTI	31	Production	Senior Executive	₹ 1,00,00,000	Indusind - Cheque # 121086
12	RAJASEKHAR PAIDI	23	Process Engineering	Trainee Process Engineer	₹ 1,00,00,000	Indusind - Cheque # 121080
13	SANYASI NAIDU VEGI	53	Engineering	HK BOY	₹ 1,00,00,000	Indusind - Cheque # 121071
14	CHINNARAO YALLABILLI	34	Engineering	PAINTER	₹ 1,00,00,000	Indusind - Cheque # 121085
15	PARDASARADI JAWADI	27	Engineering	FITTER	₹ 1,00,00,000	Indusind - Cheque # 121087
16	MOHAN DURGA PRASAD PUDI	19	PD Lab	HK BOY	₹ 1,00,00,000	Indusind - Cheque # 121072
17	CHIRANJEEVI JAVVADI	24	Engineering	FITTER	₹ 1,00,00,000	Indusind - Cheque # 121073

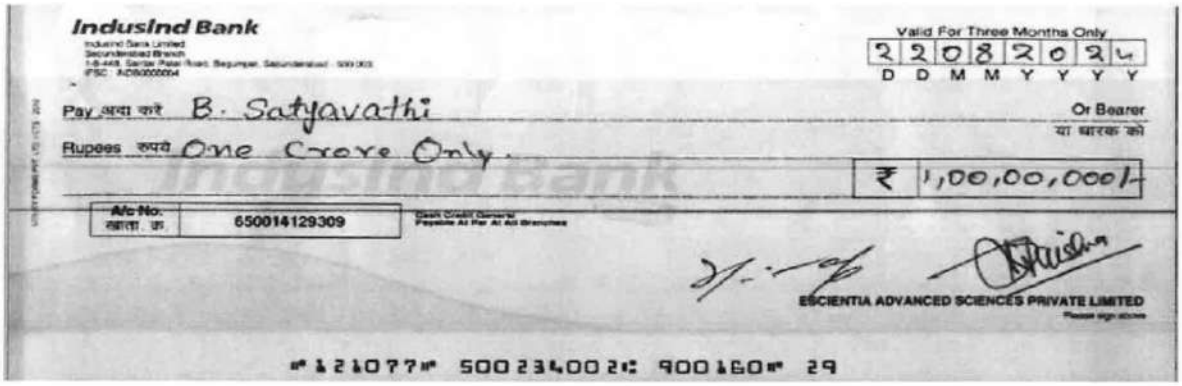
Injured persons list and compensation details

S. No	Name of the Employee	Department	Designation	Injured category	Compensation Amount	Onlin Transaction ID
1	JAGADEESH PONNADA	Production	Manager / Group leader	Major	50,00,000.00	HDFCR52024082386499751
2	SRINIVASA RAO PANGA	Production	Deputy Manager / Sr Team leader	Major	50,00,000.00	HDFCR52024082386545871
3	SANTHOSH GEDDA	R&D - (PD Lab)	Executive	Major	50,00,000.00	HDFCR52024082386563866
4	BABA SRINIVASA VARMA DANDU	Production	Senior Executive	Major	50,00,000.00	HDFCR52024082386615218
5	JAGADEESWARA RAO PASUPUREDDI	Production	Deputy Manager / Sr. Team leader	Major	50,00,000.00	HDFCR52024082386499762
6	B Siva Venkata Ratnam	Production	HK Helper	Major	50,00,000.00	HDFCR52024082386563876
7	RAMBABU KONDRU	Production	Senior Executive	Major	50,00,000.00	FT - 2308202414
8	K Chandra Sekhar	ESD	Utility Operator	Major	50,00,000.00	HDFCR52024082386615203
9	Y Mahesh Babu	ESD	ESD	Major	50,00,000.00	HDFCR52024082386499752
10	NARAYANA RAO KONDALA	R&D - (PD Lab)	Asst.Manager/Team Leader	Major	50,00,000.00	HDFCR52024082386582589
11	DEMUDU PIKKI	Engineering	Senior Engineer	Major	50,00,000.00	HDFCR52024082386601430
12	KIRAN SATYANARAYANA MANDAPATI	Production	Senior Executive	Major	50,00,000.00	HDFCR52024082386563878
13	G Raja rao	Production	HK Boy	Major	50,00,000.00	HDFCR52024082386601434
14	B Suribabu	Production	HK Boy	Major	50,00,000.00	HDFCR52024082386545870
15	J Vardhan	Production	HK Helper	Major	50,00,000.00	HDFCR52024082386615135
16	R Satyanarayana	Production	HK Helper	Major	50,00,000.00	HDFCR52024082386545866
17	YAAMINI SARAGADAM	R&D - (PD Lab)	Trainee Chemist	Major	50,00,000.00	HDFCR52024082386545899

18	VAMSI SARAGADAM	Production	Junior Chemist	Major	50,00,000.00	FT - 2308202434
19	NalinPrabath Chinnala	R&D - (HYD)	PRE	Major	50,00,000.00	HDFCR52024082386545877
20	N PYDI KALYAN	PD Kalyan	HK	Major	50,00,000.00	HDFCR52024082386563883-
21	YANDAVA TEJESWARA RAO	Production	Sr Executive	Major	50,00,000.00	C77700260824120419
22	GANGADHAR TAMARANA	Quality Control	Junior Chemist-Analytical	Minor	25,00,000.00	HDFCR52024082386601448
23	SASHIKANTH BANDI	Quality Control	Executive	Minor	25,00,000.00	FT - 2308202402
24	SAIKUMAR GUDISA	Production	Executive	Minor	25,00,000.00	FT - 2308202403
25	PRAKASH JAGARAPU	Production	Executive	Minor	25,00,000.00	FT - 2308202406
26	KASI NAIDU JEEREDDI	R&D - (PD Lab)	Senior Executive	Minor	25,00,000.00	HDFCR52024082386601440
27	SATYANARAYANA VARA PRASAD RAJU GANDRAJU	Quality Assurance	Senior Manager / Sr Group leader	Minor	25,00,000.00	FT - 2308202409
28	ARUNA KUMAR POTTASIRI	Quality Assurance	Manager	Minor	25,00,000.00	HDFCR52024082386563870
29	V V LAKSHMI CHAITANYA GANDRETI	Production	Senior Executive	Minor	25,00,000.00	HDFCR52024082386545875
30	SHANMUKHARAO KELLA	Quality Control	Chemist	Minor	25,00,000.00	FT - 2308202420
31	DHANNJAYA BODALA	Quality Control	Trainee Chemist	Minor	25,00,000.00	HDFCR52024082386614963
32	SHANMUKHARAJU KANCHU	Production	Senior Executive	Minor	25,00,000.00	HDFCR52024082386545863
33	BANGARINAIDU CHANDAKA	Production	Executive	Minor	25,00,000.00	HDFCR52024082386615136
34	Ch Apparao	Production	HK Boy	Minor	25,00,000.00	HDFCR52024082386601423
35	N Apparao	Production	HK Helper	Minor	25,00,000.00	HDFCR52024082386601442
36	PARAMESWAR RAO ALLAKA	R&D - (PD Lab)	Executive	Minor	25,00,000.00	FT - 2308202432
37	P Ram Mehar Babu	Production	HK Helper	Minor	25,00,000.00	HDFCR52024082386563886
38	D Apparao	Admin	Security	Minor	25,00,000.00	HDFCR52024082386615130
39	M Nagabushanam	ESD	Painter	Minor	25,00,000.00	HDFCR52024082386545882

