BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

PRINCIPAL BENCH, NEW DELHI

Original Application No. 89/2020

IN THE MATTER OF:

JITENDRA SINGH …COMPLAINANT

Versus

CENTRAL POLLUTION CONTROL BOARD & ORS

...ACCUSED

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Through

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Dated: July 3, 2021
Place: Delhi

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

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REPLY ON BEHALF OF RESPONDENT NO. 4 TO THE JOINT INSPECTION REPORT DATED 11.08.2020 PREPARED BY THE JOINT COMMITTEE

PRELIMINARY SUBMISSIONS

1. That Teva API India Private Limited (**"Respondent No. 4"**) is a pharmaceutical Company registered under the provisions of Indian Companies Act, 1956 having registered office situated at 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Maharashtra-400063.

2. That the present Reply on behalf of Respondent No. 4 is being filed through Rajesh Umakant Naik, Site General Manager of Respondent No. 4, who is authorised vide resolution dated 22.02.2021 passed by Board of

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Directors of the Respondent No. 4 in this regard. True copy of the resolution passed by the Board of Directors of the Respondent No. 4 in their meeting held on 22.02.2021 is annexed hereto as **Annexure R-1**.

3. That Respondent No. 4 has been running the facility at Gajraula **("Facility")** since 2003 following compliances of all safety and environmental regulations as applicable from time to time. The same has been verified and endorsed by all competent authorities i.e. State and Central. Further, it may be noted that as a global pharmaceutical company, and the largest supplier of generic medicines worldwide, Respondent No. 4 is deeply committed to supply quality medicines to millions of patients which it serves around the world every day and this is done with high standards of EHS&S. In this global pandemic situation, Respondent No. 4 Company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through the Respondent No. 4's Facility situated at Gajraula site. The Facility has been maintaining highest standards while operating and no environmental and safety hazard events with such adverse outcomes were reported. At no point of time the said Facility of Respondent No. 4 was found to be wanting to have taken adequate measures to ensure safety and to avoid environmental hazard In fact, Respondent No. 4 has always been in fore front when it comes to ensure compliances with all requirements of Laws to ensure safety in operation of the Gajraula Facility.

4. The Order dated 18.06.2020 of this Hon'ble Tribunal is not complied with in the Report dated 11.08.2020 by the Joint Committee (**"Report"**). The Report does not have any basis to prove the alleged leakage of gas on 07.06.2020 and 10.06.2020 for which the Joint Committee was constituted and required to submit factual and action taken report.

5. That assuming without admitting if there was a gas leakage incident on 07.06.2020 & 10.06.2020 as alleged, then there are broadly two parameters to assess as under:-

(i) Health emergency involving people within the premises of Respondent No.4's, Facility and in the vicinity of the said Facility;

(ii) Deterioration of Air Quality in the immediate vicinity of the plant or presence of alleged leaked substance in the air;

On the above aspects the Report of the joint committee is negative:

(a) No incident of any harm or discomfort has been reported from any hospital or by the people living in the vicinity/near the Facility. No complaints were received /registered at the site, by any people in the immediate vicinity of the Facility, about any such abnormal events. Further, no incident of any harm or discomfort was reported by hundreds of workers present in the said Facility of Respondent No. 4 at the relevant time of alleged leakage.

(b) As per the conclusion at para 9(6) of the Report submitted by the joint committee, the Ambient Air quality was within permissible

norms and does not reflect the emission of toxic gases during the visit. In fact, all the stipulated parameters in the ambient air quality are well within the National Ambient Air Quality Standards (NAAQs). Further, monthly reports of ambient air monitoring (annexed as Annexure R-3 (Colly)) conducted by independent accredited agency which were submitted by the Respondent No. 4 in reply to the show-cause Notice have been ignored. Those monthly reports show that the Air quality was within permissible norms and does not reflect the emission of toxic gases. It is emphatically stated that Respondent No. 4 is complying with all the parameter as set out in guidelines in this regard.

6. That further as per para 9(14) of the conclusion of the Report even the Ground water beneath the Facility was qualitatively found to be within permissible limits as per BIS standard by the joint Committee. This shows that no pollution to the ground water is caused by the said Facility of Respondent No. 4.

7. That the Report submitted by the Joint Committee failed to consider the detailed Reply dated 26.06.2020 alongwith documents filed by Respondent No. 4 to Show-cause Notice dated 11.06.2020 received from Uttar Pradesh Pollution Control Board (**"UPPCB"**). Copy of Show Cause Notice dated 11.06.2020 and its Reply are annexed herewith as **Annexure R-2 (Colly)**.

8. That the Joint Committee failed to consider that in compliance to the consent conditions of Letter dated 04.06.2020 as well as incompliance of

suspected. Copy of letter dated 16.06.2020 is annexed herewith as **Annexure R-4**.

11. That the Joint Committee failed to consider that HCL is stored in tanks in the Facility in aqueous form with 30% concentration and hence the possibility of generation of vapour from the tanks during the normal storage conditions is not possible as per the inherent physical properties of HCL. Hence, there is no possibility of gas leakage from the storage system which is at atmospheric temperature and pressure. The Facility has been adopting a robust hazard identification and minimization program as a part of the ISO 45001:2018 standards and layers of protection measures are adopted to avoid any adverse impacts due to release of any accidental HCL releases and a SOP is in place to minimize the operational risks. A dedicated wet scrubber is provided with adequate capacity to handle the HCL fumes if any. Structured preventative maintenance programs and system audit programs are in place and work permit systems at high risk areas are in place to ensure that only authorized and trained personnel are operating such facilities. Moreover, there are several CCTV cameras installed and were in running condition at the relevant time of suspected leakage. Had there been any leakage there would definitely been some unrest among 631 workers present inside the Facility at the relevant time on 07.06.2020. However, on the contrary the footage of those cameras show that there was no unrest or alarm among the Facility workers and when suddenly media and Chief Fire Officer arrived at 10 PM on

Guidelines for the Measurement of Ambient Air Pollutants by Central Pollution Control Board ("CPCB") and UPPCB, Ambient air monitoring is being performed at the Facility by third party dually approved by Ministry of Environment & Forest as well as by CPCB. Copies of the monthly reports which were duly filed in reply to the Show-Cause Notice are attached herewith as **Annexure R-3 (Colly)**. The monthly Ambient air monitoring reports shows that the Air quality was within permissible norms and does not reflect the emission of toxic gases.

9. That it is further submitted that long-term ambient air quality monitoring data measured by the accredited consultant also reconfirms that all stipulated air quality parameters are within the NAAQs. Ambient air quality test reports indicated that stipulated toxic pollutants such as Benzene and BaK are absent. Moreover, it is pertinent to note that the Facility is not involved in manufacturing or handling of Benzene and BaK and hence the possibility of release of such toxic gases from the Facility is not possible. The results of the latest ambient air quality monitoring conducted at nearby communities in the vicinity of the Facility as per CPCB guidelines, by the accredited agencies, once again confirms that ambient air quality at the Facility is well within the stipulated norms.

10. That the Joint Committee failed to consider that no evidence of leakage or any health related complaint is shared with Respondent No. 4 despite the fact that the same was requested vide letter dated 16.06.2020 from Respondent No.4 to Chief Fire Officer (CFO) who inspected the site

07.06.2020 the security at the gate was totally unaware of any leakage. Copies of the pictures from those CCTV cameras is annexed herewith as **Annexure R-5 (Colly)**. Additionally, footage from the CCTV cameras as can be provided.

12. That the Report of the joint committee notes that during inspection of the Facility on 09.06.2020, the wet scrubber to HCL tank was found non-operational and the unit representatives were unable to make it operational. On this basis it was concluded that Facility was unable of control the emission of HCL vapour on 07.06.2020 and that incident of gas leakage took place. In this regard, the joint committee failed to consider that reply to show cause Notice. It is to submit that trace levels of HCL emissions, if any, may be generated only during the HCL unloading from road tanker to storage tank, for which a SOP is already in place to inspect the system and operate the scrubber to avoid any fumes in to the environment. As indicated in our previous paragraphs of this document, as per the SOP only authorized and trained personnel will be allowed to operate at HCL storage areas. On the day of the inspection, neither HCL unloading operation, nor any major O&M activities were scheduled, hence the authorised and trained personnel was not available at the specific area. The emergency staff who was asked to operate the wet scrubber during testing exercise was not the designated regular operator for such specific operation, but he tried as instructed by the Inspection team. The regular operator was on lunch break during that period and on his arrival back to the inspection place at

site the system was operated and shown to the inspection team, it was working normal. It is pertinent to mention herein that the wet scrubber is operated during events like unloading of HCL tanker into the HCL Storage tank because at that time there is possibility of HCL vapours to be emitted. Wet scrubber is not operated all the time. Further, the joint inspection team during their visit on 09.06.2020 frequently monitored the scrubber system to verify any abnormality, fumes, etc., however no abnormality was noticed. Further, the preventive maintenance is being performed according to the approved preventive maintenance schedule which is part of the SOP, "Preventive and reparative maintenance". Respondent No. 4 has software based preventive maintenance record for the wet scrubber and real time electronic record is maintained at the Facility. Copy of the preventive maintenance records of wet scrubber which was duly shared in reply to show cause notice is attached herewith as **Annexure R-6.**

13. It is further submitted that the HCL vapours are likely to be emitted only during the HCL tanker unloading in to the HCL Storage tank. HCL loading operations are periodic in nature and scrubber is operated all the time during the tanker unloading operations. Based on the industry practice, HCL emissions from such operations will be insignificant and absolutely no emissions will be released from the static storage tank. Hence, the scrubber serves as an additional protective measure, to treat any trace HCL vapour emissions, if any. Further, as per the plant records, there was no tanker unloading between 1st June 2020 to 23rd June 2020. Hence, the

allegation of HCL vapor release is baseless. True copy of photographs while unloading HCL tanker into the HCL Storage tank are annexed herewith as **Annexure R-7 (Colly).**

14. The joint committee failed to consider that on 08.06.2020 also team of Uttar Pradesh Pollution Control Board ("UPPCB") along with SDM visited the Facility and checked the wet scrubber. They found that everything was in order. Copy of the Photographs of the CCTV footage to show the same (which were also filed along with reply to the show cause Notice) are annexed herewith as **Annexure R-8 (Colly)**. Relevant footage from the CCTV camera can be produced as and when directed by this Hon'ble Tribunal. The test reports of the Joint Committee confirms that the acid emissions from the HCL scrubber vent is about 1 mg/Nm^3, which is less than any detectable limit of stack gas monitoring. In addition, the latest emission tests conducted by NABL accredited lab, during the HCL tanker unloading operations, reconfirms that the HCL vapours at the scrubber outlet are far below the limit of 35 mg/Nm^3 suggested by joint committee in their report. However, it is pertinent to mention herein that there are no specific limits prescribed for HCL vapours as per the consent conditions. Copy of the emission test report is annexed herewith as **Annexure R-9.** This aspect clearly indicates that the scrubber systems is working well and is adequate to meet the stipulated emission norms. In addition, it is worth to note that these emissions are not continuous sources. Such unloading operations happens only for few hours in a month. Moreover, due to

adoption of SOP and Log book and Scrubber system Preventive maintenance, HCL emissions from the unloading operations are very well controlled as per good engineering practices. Hence, the possibility of release of any HCL gases into the neighboring areas, is only a false allegation.