: Bandi Aranda Rao

: E0483


IndusInd Bank

Valid For Three Months Only

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Pay अदा करें B. Satyavathi

Or Bearer / या धारक को

Rupees रुपये One Crore Only.

₹ 1,00,00,000/-

A/c No. खाता. सं. 650014129309

Cash Credit General Payable At Par At All Branches

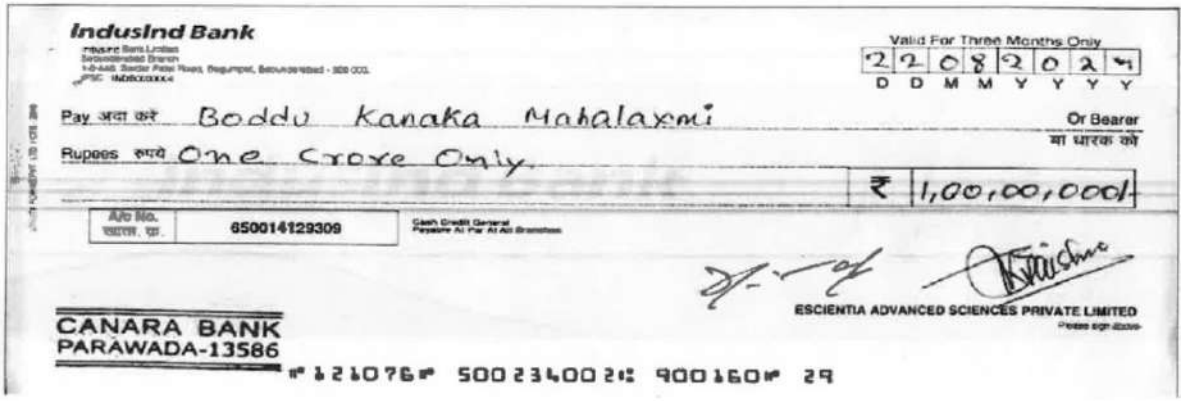
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈ 121077 ⑈ 500234002 ⑆ 900160 ⑈ 29

: B. N. Rama Chandra Rao

: E0303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Valid For Three Months Only

D D M M Y Y Y Y: 2 2 0 8 2 0 2 4

Pay अदा करें Boddu Kanaka Mahalaxmi

Or Bearer / या धारक को

Rupees रुपये One Crore Only.

₹ 1,00,00,000/-

A/c No. खाता. सं. 650014129309

Cash Credit General Payable At Par At All Branches

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

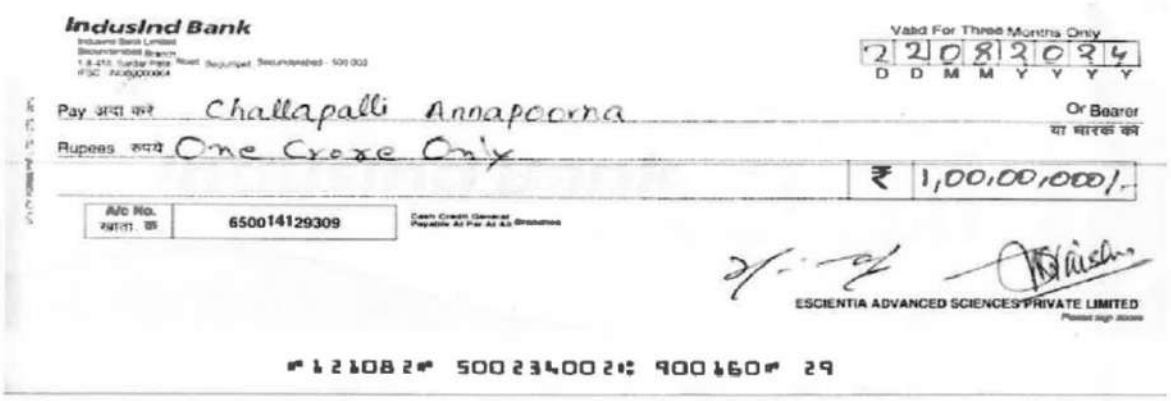
Please sign above

CANARA BANK
PARAWADA-13586

⑈ 121076 ⑈ 500234002 ⑆ 900160 ⑈ 29

: Ch. Harika

: E0458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Valid For Three Months Only
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D D M M Y Y Y Y

Pay अदा करें Challapalli Annapoorna Or Bearer या धारक को

Rupees रुपये One Croxe Only ₹ 1,00,00,000/-

A/c No. खाता सं. 650014129309

Cash Credit General Payable At Par At All Branches

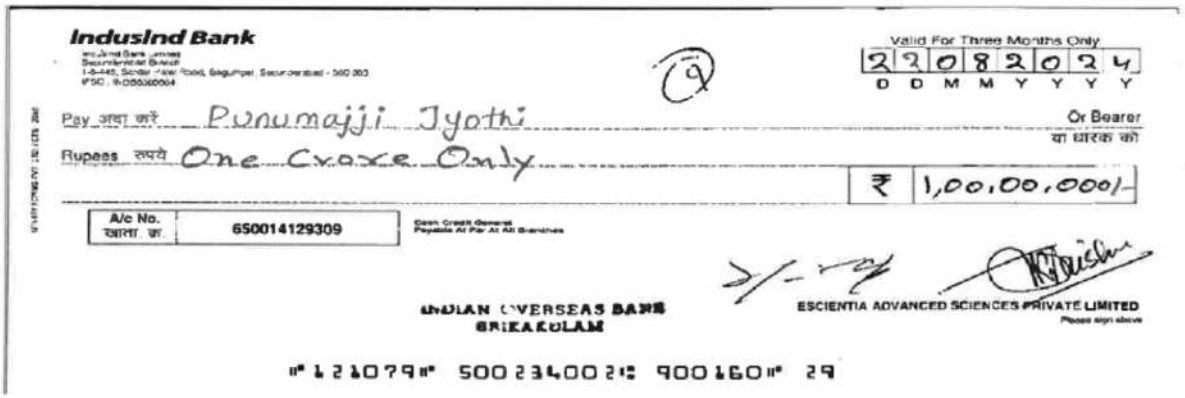
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈ 121082⑈ 500234002⑆ 900160⑈ 29