15. That in relation to observation of ground water depletion made in the Report, the Joint Committee failed to consider that the Facility has demonstrated various water stewardship initiatives. The Facility has been adopting a robust waste water recycling program and about 30% of the fresh water demand was reduced by adopting a robust wastewater recycling program within the Facility. In addition Respondent No. 4 has adopted various local and regional level rain water harvesting programs. Various measures were taken to enhance the ground water recharge potential at six nearby community ponds at nearby locations. Respondent No. 4 has adopted two more ponds in the nearby village in 2020 and necessary work has been completed. Details in this regard are annexed herewith as **Annexure R-10.** In addition, various rainwater harvesting programs are also adopted within the existing Facility. Based on an initial assessment, the Facility has made all efforts to becoming water positive Facility. As per the Jal Sakti notification 24th September 2020, the Facility has commissioned an accredited consultant to undertake ground water impact assessment study. Based on the preliminary assessment, the following observations are made: the safe yield of the existing borewells at the site

are far above the water demand in the Facility and impact of withdrawal of the ground water on the neighboring ground water table is insignificant.

16. That Respondent No. 4 has been adopting highest environmental and safety management systems and the Facility is an ISO 14001:2015 and ISO 45001:2018 certified Facility, which are risk based management systems that are more stringent than the previous versions of ISO 14001:2004 and OHSAS 18001 standards. The Facility is certified for ISO 14001:2015 and ISO 45001:2018 by BSI, a reputed certification institute. Copy of Certificate of Registration under Environmental Management System ISO 14001:2015 and ISO 45001:2018 are attached herewith as **Annexure R-11 (Colly)**. A detailed aspect impact and hazard identification activities are documented and necessary risk mitigation measures are already in place. These management systems were audited and the certification agency has granted certification based on the merits of the systems implemented at the site. Further, the Joint Committee failed to consider that the Facility has world class Environment and Safety system at the site. The documents in this regard submitted along with reply to Show-Cause Notice are annexed herewith as **Annexure R-12 (Colly).**

PARAWISE REPLY

1. That the contents of para 1 of the joint inspection report needs no reply.

2. That the contents of para 2 of the joint inspection report needs no reply the same being a matter of record. However, it is pertinent to state that the said report under reply was only filed on 01.02.2021.

3. That the contents of para 3 of the joint inspection report needs no reply the same being a matter of record.

3.1. That the contents of para 3.1 of the joint inspection report needs no reply to the extent the same is a matter of record. It may be noted that the even on the day of inspection the unit was found operational at production capacity of 0.68 MT per day which is 40% of consented production capacity. As noted in para 3.1 of the Report under Reply, the Facility is granted consent to produce 620 MT per annum of various consented products at the Facility. The products will be manufactured on campaign basis and in batches based on the market demand. Each batch will be operated at full capacity and hence the water consumption and waste water generation represent the full production operations of the Facility and adequate environmental management infrastructure is already in place. Hence, estimation of production on per day basis is not appropriate. However, it should be noted that the overall emissions, discharges and wastes generated from the Facility has never exceeded the stipulated quantities and thus the Facility is not in violation of any regulations and norms.

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4. Reply to para 4 is as under:

4.1 That the contents of para 4.1 so far the same is matter of record needs no reply. However, anything contrary to record is denied. It is however clarified that just because NOC granted to Respondent No. 4's Gajraula Facility for abstraction of ground water is expired, does not in itself indicate any kind of pollution being caused. The Report admits that NOC was reapplied on 14.10.2019. The Facility has been adopting a robust waste water recycling program and about 30% of the fresh water demand was reduced by adopting a robust wastewater recycling program within the Facility. In addition Respondent No. 4 has adopted various local and regional level rain water harvesting programs. Various measures were taken to enhance the ground water recharge potential at six nearby community ponds. The said Facility of Respondent No. 4 adopted two more ponds in the nearby village in 2020 and necessary work is in progress. Detail is attached in Annexure R-10.

It is further submitted that Respondent No. 4 submitted the application for renewal of permission for abstraction of Ground Water to CGWB on 14.10.2019. Respondent No. 4 has been incessantly following up with the authorities through a series of communications letter no. TAIL/GAJ/E&S/CGWA/2020/04 dated 08.02.2020,

TAIL/GAJ/E&S/CGWA/2020/05 dated 17.03.2020, TAIL/GAJ/E&S/CGWA/2020/06 dated 20.07.2020 which are annexed herewith as **Annexure R-13 (Colly)**. Respondent No. 4 is awaiting the response and hearing from the concerned authorities. Respondent No. 4 has also filed Application No. AMRH1220RIN0025 and AMRH1220RIN0026 dated 30.12.2020 with Uttar Pradesh Ground Water Department (UPGWD) for necessary borewell registration. Both borewells located at the said Facility were duly registered on 30.12.2020. Registration Certificates dated 30.12.2020 for both the borewell facilities were issued by UPGWD in this regard are annexed herewith as **Annexure R-14 (Colly)**. Further, as per the notification issued by the Ministry of Jal Sakthi, GOI, dated 24.09.2020, Respondent No. 4 have engaged NABET/CGWB accredited consultant and already submitted an interim report on 24.12.2020. Detailed Ground water impact assessment study has been conducted and the same has already been submitted with online Applications for renewal of permission for abstraction of ground water. Copy of Detailed Ground water impact assessment study is annexed herewith as **Annexure R-15**. Based on the preliminary assessment, the following observations are made: the safe yield of the existing borewells at the site are far above the water demand in the

Facility and impact of withdrawal of the ground water on the neighboring ground water table is insignificant.

As per the CGWB circular dated 11.02.2021, the UP State Govt. has constituted State Ground water department and now the online application (application no. AMRH0521RIN0029 & AMRH0521RIN0030, dated: 29.05.2021) has been submitted to concerned authorities for necessary renewal, as per the current regulations.

4.2 In reply to para 4.2 it is submitted that fresh water consumption in the Facility is well within the initial water allocation of 1455 m3/day for the Facility. The Facility has adopted a robust wastewater recycling Facility and about 30% of fresh water demand is reduced due to such recycling activities.

5. That the contents of para 5 of the joint inspection report needs no reply the same being a matter of record. However anything contrary to record is denied.

6. In reply to para 6 of the Report under reply it is submitted that the emissions and wastewater test reports submitted by joint committee reconfirms that all stipulated parameters are well within the limits prescribed. This reconfirms the environmental stewardship and

robustness of the ISO 14001:2015 systems implemented at the Facility. The management of Respondent No. 4 gives highest priority to environmental statutory compliance. It is also emphasized here that a robust online emission monitoring and treated wastewater quality monitoring systems are in place and the online data is connected to UPPCB server.

6.1 Effluent Management System

It is evident from the observations made by Joint Committee at para 6.1 that the Facility has installed all necessary infrastructure for collecting and treating the wastewater generated from the Facility. Good management practices such as robust SOP, monitoring mechanism and O&M operations are in place. Online treated wastewater monitoring system is in place and data is continuously uploaded on the PCB server. It is pertinent to note the samples collected by Joint Committee and also the Facility reconfirms that all the stipulated parameters are within the norms.

6.2 Sewage-Treatment system

Two full-fledged STPs are also in operation and the test reports confirm that the treated sewage is complying with stipulated discharge norms.

7. Observation on Water consumption of the unit and **Analysis result of sample collected from storm water drain**

7.1 **Observation on Water consumption of the unit**

In reply to para 7.1 it is submitted that Water consumption in the Facility is well within the allocated quantity. Due to adoption wastewater recycling programs by installing ETP and RO, the overall fresh water demand is reduced by 30%.

7.2 **Observation on the Analysis result of sample collected from storm water drain**

In reply to para 7.2 it is submitted the Facility has been adopting a robust storm water contamination prevention plan in the Facility: (i) entire wastewater collection network is through closed pipe/drain network and hence no cross contamination of wastewater with storm water is envisaged, (ii) Dedicated concrete collection tanks with transfer pumps are in operation for transferring the wastewater to ETP (iii). All hazardous waste collection facilities and storage areas placed under covered roof and hence there is no possibility of storm water ingress from these areas, (iv) all the solvent storage tanks are provided with dykes and spill collection pits, the storm water collected from the dyke pits is transferred to ETP area during the first rain for further treatment.

It is important to note that any spill of untreated wastewater in the storm water drain is transferred back to ETP. It is evident from the fact that all the solvent storage tanks are provided with dykes and

spill collection pits, the storm water collected from the dyke pits is transferred to ETP area during the first rain for further treatment.

In order to ensure that untreated storm water is not accidentally released into the environment, storm water outfall is provided with two level gates and valves to avoid any incident. Teva API has developed robust storm water management system. The storm water collected from the Facility is collected in a dedicated 200 m3 (100 x 2 Nos) tank located at the final storm water outfall point. As per SOP, irrespective of the quality of the water, this water will be treated in the ETP in a proportionate manner without disturbing the treatment operations. The photographs of the dykes, two level gates & valves in the storm water management system and Photographs of the first wash storm water collection tank are annexed herewith as **Annexure R-16 (Colly).**

It is pertinent to mention herein that at para 9(14) of the conclusion of the Inspection Report submitted by the joint committee before the Hon'ble National Green Tribunal ("NGT") it was noted that the Ground water beneath the Facility was qualitatively found to be within permissible limits as per BIS standard. This shows that no pollution to the ground water is caused by the Facility of Teva API. Had it been the case that the Facility would be releasing untreated wastewater in storm water drain into the environment then certainly

the ground water beneath would have become contaminated, which is not the case. Assuming without admitting, mere presence of untreated/partially treated Industrial wastewater in the storm water drain does not imply any pollution is caused to the environment because such untreated water is never released in the environment without passing through ETP. Copies of photographs showing the provisions available for taking back any untreated/partially treated Industrial water in storm water drain, if any, is transferred back to ETP are annexed herewith as **Annexure R-17 (Colly).**

8. Effluent/Emission/Solid & Haz. Waste Management System

8.1 Observations on Effluent Treatment Plant (ETP)

In reply to para 8.1 of the Report under Reply it is submitted that the existing Facility is operating a full-fledged wastewater treatment facility to meet the CREP guidelines issued by CPCB. High TDS wastewater is segregated at the source and treated in a dedicated high-TDS wastewater ETP stream. The condensate generated from the MEE/ATFD of the high TDS wastewater stream is treated in the low TDS wastewater stream for recycling purpose. Low TDS wastewater treatment system comprises of primary treatment, two stage biological treatment system and two stage RO plant. Treated wastewater from the RO permeate is reused for cooling make up and other applications. RO rejects are subjected to mechanical evaporation in MEE and followed

by ATFD. MEE/ATFD condensate is recycled back in the ETP and treated in the RO plant. By adopting the above closed loop wastewater treatment facility, the Facility is able to achieve ZLD status. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day. Due to adoption of various water recycling programs, the overall wastewater quantity is reduced from the consented level of 370 m3/day to about 300 m3/day and thereby the existing ETP/ZLD system has additional buffer capacity. A robust SOP is already in place for achieving assured ZLD operations in the Facility.

8.2 Observations on Sewage Treatment Plants (STPs)

In reply to para 8.2 so far the same are matter of record needs no reply. It is further submitted that the Facility is operating two full-fledged STPs. It is further submitted that there are no changes in number of housing units in the colony and the overall domestic water consumption in the main plant and colony. Hence, the sewage generation will remain the same from the previous years. The CTO amendment letter was submitted to PCB on 09.07.2020 and thereafter two follow up Applications were also filed which are annexed herewith as **Annexure R-18 (Colly)** indicates the same level of sewage generation from previous years. The Facility has already approached PCB for necessary

amendment in the CTO to indicate the sewage generation quantities in line with previous consented levels.

It is pertinent to note that the entire sewer network is isolated from the storm water drains and hence there is no possibility of storm water ingress in the sewers, which can be evidenced from the site photographs annexed herewith. Due to the lower organic load (COD) on the STPs, the biological treatment system has achieved equilibrium with the biomass in the aeration tank with optimal MLSS for the organic load on the system. Hence, it has to be noted that this is not an abnormal phenomenon as the final treated sewage quality conforms to the stipulated discharge norms.

8.3 Existing Emission Management System

In reply to para 8.3 it is submitted that the Facility has installed CEMS and has been maintaining all parameters within the prescribed limits. Generation of PM emissions depends on the ash content in the LSHS, which might vary from batch to batch and hence, the instantaneous PM recorded during the site inspection might vary with the long-term CEMS data. However, it should be noted that all values are maintained within the limits. Respondent No. 4 at the said Facility is adopting robust SOPs for calibrating, monitoring and reporting environmental monitoring data. It is further submitted that as per CPCB guidelines and also IS Code monkey ladder is also an accepted method. Copy of

CEMS Boiler calibration certificates are annexed herewith as **Annexure R-19.**

Further, in para 8.3 of the Report it is stated that on 09.06.2020 during the visit of Chief Fire Officer and UPPCB wet scrubber was found non-operational and unit representatives were unable to make it operational. On this basis it was concluded in the Report that incident of gas leakage took place on 07.6.2020. In this regard, it is submitted that such conclusion on the face of it is based on conjectures and surmises. It is further submitted that as clarified in detail in Preliminary Submissions above the wet scrubber is not required to be operated all the time. As per industry practice the Wet Scrubber is only required to be operated when there is possibility of generation of fumes i.e. during events like unloading of HCL tanker into the HCL Storage tank. Wet scrubber at the Facility has been operated during all such times. Further, on 09.06.2020 when the Inspection Team arrived the regular operator was on lunch break and the emergency staff who was asked to operate the wet scrubber during testing exercise of inspecting team was not the designated regular operator for such specific operation, but he tried as instructed by the Inspection team. It may be noted that on the day of the inspection, neither HCL unloading operation, nor any major O&M activities were scheduled. The regular operator nevertheless returned after lunch break and on his arrival back to the inspection place at site,

the Wet Scrubber was operated and shown to the inspection team, it was working normal.

8.4 Solid and hazardous waste management

The contents of para 8.4 to the extent the same is matter of record need no reply. It is further submitted that the Facility has consented permission to generate & dispose 40 MTPA of Spent Catalyst, however no spent catalyst was generated in the last financial year i.e. F.Y. 2019-20 as this generation of this waste is less frequent and periodical. Further, the Facility also has the necessary permission for Ion Exchange resin and such waste is within permissible level, however, no spent Ion Exchange resin was generated in the F.Y. 2019-20. The Facility also has the necessary permission for Spent carbon upto 40 MT. However, the Facility generated and disposed-off 22.2 MT in the F.Y. 2019-2020 and such waste is sent to TSDF. Details about generation & disposal of Spent Carbon, is annexed herewith as **Annexure R-20**.

9. REPLY TO CONCLUSIONS

Para 9 of the joint report is the conclusion which is replied as under:

9.1 In reply to para 9.1 it is submitted that Respondent No. 4 have been operating a full-fledged Effluent Treatment Plant (**"ETP"**) comprising of primary, secondary and tertiary treatment facilities and achieved zero liquid discharge status.

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Treated wastewater quality is monitored and periodically submitted to Pollution Control Board. Test reports indicate that the overall Zero Liquid Discharge (**"ZLD"**) system is functioning as per the design intent and the permeate is recycled in the Facility and the same has been confirmed in the Joint Inspection Report. Treated Effluent Water Sample Analysis Reports for the month of May 2020, June 2020 and July 2020 clearly shows that all parameter of pollutants are well below the permitted limits prescribed by CPCB. Copy of Treated Effluent Water Sample Analysis Reports for the month of May 2020, June 2020 and July 2020 are annexed herewith as **Annexure R-21 (Colly)**. It is pertinent to mention herein that Treated Effluent Water Sample Analysis Reports for the month of May 2020, June 2020 and July 2020 were duly submitted to UPPCB by Respondent No. 4. As Respondent No. 4's Facility is a ZLD unit, the question of partially treated effluent discharging in to the environment does not arise. The salts generated from the MEE/ATFD are disposed to authorized TSDF facility. As a part of Respondent No. 4's corporate environmental management plan, Respondent No. 4 have engaged a NABET accredited professional consultant to undertake a detailed adequacy study. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP

units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day. Due to adoption various water recycling programs, the overall wastewater quantity is reduced from the consented level of 370 m3/day to about 300 m3/day and thereby the existing ETP/ZLD system has additional buffer capacity. A robust SOP is already in place for achieving assured ZLD operations in the Facility.

9.2 In reply to para 9.2 it is submitted that the Respondent No. 4's Gajraula Facility has been utilizing the treated wastewater for non-process applications such as cooling tower, CIP etc. within the Facility and have adequate storage facilities for holding the treated wastewater during the rainy days. Hence, there is no reason for discharging the wastewater into storm water drains. The ground water collected from the existing test wells at the site is regularly monitored and no evidence of soil and ground water contamination was noted. This fact was reconfirmed in the Joint Inspection Report. Storm water outfall is provided with two level gates and valves to avoid any accidental release if any, entering into the environment. Necessary spill retaining systems are already placed at the process buildings, storage tank areas and ETP and hence

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there is no possibility of wastewater entering into the storm water drains.

The Facility has adopted a robust storm water contamination prevention plans: (i) entire wastewater collection network is through closed pipe/drain network and hence no cross contamination of wastewater with storm water is envisaged, (ii) Dedicated concrete collection tanks with transfer pumps are in operation for transferring the wastewater to ETP, (iii) all hazardous waste collection facilities and storage areas placed under covered roof and hence possibility of storm water ingress from these areas is not envisaged, (iv) all the solvent storage tanks are provided with dyes and spill collection pits, the storm water collected from the dyke pits is transferred to ETP area during the first rain for further treatment.

9.3 In reply to para 9.3 it is submitted that as per the good Environmental Management system and practices, any spill within the storage tanks across the facilities is collected and transferred to the ETP equalisation tank for further treatment. The closed drain valve was only available at the top of tank only whereas the collection pit was provided with level based pumping system. Subsequent to the inspection, this drain

valve was permanently closed. True copy of photographs are attached herewith as **Annexure R-22 (Colly).**

9.4. The contents of para 9.4 are admitted.

9.5. The contents of para 9.5 are vehemently denied as misconceived. It is further submitted that it is concluded in the para under Reply that incident of gas leakage took place. This conclusion is based on premises stated in para 8.3 of the Investigation Report. Those premises are that on 09.06.2020 during the visit of Chief Fire Officer and UPPCB officials, wet scrubber was found non-operational and unit representatives were unable to make it operational. Merely, on this basis it was concluded in the Report that incident of gas leakage took place on 07.6.2020. In this regard, it is submitted that such conclusion on the face of it is based on conjectures and surmises. It is further submitted that as clarified in detail in Preliminary Submissions above the wet scrubber is not required to be operated all the time. As per industry practice the Wet Scrubber is only required to be operated when there is possibility of generation of fumes i.e. during events like unloading of HCL tanker into the HCL Storage tank. Wet scrubber at the Facility has been operated during all such times. Further, on 09.06.2020 when the Inspection Team arrived the regular operator was on lunch

break and the emergency staff who was asked to operate the wet scrubber during testing exercise of inspecting team was not the designated regular operator for such specific operation, but he tried as instructed by the Inspection team. It may be noted that on the day of the inspection, neither HCL unloading operation, nor any major O&M activities were scheduled. The regular operator nevertheless returned after lunch break and on his arrival back to the inspection place at site, the Wet Scrubber was operated and shown to the inspection team, it was working normal.

It is reiterated that HCL vapours are likely to be emitted only during the HCL tanker unloading in to the HCL Storage tank. HCL loading operations are periodic in nature and scrubber is operated all the time during the tanker unloading operations. Based on the industry practice, HCL emissions from such operations will be insignificant and absolutely no emissions will be released from the static storage tank. Hence, the scrubber serves as an additional protective measure, to treat any trace HCL vapour emissions, if any. It is evident from the plant records, there was no tanker unloading between 01.06.2020 to 23.06.2020. Hence, the allegation of HCL vapour release is baseless. Photographs of the HCL scrubber are attached herewith as **Annexure R-23.**

9.6 The contents of para 9.6 are admitted.

9.7 In reply to para 9.7 it is submitted that the long-term plant records confirms that the PH levels at the inlet of primary clarifier are maintained between 7.5 to 8.25 which confirms that the EQ and neutralization system is adequate. A perusal of Wastewater pH data shows adequate chemical dosing in place. Summary of the efficiency of Pre-Treatment System is attached herewith as **Annexure R-24** clearly shows the PH levels of inlet wastewater and outlet wastewater. It is further submitted that the existing Facility is operating a full-fledged wastewater treatment facility to meet the CREP guidelines issued by CPCB. High TDS wastewater is segregated at the source and treated in a dedicated high-TDS wastewater ETP stream. The condensate generated from the MEE/ATFD of the high TDS wastewater stream is treated in the low TDS wastewater stream for recycling purpose. Low TDS wastewater treatment system comprises of primary treatment, two stage biological treatment system and two stage RO plant. Treated wastewater from the RO permeate is reused for cooling make up and other applications. RO rejects are subjected to mechanical evaporation in MEE and followed by ATFD. MEE/ATFD condensate is recycled back in the ETP and treated in the RO plant. By adopting the above closed

loop wastewater treatment facility, the Facility is able to achieve ZLD status. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day. Due to adoption of various water recycling programs, the overall wastewater quantity is reduced from the consented level of 370 m3/day to about 300 m3/day and thereby the existing ETP/ZLD system has additional buffer capacity. A robust SOP is already in place for achieving assured ZLD operations in the Facility.