: H. Prasanth

: E0118


IndusInd Bank

Valid For Three Months Only
2 2 0 8 2 0 2 4
D D M M Y Y Y Y

Pay अदा करें Punumajji Jyothi Or Bearer या धारक को

Rupees रुपये One Croxe Only ₹ 1,00,00,000/-

A/c No. खाता सं. 650014129309

Cash Credit General Payable At Par At All Branches

INDIAN OVERSEAS BANK
SRIKAKULAM

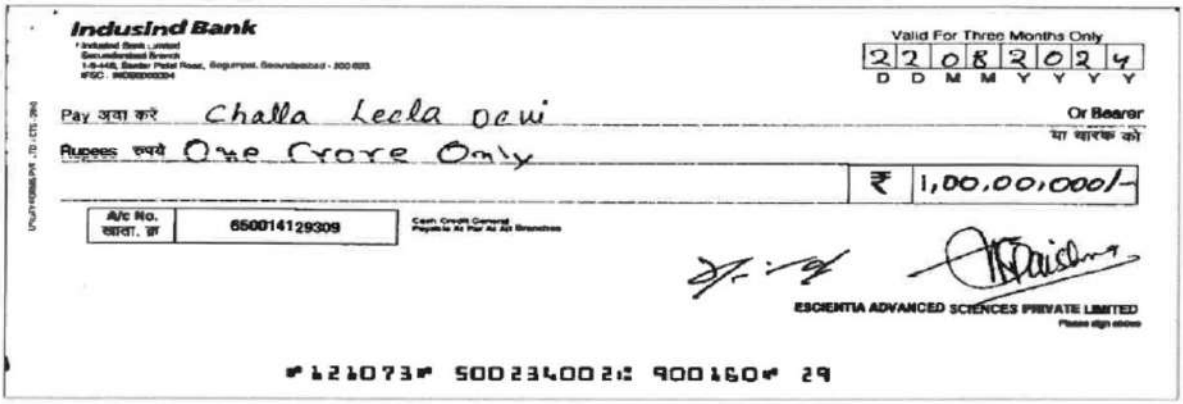
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈ 121079⑈ 500234002⑆ 900160⑈ 29

: J. Chirayjeevi

: Charan Contract



IndusInd Bank

Valid For Three Months Only

D D M M Y Y Y Y: 22 08 2024

Pay अदा करे: Challa Leela Devi

Or Bearer / या धारक को

Rupees रुपये: One Crore Only

₹ 1,00,00,000/-

A/c No. खाता. सं: 650014129309

Cash Credit General Payable At Par At All Branches

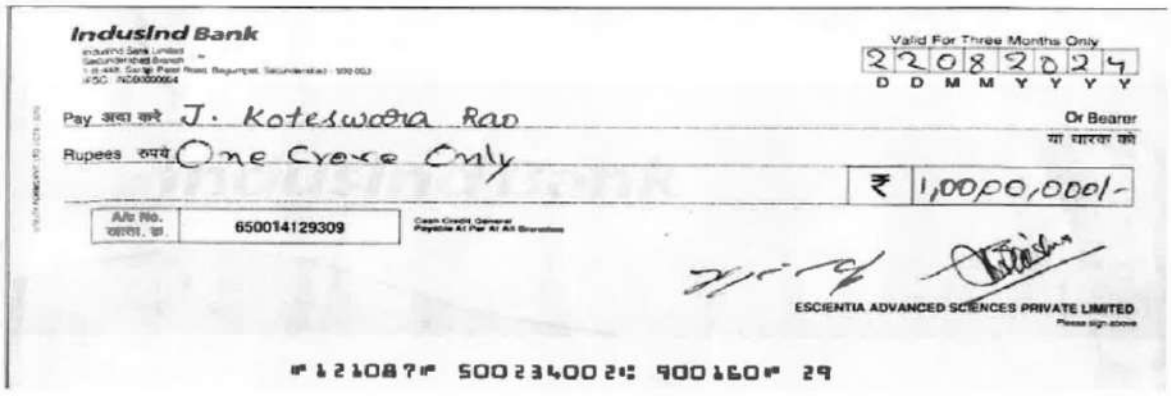
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈121073⑈ 500234002⑆ 900160⑈ 29

: J. Pardha Saradhi

: Charan Contract



IndusInd Bank

Valid For Three Months Only

D D M M Y Y Y Y: 22 08 2024

Pay अदा करे: J. Koteswara Rao

Or Bearer / या धारक को

Rupees रुपये: One Crore Only

₹ 1,00,00,000/-

A/c No. खाता. सं: 650014129309

Cash Credit General Payable At Par At All Branches

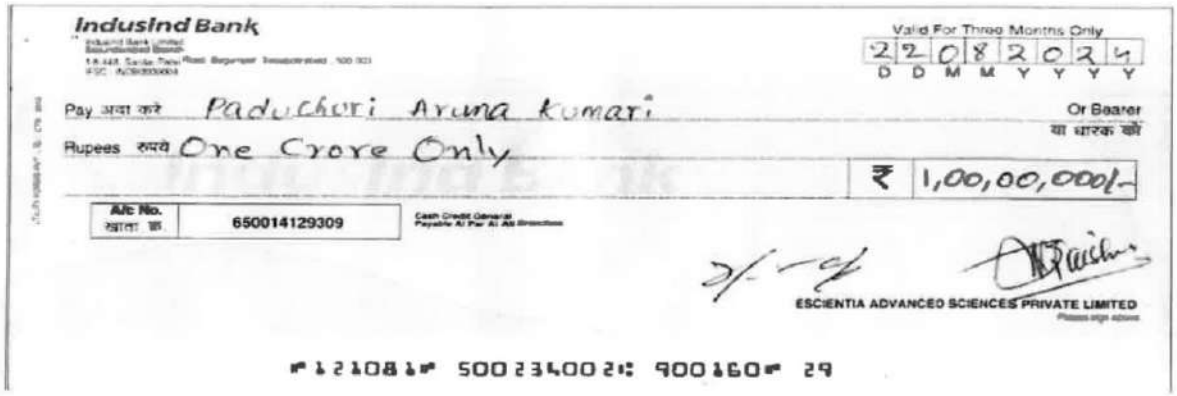
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈121087⑈ 500234002⑆ 900160⑈ 29

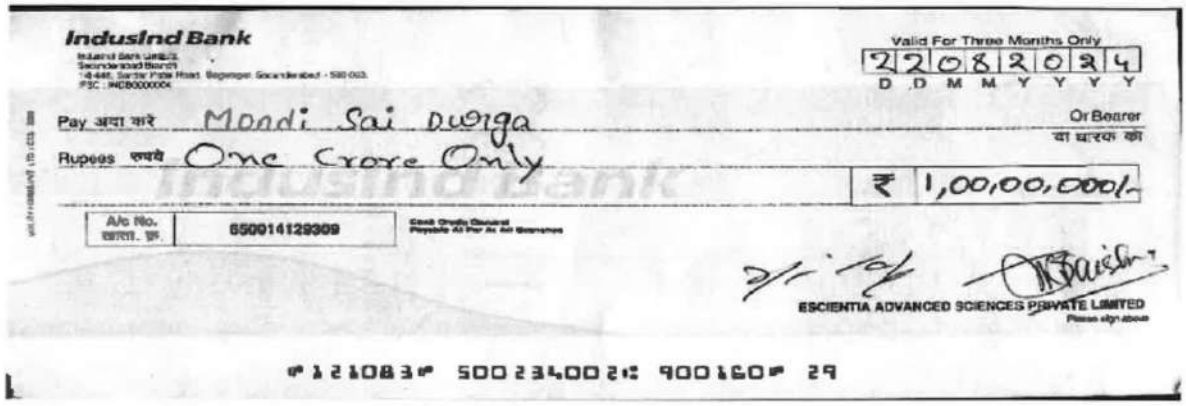
: K. Ganesh

: E0325



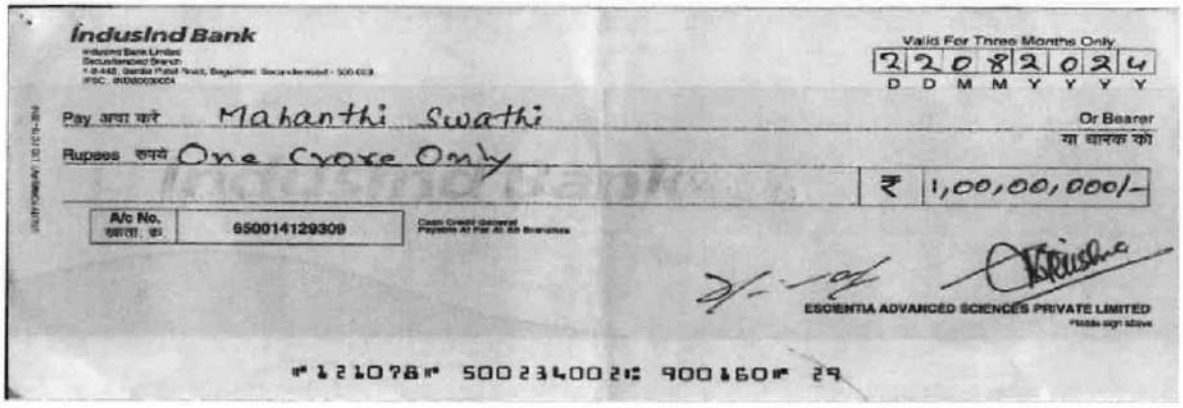
: M. Nagababu

: E0477



: M. Narayana Rao

: E0223



IndusInd Bank

Valid For Three Months Only

2 2 0 8 2 0 2 4
D D M M Y Y Y Y

Pay अदा करें Mahanthi Swathi Or Bearer या धारक को

Rupees रुपये One Crore Only ₹ 1,00,00,000/-

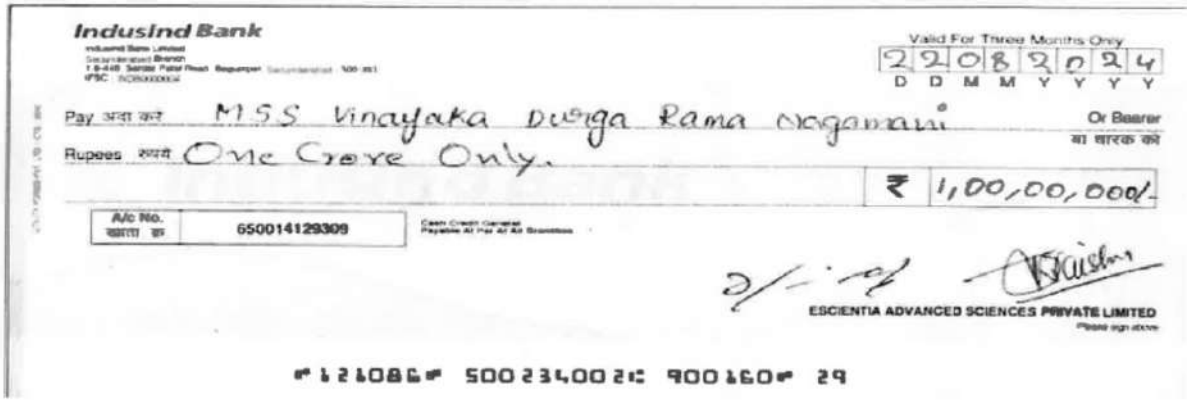
A/c No. खाता सं. 650014129309

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

⑈121078⑈ 500234002⑆ 900160⑈ 29

: M. Satish

: E0569



IndusInd Bank

Valid For Three Months Only

2 2 0 8 2 0 2 4
D D M M Y Y Y Y

Pay अदा करें M.S.S Vinayaka Durga Rama Organics Or Bearer या धारक को

Rupees रुपये One Crore Only. ₹ 1,00,00,000/-

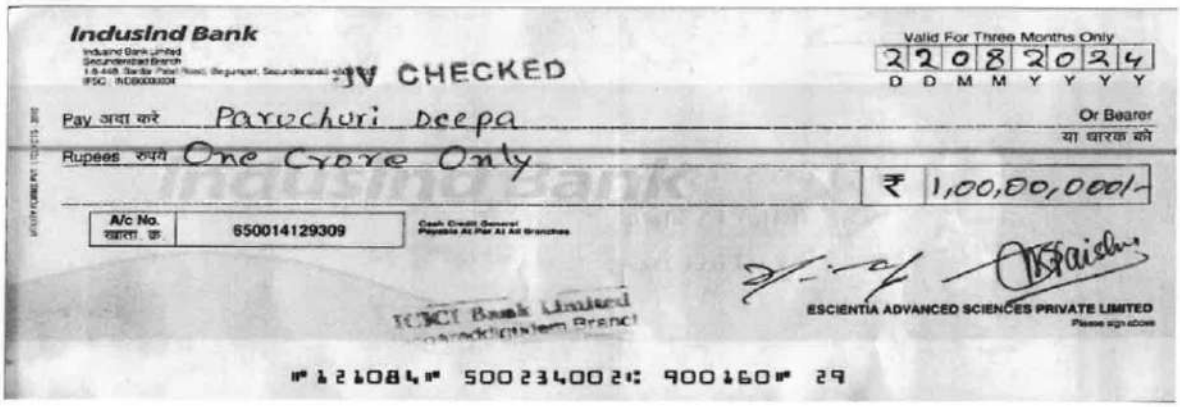
A/c No. खाता सं. 650014129309

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

⑈121086⑈ 500234002⑆ 900160⑈ 29

: M. Surendra

: E0041



IndusInd Bank

IndusInd Bank Limited
Secunderabad Branch
IFSC : INDB0000004

JV CHECKED