9.8 to 9.12 In reply to para 9.8 to para 9.12 it is submitted that just because NOC granted to Respondent No.4's Gajraula Facility for abstraction of ground water is expired, does not in itself indicate any kind of pollution being caused. The Report admits that NOC was reapplied on 14.10.2019. It is further submitted that the Joint Committee failed to consider in the Report that the said Facility is a water stewardship Facility. The Facility has been adopting a robust waste water recycling program and about 30% of the fresh water demand was reduced by adopting a robust wastewater recycling program within the Facility. In addition Respondent No. 4 has adopted

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various local and regional level rain water harvesting programs. Various measures were taken to enhance the ground water recharge potential at six by community ponds at nearby locations. Respondent No. 4 has adopted two more ponds in the nearby village in 2020 and necessary work is in progress. Detail is attached in Annexure R-10.

It is further submitted that Respondent No. 4 submitted the Application for renewal of permission for abstraction of ground water was filed before CGWB on 14.10.2019. Respondent No. 4 have been incessantly following up with the authorities through a series of communications letter no. TAIL/GAJ/E&S/CGWA/2020/04 dated 08.02.2020, TAIL/GAJ/E&S/CGWA/2020/05 dated 17.03.2020, TAIL/GAJ/E&S/CGWA/2020/06 dated 20.07.2020 which are annexed herewith as **Annexure R-25 (Colly)**. Respondent No. 4 has also filed Application No. AMRH1220RIN0025 and AMRH1220RIN0026 dated 30.12.2020 with UPGWD department for necessary borewell registration. Both borewells located at the said Facility were duly registered on 30.12.2020 and 31.12.2020 respectively. Registration Certificates dated 30.12.2020 & 31.12.2020 issued by UPGWD in this regard are annexed above as Annexure R-14 (Colly). Further, as per the notification issued by the Ministry of Jal Sakthi, GOI, dated 24.09.2020,

Respondent No. 4 have engaged NABET/CGWB accredited consultant and already submitted an interim report on 24.12.2020. Detailed Ground water impact assessment study has been completed and submitted along with online application (application no. AMRH0521RIN0029 & AMRH0521RIN0030, dated: 29.05.2021) to UPGWD. As per the CGWB circular dated 11.02.2021, the UP State Govt. has constituted State Ground water department and now the application submitted as mentioned above.

9.13 In reply to para 9.13 it is submitted that as CPCB guidelines and also IS Code monkey ladder is also an accepted method. True copy of the ladder facility at the said Facility is attached herewith as **Annexure R-26 (Colly).**

9.14. That the contents para 9.14 of the Report imply that there has been no ground water contamination committed by the said Facility of the Respondent No. 4.

9.15 In reply to para 9.15 it is submitted that toilet water is passed through the intermediate tanks and further sent to the STP, hence the particulate organic matter tends to get collected in the tanks resulting in reduced organic load to the STP, which reduces the organic load of the STP.

It is pertinent to note that the entire sewer network is isolated from the storm water drains and hence there is no possibility of storm water ingress in the sewers, which can be evidenced from the site photographs annexed herewith. Due to the lower organic load (COD) on the STPs, the biological treatment system has achieved an equilibrium with the biomass in the aeration tank with optimal MLSS for the organic load on the system. Hence it has to be noted that this is not an abnormal phenomenon as the final treated sewage quality conforms to the stipulated discharge norms.

9.16 In reply to para 9.16 it is submitted that the joint Committee was constituted to investigate whether the alleged incident of gas leak took place at the premises of said Facility of the Respondent No. 4 on 07.06.2020 and 10.06.2020. Hence, the contents of para under Reply are not relevant to determine the same. It is however clarified that as per Consent to Operate (CTO) issued on dated 27.12.2017, Consent No. H14133/C-7/Water/92/Bijnor/2017, which is annexed herewith as **Annexure R-27**, the Facility is permitted to treat and discharge 170 m3/day of sewage. The existing STP has a capacity 170 m3/day. Respondent No. 4's applications submitted to PCB dated 25.10.2019 via application no. TAIL/GAJ/E&S/UPPCB/2019/70 also indicates the same

quantity of 100 KL/day and 70 KL/day. However, the current consent is showing the above value for which appropriate representation has been made for due amendment via letter No. TAIL/GAJ/E&S/UPPCB/2020/66 dated 09.07.2020, TAIL/GAJ/E&S/UPPCB/2020/107 dated 3.12.2020, TAIL/GAJ/E&S/UPPCB/2019/70 dated 24.12.2020 which are annexed herewith as **Annexure R-28 (Colly)**, amended consent is awaited from UPPCB. It is clarified that there is no change in the infrastructure and hence no change in the sewage generation. However, it may be noted that present joint Committee was constituted to investigate whether the alleged incident of gas leak took place at the premises of said Facility of the Respondent No. 4 on 07.06.2020 and 10.06.2020.

9.17 In reply to para 9.17 it is submitted that at any given point of time, the maximum wastewater will not exceed the consented level of 370 KL/day for which necessary consent is already in place. The existing ETP/ZLD system is designed for the peak wastewater flow of 370 KL/day and the current wastewater flow peak is about 272 KLD only (Low TDS + High TDS 226.5 KLD and WWTP 45.9 KLD). As a part of Respondent No.4's corporate environmental management plan, NABET accredited professional consultant has been

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appointed. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day.

9.18-9.19 The contents of para 9.18 – 9.19 is admitted.

9.20 In reply to para 9.20 it is submitted that as per the Report OCEMS at boiler stack were found installed. Further, a ladder is available for the Stack monitoring as per the CPCB guidelines using stack monitoring kit. True copy of photographs of the ladder is annexed as Annexure R-26 (Colly).

9.21 In reply to para 9.21 it is submitted that the Facility has installed OCEMS and has been maintaining all parameters within the prescribed limits. Generation of PM (Particulate Matter) emission depends on the ash content in the Low Sulphur High Stock Fuel Oil (LSHS), which might vary from batch to batch and hence, the instantaneous PM recorded during the site inspection might vary with the long-term OCEMS data. However, it should be noted that all values are maintained within the limits. OCEMS is periodically calibrated by the equipment supplier. Respondent No. 4 has

adopted robust systems for calibrating, monitoring and reporting environmental monitoring data.

9.22 In reply to para 9.22 it is submitted that the said Facility has been maintaining Form 3 and Form 4 as per HW Manifest and annual returns are submitted to UPPCB. All types of hazardous wastes relevant to the site operations are captured under HW Authorization Form -4 which is annexed herewith as **Annexure R-29**.

REPLY TO RECOMMENDATIONS

10. The Respondent 4 has perused the recommendations of the Joint Team of CPCB and UPPCB and has dealt with each recommendation hereinbelow:

10.1 Unit was found non-compliant wrt discharge of untreated/partially treated effluent through storm water drains and violating the condition of ZLD

The existing Facility is operating a full-fledged wastewater treatment facility to meet the CREP guidelines issued by CPCB. High TDS wastewater is segregated at the source and treated in a dedicated high-TDS wastewater ETP stream. The condensate generated from the MEE/ATFD of the high TDS wastewater stream is treated in the low TDS wastewater stream for recycling purpose. Low TDS wastewater

treatment system comprises of primary treatment, two stage biological treatment system and two stage RO plant. Treated wastewater from the RO permeate is reused for cooling make up and other applications. RO rejects are subjected to mechanical evaporation in MEE and followed by ATFD. MEE/ATFD condensate is recycled back in the ETP and treated in the RO plant. By adopting the above closed loop wastewater treatment facility, the Facility is able to achieve ZLD status. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day. Due to adoption of various water recycling programs, the overall wastewater quantity is reduced from the consented level of 370 m3/day to about 300 m3/day and thereby the existing ETP/ZLD system has additional buffer capacity. A robust SOP is already in place for achieving assured ZLD operations in the Facility.

The test reports of Joint Committee and also long-term plant records confirm that the treated wastewater quality was found to comply with stipulated norms. Wastewater flow meters are installed at the outlet of the equalization tank of the ETP and also on the treated wastewater recycling line. Long-term plant data reconfirms that the treated wastewater is not discharged outside the Facility. It is also evident that due to recycling of treated wastewater, fresh water demand in the

Facility is reduced by about 30%. Hence ZLD facility has become more an essential and critical facility, as significant quantity of water required for the plant is being recycled through the ETP/RO units. Hence possibility of not-treating the wastewater and discharging such wastewater into storm water is ruled out.

10.2 Unit shall ensure that no untreated/partially treated effluent and seepage/runoff from the industrial process is discharged into storm water drain

The Facility has adopted a robust storm water contamination prevention plans in the Facility: (i) entire wastewater collection network is through closed pipe/drain network and hence no cross contamination of wastewater with storm water is envisaged, (ii) Dedicated concrete collection tanks with transfer pumps are in operation for transferring the wastewater to ETP, (iii) all hazardous waste collection facilities and storage areas placed under covered roof and hence possibility of storm water ingress from these areas is not envisaged, (iv) all the solvent storage tanks are provided with dykes and spill collection pits, the storm water collected from the dyke pits is transferred to ETP during the first rain for further treatment.

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10.3 Unit shall strictly follow the conditions laid-down in the consent to operate issued by UPPCB

The Facility has been adopting various environmental management programs and meeting emission and discharge norms and have applied for few modifications which are under active consideration with the concerned department.

10.4 Unit shall carryout adequate assessment of the ETP at operational capacity of 1.77 TPD

ETP assessment was undertaken by a NABET accredited consultant and the study indicates that the ETP/ZLD facility is adequate for the consented wastewater discharge quantity of 370 m^3/day. The study also confirms that the existing civil and mechanical units are adequate to treat the wastewater for the observed long-term plant average wastewater quality data. Due to adoption of various water conservation measures, the hydraulic load on the ETP/ZLD facility is reduced to less than 300 m^3/day over a period of time as against the contested load of 370 m^3/day, therefore the existing ETP/ZLD system is adequate for peak production capacities at given time.

10.5 Monitoring data of boiler stack and HCL stack and ambient air doesn't reflect the toxic gases during the visit on 11-08-2020.