Valid For Three Months Only
2 2 0 8 2 0 2 4
D D M M Y Y Y Y

Pay अदा करें Paruchuri Deepa

Or Bearer
या धारक को

Rupees रुपये One Crore Only

₹ 1,00,00,000/-

A/c No. खाता. क्र. 650014129309

Cash Credit General
Payable At Par At All Branches

ICICI Bank Limited
Secunderabad Branch

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
Please sign above

⑈121084⑈ 500234002⑆ 900160⑈ 29

Venkatesh Varada

From: Ramana Reddy Neelapu
Sent: 26 August 2024 14:44
To: P V Rao
Cc: Ravi Shankar Kadari; Venkatesh Varada; Tata Babu Lalam; Sanjay Vaishnava; Yadagiri Pendri; Kiran Pendri; Srinivasa Rao Korada
Subject: RE: Cancelled cheque of Dr Rami reddy

Dear Rao Sir,

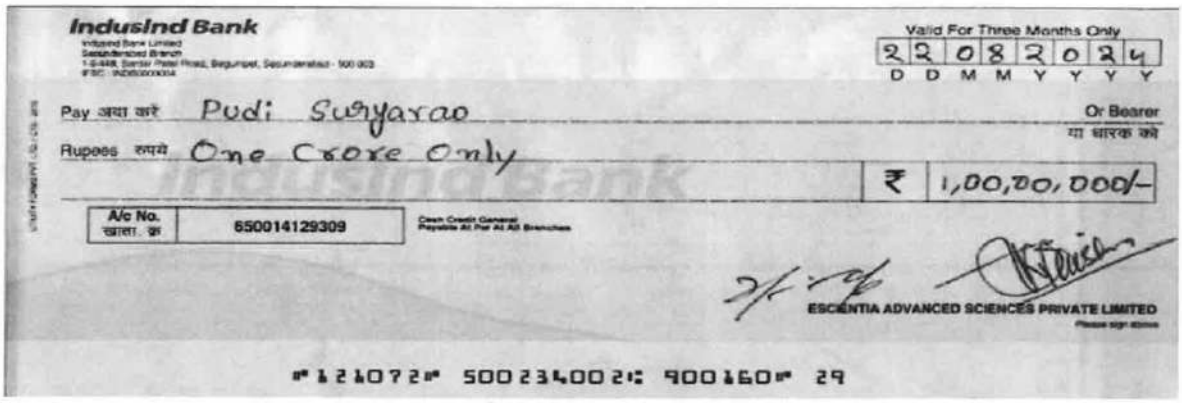
We have processed Rs. 1 Crore Death Ex gratia of Dr. Rami reddy garu to his wife Mr. Danda Suneetha. Below are payment reference details.

Transaction Dat	Transaction Description	Transacti
26 08 2024 13:55:00	Multiple Payees C7891024082417315 4 - Death Ex Gratia of NEELAPU RAMI REDDY	1.00