The Facility has been monitoring all stipulated air quality parameters as per the CPCB NAAQs standards. Toxic pollutants such as Benzene and BaK stipulated under NAAQs are not generated from the Facility operations. Ambient air quality monitoring undertaken by NABL accredited lab in the month of November/December 2020 once again affirms that all stipulated

gaseous pollutants are within the norms. Other than the stipulated parameters as per NAAQ standards, no other toxic emissions are regulated. By adopting effective air quality management systems, such as nitrogen blanketing for all solvent storage tanks to avoid volatile organic carbon emissions, primary and secondary chilled water condensers for capturing emissions from process reactors, installation of scrubbers at relevant locations, Leak Detection and Repair (LDAR) program as per USEPA guidelines and preventive maintenance of air pollution control systems, the Facility is ensuring that no adverse environmental outcomes are arising out of operation of the Facility.

10.6 Unit shall make sure that air pollution control devices provided work efficiently and no such incidents of leakage of gas occurs in future

It is reiterated that there was no gas leak incident occurred at the Facility. It shall be noted that the inspection report didn't provide any clear evidence of the alleged gas leakage incident on 7th June 2020 and 9th June 2020 at site. The emission monitoring report by JIC reconfirms that the HCL emissions from the storage tank scrubber was reported about 1 mg/Nm^3, which is far below detectable level and confirms that the scrubber connected to HCL storage tank is functioning effectively to meet the stipulated emission norms. As indicated in previous paragraphs, the following robust air quality management program is being adopted by the Facility:

- Adequately designed scrubber system for HCl unloading operations,
- Scrubber inspection and preventive maintenance activities,
- Adopting SOP, logbooks and work instruction posters at site etc,
- Only authorized and trained operators for operating the scrubbers.

10.7 Unit shall get renewal of NOC from CGWB for drawl of ground water

It is further submitted that Respondent No. 4 submitted the Application for renewal of permission for abstraction of ground water to CGWB renewal application on 14.10.2019. Respondent No. 4 have been incessantly following up with the authorities through a series of communications letter no. TAIL/GAJ/E&S/CGWA/2020/04 dated 08.02.2020, TAIL/GAJ/E&S/CGWA/2020/05 dated 17.03.2020, TAIL/GAJ/E&S/CGWA/2020/06 dated 20.07.2020. Respondent No. 4 is awaiting the response and hearing from the concerned authorities. Moreover, Respondent No. 4 has also filed Application No. AMRH1220RIN0025 and AMRH1220RIN0026 dated 30.12.2020 with UPGWD department for necessary borewell registration. Both borewells located at the said Facility were duly registered on 30.12.2020 and 31.12.2020 respectively. Registration Certificates dated 30.12.2020 & 30.12.2020 issued by UPGWD in this regard are annexed herewith as Annexure R-14 (Colly). Further, as per the notification issued by the Ministry of Jal Sakthi, GOI, dated 24.09.2020, Respondent No. 4 have engaged NABET/CGWB accredited consultant and already submitted

an interim report on 24.12.2020. Detailed Ground water impact assessment study had been completed and submitted along with online application (application no. AMRH0521RIN0029 & AMRH0521RIN0030, dated: 29.05.2021) to UPGWD. As per the CGWB circular dated 11.02.2021, the UP State Govt. has constituted State Ground water department and now the application submitted as mentioned above.

10.8 Unit shall maintain records of generation and disposal of all types of hazardous waste

The Facility has mapped all types of hazardous wastes that are generated from the Facility and hazardous waste authorization was obtained from PCB with vide letter number 40/HAZ-03/17 dated 14/10/2017. The joint inspection report has already captured all types of hazardous waste that is generated from the Facility for which necessary authorization from PCB is available. Category and quantity of hazardous wastes generated and disposed are captured in Form 3, Form 4 and Form 10 of the hazardous waste manifest.

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10.9 Facility for dosing and mixing alum and polyelectrolyte shall be provided

Long-term plant data indicated that the P^H levels at the outlet of the EQ tank is maintained between 7.9 and 8.2 with a standard deviation less than 5%, this aspect confirms that the existing p^H correction system at the ETP is satisfactory and meeting the requirements of the clarifier and down-

stream biological treatment systems. Provision for dosing alum and polyelectrolyte are already in place.

10.10: Ladder facility with stack shall be provided.

Already provided and they are in operation since the commissioning of the Facility.

10.11 Regular calibration of OCEM

The existing OCEM facilities are maintained and operated by Forbes Marshal which is a CPCB accredited agency. These systems are fitted with self-calibration facility and the system operator is periodically undertaking calibration of the sensors using standard gases. Copies of the calibration certificates are annexed as Annexure R-19.

11. PRESENT STATUS

This Hon'ble Tribunal vide Order dated 18.06.2020 in the present matter constituted a Joint Committee to file factual and action taken report. Basis Order dated 18.06.2020 inspection was conducted by the Joint Committee on 11.08.2020 at the premises of the Gajraula Facility of Respondent No. 4. Thereafter, two Show Notices were issued by Uttar Pradesh Pollution Control Board to Respondent No. 4 viz. Show Cause Notice dated 06.04.2021 (received on 28.04.2021) having ref. no. H61483/C-7/Air-21/21 issued under The Air (Prevention and Control of Pollution) Act 1981 (**"Air Pollution Notice"**) and Show Cause Notice dated 06.04.2021 (received on 28.04.2021) having ref. no. H61482/C-7/Water-92/21 under Water

(Prevention and Control of Pollution) Act (**"Water Pollution Notice"**). Copy of Air Pollution Notice and Water Pollution Notice are annexed herewith as **Annexure R-30 (Colly).** Despite the fact the present matter is pending before this Hon'ble Tribunal, the said Show Cause Notices levied Environmental Compensation on Respondent No. 4 and threatened to disconnect the electricity & water connections at the Facility. This caused grave prejudice to Respondent No. 4 which is a pharmaceutical company supplying essential services in Covid pandemic times and directly/indirectly employing around 2500 people are at the Facility. Thus, in order to ensure continuity of its operations during critical Covid pandemic times, without prejudice to its right to recover the deposit, Respondent No. 4 was constrained to deposit environmental compensation of Rs. 14,85,000/- (Rupees Fourteen Lakhs Eighty Five Thousand) for Air Pollution Notice. The Replies to the said Show Cause Notices (without Annexures) filed by Respondent No. 4 are annexed herewith **Annexure R-31 (Colly).**

RESPONDENT NO. 4

Through

KAPIL SAPRA & ASSOCIATES
ADVOCATES
Plot No. 1/ 262, Westend Marg,
Said-Ul-Azaib, M.B. Road,
New Delhi – 110 030

Place: New Delhi

Dated: 02.07.2021

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

PRINCIPAL BENCH, NEW DELHI

Original Application No. 89/2020

IN THE MATTER OF:

JITENDRA SINGH **...APPLICANT**

Versus

CENTRAL POLLUTION CONTROL BOARD & ORS.

...RESPONDENTS

AFFDIAVIT ON BEHALF OF THE RESPONDENT NO. 4

I, Rajesh Umakant Naik aged 45 years s/o Sh. Umakant r/o Teva Officers Colony, Bijnor Road Gajraula, District Amroha, Uttar Pradesh-244235, having Aadhaar Card No. 500842788725, working as Site General Manager of Respondent No. 4 in the above mentioned matter, do hereby solemnly affirm and declare as under:

1. That the Deponent, working as Site General Manager of Respondent No. 4 in the above stated matter, is filing attached Reply to Inspection Report by the Joint Committee on behalf of Respondent No. 4, the contents of which are not repeated for the sake of brevity and to avoid prolixity but the same may be read as part and parcel of this affidavit.

2. That the Deponent is aware about the facts leading to the filing of the accompanying Reply to Inspection Report by the Joint Committee. The deponent has read and understood the contents of the Reply, which has been drafted by his counsel as per her instructions.

3. That the contents of accompanying Reply to Inspection Report are true to my knowledge and there is no false statement or concealment

of any material fact, and I have included information that is according to me, relevant for the present Reply to Inspection Report.

DEPONENT

VERIFICATION:

Verified at Amroha (UP) on this, day of June 2021 that the contents of the above affidavit are true to my knowledge based on records and nothing material has been concealed therefrom.

DEPONENT

CERTIFIED COPY OF THE RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECOTRS OF TEVA API INDIA PRIVATE LIMITED HELD ON 22ND FEBRUARY, 2021 AT 04.30 P.M IST THROUGH VIDEO CONFERENCE AT B/2004, MILLENNIUM AVANISH, PLOT NOS. 9, 10 AND 11, SECTOR 10A, BEHIND D MART, AIROLI, NAVI MUMBAI 400708, INDIA.

Authorisation to engage counsel(s)/ advocate(s)/ attorney(s) and to represent the company for legal proceedings before legislative authorities/ courts.

RESOLVED THAT in supersession of the earlier resolutions passed by the Company, any one of the following officials of the Company be and is hereby severally authorized to take all such actions that may be considered necessary and expedient in the interest of the Company, including to appoint / engage counsel(s)/ advocate(s)/ attorney(s) and to sign/execute on behalf of the Company and to institute, conduct, defend, compromise, settle or abandon any legal proceedings, tender evidence, etc. before any Court(s) and/ or Tribunal(s) in any legal proceedings filed by or against the Company.

RESOLVED FURTHER THAT any one of the following officials of the Company be and is hereby severally authorized to represent, appear, act, defend, tender, sign, verify, file any complaint, suit, petition, appeal, application, affidavits, pleadings, plaints, written statements, evidence, and/or all other documents as may be required to be filed in any legal proceedings for and on behalf of the Company in any Court or Tribunal filed by or against the Company. Any below mentioned signatories can nominate any other signatories on their behalf.

Sr. Nos.	Name	Designation
1	Pramod Ghorpade	Sr. Director Country CFO
2	Venkat Pudipeddi	Director HR , India and China
3	Nitish Dikshit	Sr. Director, Facility Management
4	Dr. Parven Luthra	Sr. Dir Head of Development TAPI R&D
5	Deepak Kushalnath Shukla	Site General Manager
6	Rajesh Umakant Naik	Site General Manager
7.	Muneshvar Singh	Sr. Director, Factory Manager
8	Tishey Sharma	Sr. Director, Country Head Procurement

RESOLVED FURTHER THAT any one of the director of the Company is hereby severally authorized to furnish a certified true copy of the above resolutions to such authorities/agencies as may be required from time to time.

For and on behalf of Teva API India Private Limited

Pramod Ghorpade
Director
DIN: 07644110

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

संदर्भ संख्या–H 49876/सी- 7/वायु/21/2020 दिनांक 11/6/2020

पंजीकृत

सेवा में,

मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0,
औद्योगिक क्षेत्र, गजरोला,
अमरोहा।

यह कि मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा द्वारा कच्चे माल के रूप में प्रोसेसिंग केमिकल्स एवं साल्वेन्ट इत्यादि का प्रयोग कर बल्कड्रग्स एवं इन्टरमीडिएट 620 मीट्रिक टन प्रति वर्ष उत्पादन करते हुऐ उक्त वार्णित स्थल पर कार्यरत है, जो कि वायु (प्रदूषण निवारण तथा नियत्रंण) अधिनियम 1981 यथासंशोधित की धारा 40 के अन्तर्गत एक कम्पनी है।

यह कि उद्योग को वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम 1981 यथासंशोधित की धारा 21/22 के अन्तर्गत बोर्ड के पत्र संख्या–68214/ UPPCB/ Bijnore(UPPCBRO)/ CTO/Air/JYOTIBA PHULE NAGAR/ 2019 दिनांक 04.06.2020 द्वारा सशर्त सहमति वायु निर्गत की गई है जिसकी वैधता 31.12.2021. तक है।

यह कि उद्योग के औद्योगिक परिसर से हुए गैस रिसाव की शिकायत के सम्बन्ध में जिलाधिकारी अमरोहा द्वारा उपजिलाधिकारी धनौरा की अध्यक्षता में कारखाना विभाग, उत्तर प्रदेश प्रदूषण नियत्रंण बोर्ड एवं अग्निशमन विभाग की संयुक्त समिति गठित करते हुए उद्योग की जाँच हेतु निर्देश जारी किये गये।

यह कि उक्त संयुक्त समिति द्वारा दिनांक 09.06.2020 को मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा का निरीक्षण किया गया। मुख्य अग्निशमन अधिकारी द्वारा पूर्व में दिनांक 07.06.2020 को रात्रि 10.00 बजे किये गये निरीक्षण में रिसाव होता पाया गया जिसके फोटोग्राफ मौके पर लिये गये।

यह कि संयुक्त समिति द्वारा दिनांक 09.06.2020 को किये गये निरीक्षण के दौरान पाया गया कि उद्योग में 40 किलोलीटर क्षमता के 02 हाइड्रोक्लोरिक एसिड (HCI) भण्डारण टैंक स्थापित है, जिन पर एसिड फ्यूम को वेन्ट करने हेतु एल्कली वेट स्क्रबर के साथ धरातल से लगभग 30 फीट ऊँची चिमनी स्थापित है। वेट स्क्रबर की ऊपर की फ्लैंज में नयी पैकिग व 04 नये नट–बोल्ट लगाकर रिपेयर किये गये पाये गये तथा इसके पुराने नट–बोल्ट पैकिंग आदि के टुकड़े स्थल पर बिखरे पाये गये।

यह कि निरीक्षण के दौरान पाये गये तथ्यों से स्पष्ट होता है कि उद्योग द्वारा उक्त अनुरक्षण कार्य गैस लीकेज के उपरान्त किया गया है। संयुक्त टीम द्वारा मौके पर उपस्थित उद्योग प्रतिनिधि को स्थापित वेट स्क्रबर को संचालित करने हेतु निर्देशित किया गया, परन्तु उद्योग द्वारा वेट स्क्रबर का संचालन प्रारम्भ नही किया जा सका। उद्योग प्रतिनिधि को आपातकालीन स्टाफ को बुलाकर भी इसे संचालित करने हेतु निर्देशित किया गया, परन्तु उद्योग प्रतिनिधि द्वारा वेट स्क्रबर का संचालन नही कराया जा सका। पुनः ऑपरेटर द्वारा वायु प्रदूषण नियंत्रण संयंत्र का संचालन प्रारम्भ करने का प्रयास किया गया परन्तु आई0डी0 फैन संचालित नही हो सका। इकाई द्वारा आवश्यक अनुरक्षण कर वायु प्रदूषण नियंत्रण संयत्र का संचालन प्रारम्भ किया गया परन्तु मोटर की बियरिंग आदि में खराबी होने के कारण वेट स्क्रबर पूर्णतया संचालित नही हो पाया।

.....2/-

टी. सी. – 12 वी, विभूति खण्ड
गोमतीनगर, लखनऊ-226010
दूरभाष-2720831, 2720828, 2720691, 2720681
फैक्स 0522–2720764 Fax: 0522 – 2720764 ई–मेल- info@uppcb.com
Web Site: www.uppcb.com

T.C. 12 - V, Vibhuti Khand
Gomti Nagar, Lucknow – 226010
Phone:2720831,2720828,2720691,2720681
Email: info@uppcb.com वेबसाइट: www.uppcb.com

यह कि इकाई द्वारा हाइड्रोक्लोरिक एसिड (HCI) भण्डारण टैंक से जनित एसिड फ्यूम को न्यूट्रलाईज कर निस्तारित किये जाने हेतु स्थापित वैट स्क्रबर का संचालन एवं रख रखाव समुचित रूप से नही किया जा रहा है। इकाई द्वारा वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम 1981 यथासंशोधित के प्राविधानों का उल्लंघन करते हुए प्रदूषणकारी उत्सर्जन का निस्तारण किया गया है जोकि वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम 1981 यथासंशोधित की धारा 21/22 के अन्तर्गत बोर्ड के पत्र संख्या–68214/ UPPCB/ Bijnore(UPPCBRO)/ CTO/Air/JYOTIBA PHULE NAGAR/ 2019 दिनांक 04.06.2020 द्वारा निर्गत सशर्त सहमति वायु में अधिरोपित शर्तो का उल्लघंन है।

उपरोक्त को दृष्टिगत रखते हुए उद्योग मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा के विरूद्ध वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम 1981 यथासंशोधित की धारा 31ए सपठित 21(6) के अन्तर्गत बोर्ड के पत्र दिनांक 04.06.2020 द्वारा निर्गत सर्शत सहमति वायु खण्डित करते हुए बन्दी आदेश जारी किये जाने हेतु सक्षम अधिकारी के अनुमोदनोपरान्त निम्नानुसार कारण बताओ नोटिस जारी किये जाते है–

1. यह कि क्यों न उद्योग मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा के पक्ष में बोर्ड के पत्र संख्या–68214/ UPPCB/ Bijnore(UPPCBRO)/ CTO/Air/JYOTIBA PHULE NAGAR/ 2019 दिनांक 04.06.2020 द्वारा निर्गत सशर्त सहमति वायु को खण्डित कर दिया जाए।
2. यह कि क्यो न उद्योग मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा के संचालन को रोके जाने हेतु उद्योग के विरूद्ध बन्दी आदेश जारी कर दिए जाए।
3. यह कि क्यो न सक्षम अधिकारियों से यह अपेक्षा की जाये कि उद्योग मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा के संचालन हेतु सम्बद्ध समस्त विद्युत कनेक्शनो को विच्छेदित कर दिया जाए।

आपको निर्देशित किया जाता है कि उक्त निर्देशों के सम्बन्ध में अपना स्पष्टीकरण 15 दिन के अन्दर बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे। निर्धारित समयावधि में स्पष्टीकरण प्राप्त न होने अथवा संतोषजनक उत्तर प्राप्त न होने की दशा में उक्त निर्देशो की पुष्टी करते हुए उद्योग के विरूद्ध पर्यावरणीय अधिनियमों के अन्तर्गत कार्यवाही प्रारम्भ कर दी जायेगी, जिसका सम्पूर्ण उत्तरदयित्व स्वंय उद्योग एवं उद्योग स्वामी का होगा।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी, वृत्त–7

प्रतिलिपि :

1. जिलाधिकारी अमरोहा को सूचनार्थ प्रेषित।
2. क्षेत्रीय अधिकारी उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, बिजनौर को इस निर्देश के साथ कि उक्त निर्देशों के क्रम में मेसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, औद्योगिक क्षेत्र, गजरोला, अमरोहा का निरीक्षण करते हुए ससमय निरीक्षण आख्या स्पष्ट संस्तुति सहित बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे।

मुख्य पर्यावरण अधिकारी, वृत्त–7

UTTAR PRADESH POLLUTION CONTRAL BOARD

Ref. No. H49876/C-7/Air/21/2020 **Date 11/06/2020**

Registered

To

Teva API India Private Limited
Industrial Area, Gajraula,
Amroha.

That M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha by using raw material in the form of processing chemical and solvent etc is producing bulk drugs and intermediate 620 metric ton per year and is operational at above stated place, which is a Company covered under Section 40 of Air (Prevention and Control of Pollution) Act, 1981.

That the Industry has been given conditional consent vide Letter No. 68214/UPPCB/ Bijnore (UPPCBRO)/CTO/Air/Jotiba Phule Nagar/2019 dated 04.06.2020 under amended Section 21/22 of Air (Prevention and Control of Pollution) Act, 1981.

That in relation to the complainant of gas leakage in the premises of the Industry, investigation was ordered by joint committee headed by Deputy District Magistrate, Dhanaura and comprising members from Factories

Department, Uttar Pradesh, Uttar Pradesh Pollution Control Board and Fire Department.

The joint committee conducted investigation on 09.06.2020 at the premises of Teva API India Pvt. Ltd, Gajraula, Amroha. Earlier, Chief Fire Officer during inspection on 07.06.2020 at 10 PM found gas leakage whose photograph was taken at the spot.

That during inspection by the joint committee on 09.06.2020 it was found that Industry that two HCL tanks of 40 KL each, on which to vent the acid fumes alongwith alkali wet scrubber chimney is installed which 30 feet from ground level. It was found that the upper flange of wet scrubber was repaired by new packing and 4 new nut-bolts and broken pieces of old nut-bolts, packing etc were also found.

That it is evident from the facts found during inspection that the maintenance work was conducted after the gas leakage. The representative of the Industry was asked by the joint committee to operate the wet scrubber at the spot, but the wet scrubber could not be operated. The representative of Industry was asked to call the emergency staff to operate the wet scrubber, but wet scrubber could not be operated. Again, an attempt was made by the operator to start the operation of the air pollution control plant, but ID fan could not be started. Operation of air pollution control plant was started by the unit after doing necessary maintenance but due to fault in motor bearings etc., the wet scrubber could not operate completely.

The operation and maintenance of wet scrubber installed by this unit to neutralize and dispose the acid fume generated from HCL storage tank is not being properly maintained. The polluting emissions were disposed of by the unit in violation of the conditional consent vide Letter No. 68214/UPPCB/ Bijnore (UPPCBRO)/CTO/Air/Jotiba Phule Nagar/2019 dated 04.06.2020 under amended Section 21/22 of Air (Prevention and Control of Pollution) Act, 1981.

In view of above, for the issuance of closure orders as per rules after approval of competent authority, show cause Notice is issued against M/s. Teva API India Private Limited, Gajraula, Amroha under amended Section 31A read with Section 21(6) for violation of conditional consent Letter dated 04.06.2020:

1. Why conditional consent vide Letter No. 68214/UPPCB/ Bijnore (UPPCBRO)/CTO/Air/Jotiba Phule Nagar/2019 dated 04.06.2020 issued in favour Industry M/s. Teva API India Private Limited, Gajraula, Amroha, was violated;
2. Why closure orders be not issued against M/s. Teva API India Private Limited, Gajraula, Amroha.
3. Why competent officer is not expected to cut the electricity connection of M/s. Teva API India Private Limited, Gajraula, Amroha.