Thanks & Regards,
NEELAPU RAMANA REDDY

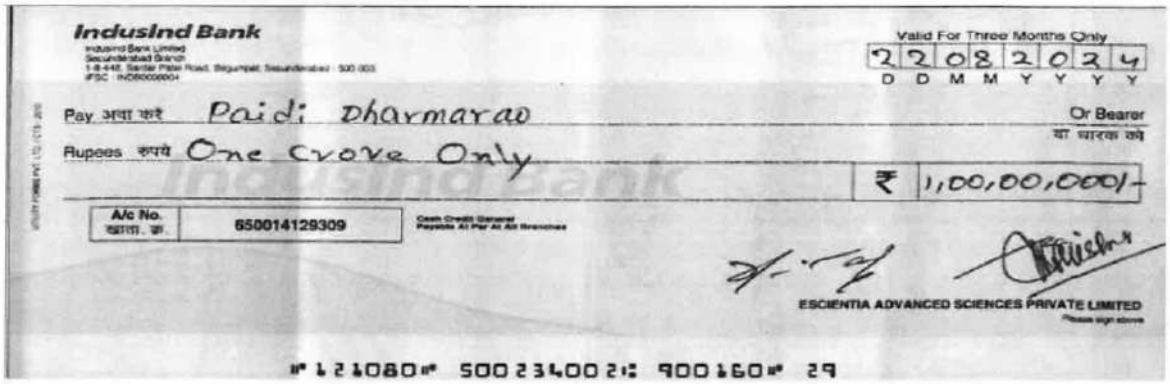
: P. Mohan Durga Prasad

: IFS - Contract



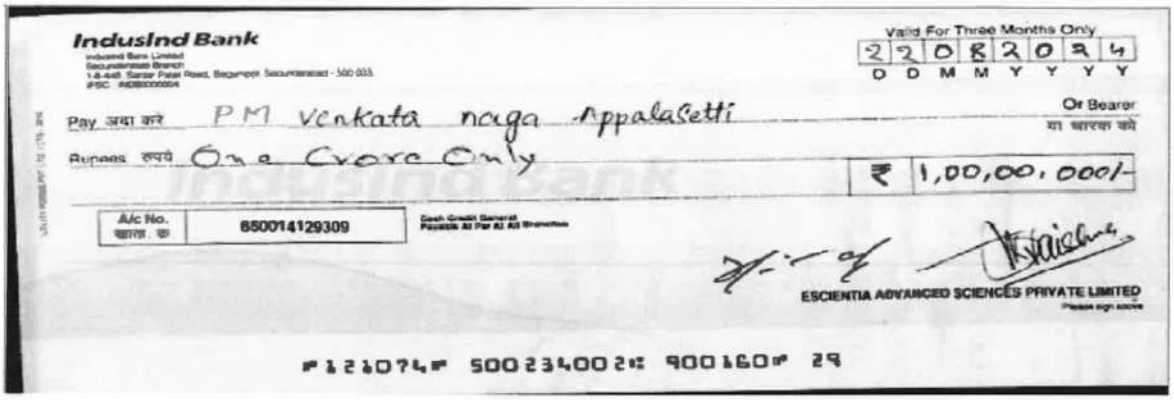
: P. Raja Shekar

: E0574



: P. Venkata Sai

: E0239


IndusInd Bank

Valid For Three Months Only
22082024
D D M M Y Y Y Y

Pay अदा करें PM Venkata naga Appalasetti Or Bearer या धारक को

Rupees रुपये One Crore Only ₹ 1,00,00,000/-

A/c No. खाता. सं. 650014129309

Cash Credit General Payable At Par At All Branches

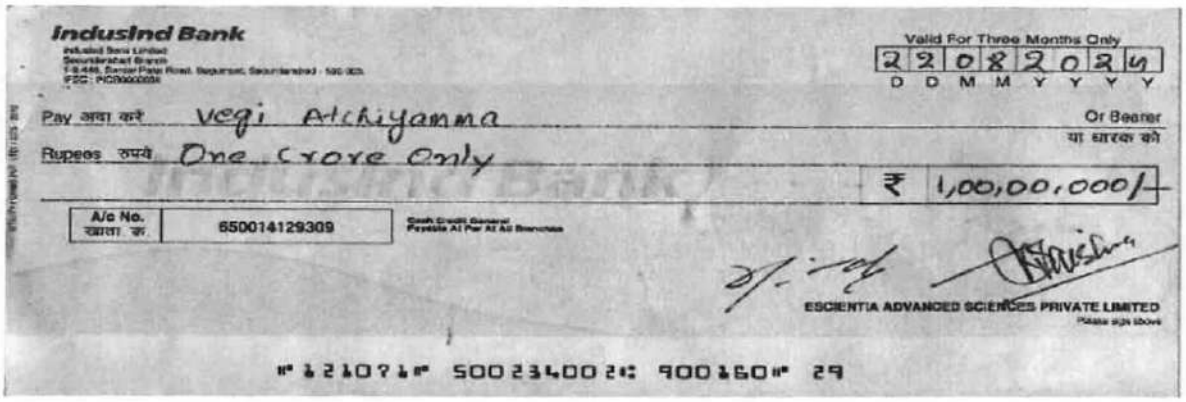
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈ 121074⑈ 500234002⑆ 900160⑈ 29

: Vegi Satyasiva

: Kapston- Contract


IndusInd Bank

Valid For Three Months Only
22082024
D D M M Y Y Y Y

Pay अदा करें Vegi Atchiyamma Or Bearer या धारक को

Rupees रुपये One Crore Only ₹ 1,00,00,000/-

A/c No. खाता. सं. 650014129309

Cash Credit General Payable At Par At All Branches

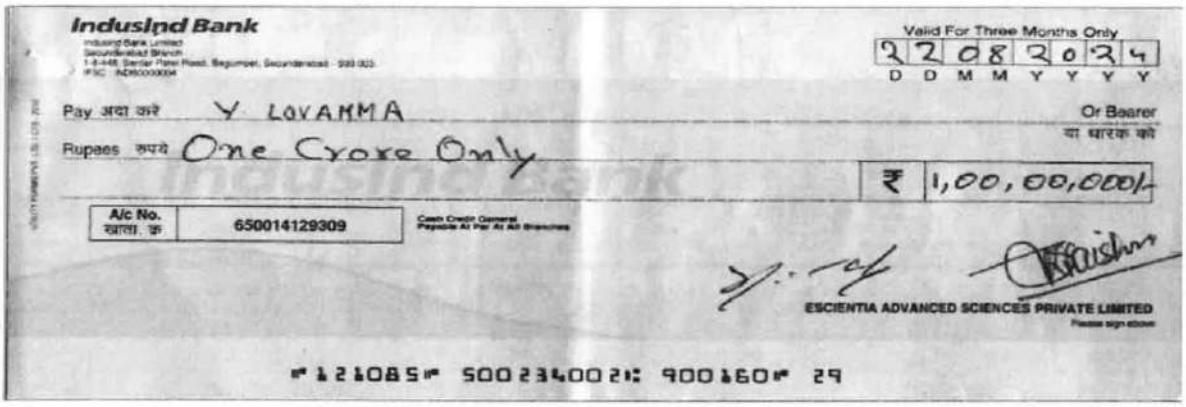
ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED

Please sign above

⑈ 121074⑈ 500234002⑆ 900160⑈ 29

: Y. Chinnarao

: SVEW- Contract



IndusInd Bank

IndusInd Bank Limited
Secunderabad Branch
1-8-448, Sardar Patel Road, Begumpet, Secunderabad - 500 003.
IFSC : INDB0000004

Valid For Three Months Only
3 2 0 8 2 0 2 4
D D M M Y Y Y Y

Pay अदा करें Y LAVAMMA

Or Bearer
या धारक को

Rupees रुपये One Crore Only

₹ 1,00,00,000/-

A/c No. खाता नं. 650014129309

Cash Credit General
Payable At Par At All Branches

ESCIENTIA ADVANCED SCIENCES PRIVATE LIMITED
Please sign above

⑈121085⑈ 500234002⑆ 900160⑈ 29

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	BHUPATI SIVA VENKATA RATNAM
Beneficiary Code	:	
Beneficiary Account Number	:	33476968769
Beneficiary Address		

Client Reference No	:	2308202413
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563876
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0001455
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	RAMBILLI
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

This is computer generated advice. Does not require any signature.