You are directed to give explanation of above instructions within 15 days at the head office of Board. If reply is not received or if appropriate explanation

is not received within stipulated time, then appropriate proceedings against the Industry under Environment Laws will be started, for which Industry and its owner will be responsible.

-sd-

Amit Chandra

Chief Environment Officer, Circle-7

Copy:

1. District Magistrate Amroha

2. Regional Officer Uttar Pradesh Pollution Control Board, Bijnor, with instructions that as per above instructions to carry inspection at Teva API India Private Limited, Gajraula, Amroha and timely submit inspection report with clear recommendations to head officer of the Board.

-sd-

Amit Chandra

Chief Environment Officer, Circle-7

True Typed Copy

teva | api

Dated: 26th June, 2020

Ref. No. TAIL/GAJ/E&S/UPPCB/2020/55

To,
Sh. Amit Chandra
Chief Environment Officer
Circle-7, UPPCB
Lucknow, U.P.

Sub: Response to the show cause notice dated 11.06.2020 having ref. no. H49876/C-7/AIR/21/2020 issued to Teva API India Pvt. Ltd. Gajraula unit by UPPCB

Reference: Letter dated 04.06.2020 No.- 68214\UPPCB\ Bijnore (UPPCBRO)\ CTO\Air\JYOTIBA PHULE NAGAR\2019 by UPPCB to Teva API India Private Limited granting consent under Section 21/22 of the Air (Prevention and Control of Air Pollution) Act, 1981.

Respected Sir,

In reply to the above captioned Show Couse Notice, our **Preliminary Submissions** are as under:

1. There has been no leakage whatsoever from our Gajraula Factory of Teva API India Private Limited (**"Factory"**) whether before or after the inspection conducted on 07.06.2020 and 09.06.2020. This is further supported from the fact that no incident of any harm or hazard leakage has been reported from any hospital to the people living in vicinity/near the Factory nor did any complain being made by any people in the vicinity of the said Factory about any hazard/harm being caused.

2. There are approx. 1150 workers working at the Factory and out of them 631 were present on 07.06.2020. No incident of such leakage or any harm or any foul smell was reported by any worker. Needless to say that no health hazard was caused to any internal person working or present in the Factory at the relevant time. None of the official of Fire Department even tried confirming this fact before concluding about alleged leakage. However from CCTV footage it's clear that there was no leakage and no discomfort cause to any one in the factory including fire officials at that time. In such circumstances, there is no question of any problem been caused to anyone outside the Factory.

3. That on 08.06.2020 also team of Uttar Pradesh Pollution Control Board (**"UPPCB"**) alongwith SDM visited the Factory and checked wet scrubber. They found that everything was in order. Copy of the Photographs of the CCTV footage to show the same are annexed

Ro Copy Received
27-6-2020

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590.
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra. CIN : U74899MH2002PTC136704

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herewith as **Annexure R-1 (Colly)**. Relevant footage from the CCTV camera can be produced as and when directed by your good office.

4. The show-cause Notice under reply seems to suggest that on 09.06.2020 because it was allegedly found that some nut bolts were recently replaced and old pieces of nut bolts were found therefore leakage must have taken place which is based on conjectures and surmises and not on factual premises. The four nut bolts were replaced, after the above stated visit of team of UPPCB alongwith SDM on 08.06.2020, as a measure of extra caution proactively and not because old nut bolts malfunctioned. It may be reiterated that team members of UPPCB alongwith SDM during inspection of wet scrubber on 08.06.2020 were satisfied. Further, assuming without admitting, Leakage can only happen from storage vessels and not wet scrubber as alleged.

5. Teva API India Pvt. Ltd. (**"Teva API"**) has been running the factory at Gajraula since 2003 following compliances of all environmental regulations as applicable from time to time. The same has been verified and endorsed by all competent authorities i.e. State and Central. We also would like to bring to the notice of your good office that that as a global pharmaceutical company, and the largest supplier of generic medicines worldwide, we are deeply committed to supply quality medicines to millions of patients we serve around the world every day and we do this with high standards of EHS&S. In this global pandemic situation, our company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through our Factory at Gajraula site. There has never been any incident of environmental hazard being created by the Factory for that matter. In fact, Teva API has always been in fore front when it comes to ensure compliances with all requirements of Laws to ensure safety in operation of the Factory.

6. Letter issued by the CFO vide No 358 dated 9th June 2020 claimed that the Chief Fire Officer (CFO) was made to wait for 20 minutes when he arrived on 07.06.2020 at around 10 PM at material gate of the Factory. However, the CCTV footage of the camera installed at the material gate shows that CFO was allowed inside the premises of the Factory ~ two minutes arriving on his car outside that gate. Copy of the photographs from the CCTV camera installed at the material gate showing date and time are annexed herewith as **Annexure R-2**.

7. In compliance of consent conditions of the above referred Letter dated 04.06.2020 as well as incompliance of *Guidelines for the Measurement of Ambient Air Pollutants* by Central Pollution Control Board (**"CPCB"**) and UPPCB, Ambient air monitoring is being performed at the Factory of Teva API by third party dually approved by Ministry of Environment & Forest as well as by CPCB. Copies of the monthly reports which are duly submitted to UPPCB are annexed herewith as **Annexure R-3 (Colly)**.

8. Additionally, it is apt to state that the Factory has world class Environment and Safety system at the site. We give people safety as our utmost priority by following proactive safe approach towards men, machine and material. Our Environment Health and Safety is governed by the philosophy of "Zero Injuries, Zero Incidents and Zero Environment release." The notable features are listed below,

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,

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- ✓ Nitrogen Blanketing to solvent storage tanks (Detail in **Annexure R-4**)
- ✓ Overfill protection to acid/alkali storage tanks (Detail in **Annexure R-4**)
- ✓ Fall protection and secondary containment (Detail in **Annexure R-4**)
- ✓ LOTO and intelligent earth monitoring system (Detail in **Annexure R-4**)
- ✓ Material Charging system and Atmosphere analyzer (Detail in **Annexure R-4**)
- ✓ Gas Cylinder Safety Management (Detail in **Annexure R-4**)
- ✓ Risk Assessment and HAZOP Studies (Detail in **Annexure R-4**)
- ✓ Training and awareness management (Detail in **Annexure R-4**)
- ✓ PPE Management for personal safety (Detail in **Annexure R-4**)
- ✓ Occupational Health Centre Facilities (Detail in **Annexure R-4**)
- ✓ Environment Management System (Detail in **Annexure R-4**)
- ✓ Monitoring of ambient air quality, stacks, treated water on monthly basis (Detail in **Annexure R-5**)
- ✓ Emergency Response Management (Detail in **Annexure R-6**)

9. Teva API is an ISO 14001 and ISO 45001 certified company by BSI. The certification audit had taken place between 14th February 2020 and 19th February 2020, the certificate is attached herewith as **Annexure R-7**.

10. Further, it may be noted that the Factory is a water positive site. We have adopted 6 nearby ponds and recharge 142668 KL to the ground water, also 155436 KL is recharged through roof top rainwater harvesting & green belt, and thereby recharging through run off process is 298104 KL against the average consumption of 282341 KL in a year. We have adopted two more ponds in the nearby village this year and necessary work is in progress. Detail is attached in **Annexure R-8**.

11. Teva API as a responsible entity has also has taken a lot of preventive measures at the Factory to address Covid-19 pandemic at the site, which are listed below,

- ✓ Thermal screening of all incoming Teva API & Contractors employees with IR thermometer.
- ✓ Visitors screening checklist & Gowning Procedure at gate.
- ✓ Marking at bus stop / Bike stand.
- ✓ Preventive Safety Kit (Portable hand sanitizer, digital thermometer, washable masks and portable disinfectant towels) distributed to all FTE employees & contractual employees.
- ✓ Gowning & PPE for incoming vehicle drivers.
- ✓ Biometric stopped, flashing of card in place to mark attendance.
- ✓ Pedal operated Hand free Sanitizer provided in all facility entry gates for sanitization.
- ✓ Usage of masks during work and movement inside the premises.
- ✓ Office/Meeting Room sitting arrangement for social distancing.
- ✓ Sitting arrangement to maintain social distancing in Cafeteria.

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- ✓ Bus sitting arrangement to maintain social Distancing.
- ✓ Regular cleaning and Sanitization for shared areas.
- ✓ Positioning Visual Ads at site on COVID-19 in Local and English language.
- ✓ Quarantine or Isolation Facility.
- ✓ Mock Drill Conducted on COVID-19.
- ✓ Mask and social distancing by contract manpower.

Details are shared with pictures in **Annexure R- 9 (Colly)**.

12. Teva API is also actively participating in CSR activities for the betterment of communities. Some of the activities done like Donation of 300 Temporary toilets, 150 Dustbin and 450 Labor (Sweeper) for Ganga mela , Making of Toilet & Ladies changing room in Tigri village, Rain water charging in Ponds in nearby villages , Upgradation Prathamik Vidyalaya, Upgradation Kasturba School Dhanura , Contribution in swach bharat abiyan, Donation of 200 drums to Municipality Gajraula, Provided public shelter at 4 locations in Gajraula, and Renovation of Tigria Bhud school, etc. Over and above, we have donated essential items and food packets to needy and poor masses of the society during COVID – 19, also, we donated the fire Jeep to Nagar Palika Parishad Gajraula to spray sanitizers and water in affected areas.

Para-wise Reply

1. The contents of unnumbered para 1 is matter of record and needs no reply.

2. The contents of unnumbered para 2 is matter of record and needs no reply.

3. The contents of unnumbered para 3 are denied for lack of knowledge. No evidence of leakage or complaint is shared by Teva API despite the fact that the same was requested vide letter dated 16.06.2020 from Teva API to Chief Fire Officer (CFO) who inspected the site suspected in the show-cause notice under reply. Copy of letter dated 16.06.2020 is annexed herewith as **Annexure R-10**. Further, the officials of Teva API present at the Factory were not allowed to accompany the inspection team at the alleged site of leakage on 07.06.2020. However, when the same was inspected immediately thereafter on 07.06.2020 by the officials of Teva API and no leakage was found..

4. In reply to contents of unnumbered para 4 it is admitted that inspection was conducted on 07.06.2020 and 09.06.2020. It is pertinent to mention here that another joint inspection by UPPCB and SDM on 08.06.2020. However, it is vehemently denied that any leakage of any gas was found in the premises of the Factory on 07.06.2020 or during any other subsequent inspection. No evidence of any leakage is provided to Teva API despite requesting in above stated letter. Further, neither any incident of any harm or hazard has been reported from any hospital to the people living in vicinity/near the Factory nor did any complain being made by any people in the vicinity of the Factory about any hazard/harm being caused.