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	BADDI SURIBABU
Beneficiary Code	:	
Beneficiary Account Number	:	32380734097
Beneficiary Address		

Client Reference No	:	2308202427
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545870
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0001455
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	RAMBILLI
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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470

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	DANDU BABA SRINIVASA VARMA
Beneficiary Code	:	
Beneficiary Account Number	:	39697012719
Beneficiary Address		

Client Reference No	:	2308202411
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386615218
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0004622
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	RAICHUR
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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471

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PAKKI DEMUDU
Beneficiary Code	:	
Beneficiary Account Number	:	920010050497584
Beneficiary Address		

Client Reference No	:	2308202418
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601430
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0004121
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	ATCHUTAPURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	GAJJI RAJA RAO
Beneficiary Code	:	
Beneficiary Account Number	:	14180100011495
Beneficiary Address		

Client Reference No	:	2308202426
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601434
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	BARB0ELAMAN
Beneficiary Bank Name	:	BANK OF BARODA
Beneficiary Branch Name	:	ELAMANCHILI DIST VISAKHAPATNAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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473

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	JAGARAPU VARDHAN
Beneficiary Code	:	
Beneficiary Account Number	:	551302010022725
Beneficiary Address		

Client Reference No	:	2308202429
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386615135
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UBIN0555134
Beneficiary Bank Name	:	UNION BANK OF INDIA
Beneficiary Branch Name	:	ATCHUTAPURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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474

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	JAGADEESH PONNADA
Beneficiary Code	:	
Beneficiary Account Number	:	915010029805886
Beneficiary Address		

Client Reference No	:	2308202404
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386499751
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000075
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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475

PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PASUPUREDDI JAGADEESWARARAO
Beneficiary Code	:	
Beneficiary Account Number	:	917010064326012
Beneficiary Address		

Client Reference No	:	2308202412
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386499762
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000075
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	KALISETTI CHANDRA SEKHAR RAO
Beneficiary Code	:	
Beneficiary Account Number	:	35281447550
Beneficiary Address		

Client Reference No	:	2308202415
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386615203
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0011111
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	RAMABHDRAPURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	KIRAN SATYANARAYANA MANDAPATI
Beneficiary Code	:	
Beneficiary Account Number	:	62114919593
Beneficiary Address		

Client Reference No	:	2308202423
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563878
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0020536
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	VSP TOWNSHIP
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	NOTLA PAIDI KALYAN
Beneficiary Code	:	
Beneficiary Account Number	:	551302010022972
Beneficiary Address		

Client Reference No	:	2308202438
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563883
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UBIN0555134
Beneficiary Bank Name	:	UNION BANK OF INDIA
Beneficiary Branch Name	:	ATCHUTAPURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	NalinPrabath Chinnala
Beneficiary Code	:	
Beneficiary Account Number	:	924010015313667
Beneficiary Address		

Client Reference No	:	2308202435
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545877
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0003241
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	NACHARAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	KONDALA NARAYANA RAO
Beneficiary Code	:	
Beneficiary Account Number	:	920010013376705
Beneficiary Address		

Client Reference No	:	2308202417
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386582589
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0004461
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	KURMANNAPALEM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	RAYI SATYANARAYANA
Beneficiary Code	:	
Beneficiary Account Number	:	2108010053312
Beneficiary Address		

Client Reference No	:	2308202430
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545866
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	PUNB0188610
Beneficiary Bank Name	:	PUNJAB NATIONAL BANK
Beneficiary Branch Name	:	ANAKAPALLE DISTT VISAKHAPATANAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	RAMBABU KONDRU
Beneficiary Code	:	
Beneficiary Account No	:	50100217440951
Beneficiary Address	:	

Client Reference No	:	2308202414
Date	:	23/08/2024
Bank Reference No	:	749011628
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100217440951 with us for Rs. 5000000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	SANTHOSH GEDDA
Beneficiary Code	:	
Beneficiary Account Number	:	919010003787539
Beneficiary Address		

Client Reference No	:	2308202408
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563866
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000075
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PANGA SRINIVASARAO
Beneficiary Code	:	
Beneficiary Account Number	:	911010011335704
Beneficiary Address		

Client Reference No	:	2308202405
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545871
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000075
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	VAMSI SARAGADAM
Beneficiary Code	:	
Beneficiary Account No	:	50100626857854
Beneficiary Address	:	

Client Reference No	:	2308202434
Date	:	23/08/2024
Bank Reference No	:	749011612
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100626857854 with us for Rs. 5000000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	YELLAPU MAHESHBABU
Beneficiary Code	:	
Beneficiary Account Number	:	33461854090
Beneficiary Address		

Client Reference No	:	2308202416
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386499752
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0003135
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	MUNAGAPAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	YAMINI SARAGADAM
Beneficiary Code	:	
Beneficiary Account Number	:	35817615861
Beneficiary Address		

Client Reference No	:	2308202431
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545899
Amount	:	5000000.00
Amount in Words	:	Fifty Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 5000000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0000805
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	ANAKAPALLE
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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Venkatesh Varada

From: Ramana Reddy Neelapu
Sent: 27 August 2024 11:25
To: Venkatesh Varada
Cc: Srinivasa Rao Korada
Subject: FW: A/C No.XXXX6411-Debit

FYI

-----Original Message-----
From: statement.mail@hdfcbank.com <statement.mail@hdfcbank.com>
Sent: Monday, August 26, 2024 1:55 PM
To: Srinivasa Rao Korada <srinivasa.korada@escientia.com>
Subject: A/C No.XXXX6411-Debit

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Sir / Madam,

Kindly find below the details of the txn Debited to your a/c number XXXXXXXXXX6411
Amount : INR 5000000
Name : YANDAVA TEJESWARA RAO
Txn Date : 26/08/2024
Value Date : 26/08/2024
Txn Type : Debit
Cheque No : 128271
Bank Ref No : 128271
A/c Narration : Multiple Payees C77700260824120419 - Ex Gratia for Major Injury

THIS IS AN AUTO GENERATED EMAIL ALERT AND PLEASE CONTACT THE BANK IN CASE OF ANY DISCREPANCIES

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	ARUNAKUMAR POTTASIRI
Beneficiary Code	:	
Beneficiary Account Number	:	914010026925759
Beneficiary Address		

Client Reference No	:	2308202410
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563870
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000732
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	P L PURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	BANGARINAIDU CHANDAKA
Beneficiary Code	:	
Beneficiary Account Number	:	32650258555
Beneficiary Address		

Client Reference No	:	2308202424
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386615136
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0002716
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	CHANDAKA APPARAO
Beneficiary Code	:	
Beneficiary Account Number	:	73165222683
Beneficiary Address		

Client Reference No	:	2308202425
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601423
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	APGV0003326
Beneficiary Bank Name	:	ANDHRA PRADESH GRAMEENA VIKAS BANK
Beneficiary Branch Name	:	BHOGAPURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	DIGMANTHI APPA RAO
Beneficiary Code	:	
Beneficiary Account Number	:	11560566930
Beneficiary Address		

Client Reference No	:	2308202436
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386615130
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0000752
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	YELLAMANCHILI
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	DHANNJAYA BODALA
Beneficiary Code	:	
Beneficiary Account Number	:	31431521693
Beneficiary Address		

Client Reference No	:	2308202421
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386614963
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0012117
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	KASHINAGARA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	TAMARANA GANGADHAR
Beneficiary Code	:	
Beneficiary Account Number	:	33160455531
Beneficiary Address		

Client Reference No	:	2308202401
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601448
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0002740
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	KASIMKOTA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	JEEREDDI KASI NAIDU
Beneficiary Code	:	
Beneficiary Account Number	:	920010051379977
Beneficiary Address		

Client Reference No	:	2308202407
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601440
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000075
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	GAJUWAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	MALLA NAGABHUSHANAM
Beneficiary Code	:	
Beneficiary Account Number	:	33250150422
Beneficiary Address		

Client Reference No	:	2308202437
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545882
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0003135
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	MUNAGAPAKA
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	NETHALA APPARAO
Beneficiary Code	:	
Beneficiary Account Number	:	11653705008
Beneficiary Address		

Client Reference No	:	2308202428
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386601442
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0001455
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	RAMBILLI
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PILLA RAM MEHER BABU
Beneficiary Code	:	
Beneficiary Account Number	:	11560581948
Beneficiary Address		

Client Reference No	:	2308202433
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386563886
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0000752
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	YELLAMANCHILI
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PARAMESWAR RAO ALLAKA
Beneficiary Code	:	
Beneficiary Account No	:	50100453490038
Beneficiary Address	:	

Client Reference No	:	2308202432
Date	:	23/08/2024
Bank Reference No	:	749011610
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100453490038 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	PRAKASH JAGARAPU
Beneficiary Code	:	
Beneficiary Account No	:	50100481839005
Beneficiary Address	:	

Client Reference No	:	2308202406
Date	:	23/08/2024
Bank Reference No	:	749011620
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100481839005 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	SAIKUMAR GUDISA
Beneficiary Code	:	
Beneficiary Account No	:	50100615604330
Beneficiary Address	:	

Client Reference No	:	2308202403
Date	:	23/08/2024
Bank Reference No	:	749011617
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100615604330 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	SASHIKANTH BANDI
Beneficiary Code	:	
Beneficiary Account No	:	50100167264425
Beneficiary Address	:	

Client Reference No	:	2308202402
Date	:	23/08/2024
Bank Reference No	:	749011616
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100167264425 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	G S VARA PRASAD RAJU
Beneficiary Code	:	
Beneficiary Account No	:	50100453489981
Beneficiary Address	:	

Client Reference No	:	2308202409
Date	:	23/08/2024
Bank Reference No	:	749011623
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100453489981 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

This is computer generated advice. Does not require any signature.

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	KANCHU SHANMUKHA RAJU
Beneficiary Code	:	
Beneficiary Account Number	:	20220790225
Beneficiary Address		

Client Reference No	:	2308202422
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545863
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	SBIN0011704
Beneficiary Bank Name	:	STATE BANK OF INDIA
Beneficiary Branch Name	:	LANKELAPALEM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	SHANMUKHARAO KELLA
Beneficiary Code	:	
Beneficiary Account No	:	50100481935571
Beneficiary Address	:	

Client Reference No	:	2308202420
Date	:	23/08/2024
Bank Reference No	:	749011634
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,
We are pleased to credit your account 50100481935571 with us for Rs. 2500000.00 for the services rendered / to be rendered against the below mentioned details

Payment Details 1	:
Payment Details 2	:
Payment Details 3	:
Payment Details 4	:
Payment Details 5	:
Payment Details 6	:
Payment Details 7	:

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PAYMENT ADVICE
ESCIENTIA ADVANCED SCIENCES PVT LTD
C/O ESCIENTIA ADVANCED SCIENCES PVT
PLOT NO 11 11 A 12 12 A
APSEZ ATCHUTAPURAM
VISAKHAPATNAM, ANDHRA PRADESH. Pin : 531001

Beneficiary Name	:	GANDRETI V V LAKSHMI CHAITANYA
Beneficiary Code	:	
Beneficiary Account Number	:	913010025235159
Beneficiary Address		

Client Reference No	:	2308202419
Date	:	23/08/2024
UTR / RRN No	:	HDFCR52024082386545875
Amount	:	2500000.00
Amount in Words	:	Twenty Five Lakh Rupees

Dear Sir / Madam,

We have initiated your payment to RBI for the amount of 2500000.00 for the services rendered, vide RTGS, for below mentioned details

IFSC Code	:	UTIB0000732
Beneficiary Bank Name	:	AXIS BANK
Beneficiary Branch Name	:	P L PURAM
Payment Details 1	:	
Payment Details 2	:	
Payment Details 3	:	
Payment Details 4	:	
Payment Details 5	:	
Payment Details 6	:	
Payment Details 7	:	

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FIRE FIGHTING TRAININGS AND FIRE DRILLS

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FIRE FIGHTING TRAININGS AND FIRE DRILLS

FIRE HYDRANT SYSTEM OPERATION AND MOCK DRILLS 509

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FIRE HYDRANT SYSTEM OPERATION AND MOCK DRILLS 510

511

EMERGENCY MOCK DRILLS/TRAINING

512

EMERGENCY MOCK DRILLS

Senior Leadership condolence meet with deceased and injured family members after incident

Senior Leadership condolence meet with deceased and injured family members after incident

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