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5. In reply to contents of unnumbered para 5 it is admitted that the Factory has two storage tanks for HCL of 40 KL each. However, show-cause Notice under reply seems to suggest that on 09.06.2020 because it was found that some nut bolts were recently replaced and old pieces of nut bolts were found therefore leakage must have taken place which is incorrect. Such assumption is based on conjectures and surmises and not on factual premises. It may be noted that in addition to inspection on 07.06.2020 and 09.06.2020, there was also inspection which took place on 08.06.2020 as stated in Preliminary Submissions above which was conducted by officials from UPPCB and SDM. CCTV footage of the same can be produced if required and copies of photographs taken from the CCTV footage of the same are annexed as **Annexure R-1 (Colly).** When they inspected everything was found in order. The four nut bolts were replaced, after the above stated visit of team of UPPCB alongwith SDM on 08.06.2020, as a measure of extra caution proactively and not because old nut bolts malfunctioned.

   It is further clarified that HCL is stored in those tanks in the Factory in ~30% aqueous HCL solution form and not as compressed gas. Hence, there is no possibility of gas leakage from the storage system which is at atmospheric temperature and pressure. Moreover, there are large numbers of CCTV cameras installed and were in running condition at the relevant time of suspected leakage. Had there been any leakage there would definitely been some unrest among large number of workers present inside the Factory. However, on the contrary the footage of those cameras show that there was no unrest or alarm among the factory workers and when suddenly CFO along with unauthorized people arrived at 10 PM on 07.06.2020 the security at the gate was totally unaware of any leakage. Copies of the pictures of those CCTV cameras are annexed herewith as **Annexure R 2 (colly)**. Additionally, footage from the CCTV cameras as can be provided on request.

6. The contents of unnumbered para 6 are denied as incorrect. Maintenance of wet scrubber is carried out proactively as a regular activity to ensure the safety. It is further submitted that the representative and emergency staff who was asked to operate the wet scrubber are not regular operator for such specific operation, but they tried as they were instructed. Scrubber could not be operated by untrained staff for stated obvious reason. The regular operator was on lunch break during that period and on his arrival back to the inspection place at site the system was operated and shown to the inspection team, it was working normal. Operator started the ID fan but unfortunately its MCB (motor circuit breaker) tripped, which may be due to sudden startup load, so ID fan could not operate, MCB was immediately reset and whole system was quickly started before joint inspection team. It is pertinent to mention herein that the joint inspection team during their visit on 09.06.2020 frequently monitored the scrubber system to verify any abnormality, fumes, etc., however no abnormality ,fumes or leakage was noticed.

7. The contents of unnumbered para 7 are denied as incorrect. The contents of the preliminary submissions above are reiterated herein. It is denied that there is any violation of the conditions of permission dated 04.06.2020 granted under Section 21/22 of the Air (Prevention and Control of Pollution) Act, 1981 granted by UPPCB. With regard to the observation in the para under reply that factory is not appropriately maintaining the operations and maintenance of scrubber used for neutralizing the HCL fumes coming out from HCL storage tank it is hereby clarified that Teva API is taking utmost care to ensure safety and is compliant with all requirement of law. The preventive maintenance is being performed according to the approved

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preventive maintenance schedule which is part of the SOP, "Preventive and reparative maintenance". Teva API has software based preventive maintenance record for the wet scrubber and real time electronic record is maintained at the Factory. Copy of the preventive maintenance records of wet scrubber are attached as **Annexure R 11.**

8. In reply to para 8 it is submitted that the Factory being run by Teva API is following compliances of all environmental regulations as applicable from time to time. The same has been verified and endorsed by all competent authorities i.e. State and Central. We also would like to bring to the notice of your good office that that as a global pharmaceutical company, and the largest supplier of generic medicines worldwide, we are deeply committed to supply quality medicines to millions of patients we serve around the world every day and we do this with high standards of EHS&S. In this global pandemic situation, our company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through our Factory at Gajraula site. We ensure safe, healthy and secure working environment for all our employees, contingent workers, contractors and nearby society. We are a responsible corporate, committed towards the environment and community welfare including health of the people.

   In view of above submissions it is clear that there has been no violation by the Factory of the provisions of Air (Prevention and Control of Pollution) Act, 1981 or the condition of consent stated in the above referred letter dated 04.06.2020 or any other applicable rules. Hence, the Notice under reply is liable to be withdrawn.

   We trust that you will find the above reply in order. In the event, should you require any other clarification/documents/CCTV Footage, we request your good self to grant us an opportunity of being heard & give us personnel hearing so as to enable us to further clarify your queries / doubts if any. We assure you of our full co-operation as we have been doing in the past.

   Thanking You,

For Teva API India Private limited

Authorized signatory

Copy to:

1. District Magistrate, Amroha
2. RO, UPPCB, Bijnore

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AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/4684/015/08/01/2020	DATE OF REPORT : 14/01/2020
Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	08/01/2020	Analysis End Date	14/01/2020
Date Of Sampling	07/01/2020	Sampling Done By	NCL
Time Of Sampling	10:20 07/01/2020 To 10:20 08/01/2020		
Sampling Location	NEAR MATERIAL GATE OF FACTORY		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.115 mtr³/min	Sampling Machine Placed At Height (From Ground)	1.6 mtr
Sample Flow Rate For Gas	0.5 LPM	Sample Duration	24 HRS
Equipments Used	RDS NO-2 DRDS 002 (S.NO-04 DTI 070128 & 2280-DTI-2007+ PM 2.5 Sampler Sr No-90035346, .		

PHYSICAL OBSERVATIONS

Ambient Temperature	16°C	Wind Direction	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS:5182 Part 23-2006 R.A 2017	96	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav.Method	48	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	24.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.43	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	46	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	25	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

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AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/4684/016/08/01/2020	DATE OF REPORT : 14/01/2020
Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	08/01/2020	**Analysis End Date**	14/01/2020
Date Of Sampling	07/01/2020	**Sampling Done By**	NCL
Time Of Sampling	10:35 07/01/2020 **To** 10:35 08/01/2020		
Sampling Location	NEAR ADMIN BLOCK		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.135 mtr³/min	**Sampling Machine Placed At Height (From Ground)**	1.7 mtr
Sample Flow Rate For Gas	0.5 LPM	**Sample Duration**	24 HRS
Equipments Used	RDS GSA-AI101-S.NO-117 DTA-2017+Pm 2.5 sampler AI-102 S.NO-119 DTA-2017, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	16°C	**Wind Direction**	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS 5182 Part 23-2006 R A 2017	95	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav.Method	43	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	26	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.32	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	42.0	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	28.0	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

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CHECKED BY PREPARED BY AUTHORIZED SIGNATORY

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AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/4530/004/05/02/2020	DATE OF REPORT : 10-02-2020
Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	05-02-2020	**Analysis End Date**	10-02-2020
Date Of Sampling	03-02-2020	**Sampling Done By**	NCL
Time Of Sampling	10:30 , 03-02-2020 To 10:30 04-02-2020		
Sampling Location	NEAR MATERIAL GATE OF FACTORY		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.125 mtr³/min	**Sampling Machine Placed At Height (From Ground)**	1.6 mtr
Sample Flow Rate For Gas	0.5 LPM	**Sample Duration**	24 HRS
Equipments Used	RDS NO-2 DRDS 002 (S.NO-04 DTI 070128 & 2280-DTI-2007+ PM 2.5 Sampler Sr No-90035346, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	16°C	**Wind Direction**	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS:5182 Part 23-2006 R.A 2017	98	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav.Method	52	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	26.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.46	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	48	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	26	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

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TEST REPORT NO : NCL/TAGJ/4530/005/05/02/2020	DATE OF REPORT : 10-02-2020
Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	05-02-2020	**Analysis End Date**	10-02-2020
Date Of Sampling	03-02-2020	**Sampling Done By**	NCL
Time Of Sampling	10:40 03-02-2020 **To** 10:40 04-02-2020		
Sampling Location	NEAR ADMIN BLOCK		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.135 mtr³/min	**Sampling Machine Placed At Height (From Ground)**	1.7 mtr
Sample Flow Rate For Gas	0.5 LPM	**Sample Duration**	24 HRS
Equipments Used	RDS GSA-AI101-S.NO-117 DTA-2017+Pm 2.5 sampler AI-102 S.NO-119 DTA-2017, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	16°C	**Wind Direction**	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS 5182 Part 23-2006 R.A 2017	95	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav Method	46	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	24	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.39	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	42	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	28	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

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M.Sc. (Env. Science)
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ISO 9001/14001/OHSAS 18001 Reg. No. R151/7381

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AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/4893/014/05/03/2020 DATE OF REPORT : 12/03/2020

Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	05/03/2020	Analysis End Date	12/03/2020
Date Of Sampling	03/03/2020	Sampling Done By	NCL
Time Of Sampling	10:40 03/03/2020 To 10:40 04/03/2020		
Sampling Location	NEAR MATERIAL GATE OF FACTORY		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.120 mtr³/min	Sampling Machine Placed At Height (From Ground)	1.6 mtr
Sample Flow Rate For Gas	0.5 LPM	Sample Duration	24 HRS
Equipments Used	RDS NO-2 DRDS 002 (S.NO-04 DTI 070128 & 2280-DTI-2007+ PM 2.5 Sampler Sr No-90035346, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	23°C	Wind Direction	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS:5182 Part 23-2006 R A 2017	86	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav.Method	49	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	26.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.46	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	52	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	28	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

CHECKED BY PREPARED BY AUTHORIZED SIGNATORY

NOTE : 1. The Results reported above pertains to the Tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to GHAZIABAD JURISDICTION. 3. The Report shall not be reproduced except in full without the permission of MANAGING PARTNER. 4. Our liability is limited to invoiced value only.

Laboratory : 8th K.M. Stone, NH-58, Delhi Meerut Road, Morta (Opp. Manan Dham Mandir) GHAZIABAD - 201 003 (U.P.) Telefax : (0120) 2675225, Mobile : 9810430345
E-mail : info@newconlab.in, newconlab@gmail.com

Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, OHSAS 18001 : 2007 Certified Laboratory
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accreditated Laboratory,
Recognised with MOEFCC & U.P. Pollution Control Board

ISO 9001/14001/OHSAS 18001 Reg. No R191/7381

Website : www.newconlab.in

TEST CERTIFICATE

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/4893/015/05/03/2020 DATE OF REPORT : 12/03/2020

Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	05/03/2020	Analysis End Date	12/03/2020
Date Of Sampling	03/03/2020	Sampling Done By	NCL
Time Of Sampling	10:55 03/03/2020 To 10:55 04/03/2020		
Sampling Location	NEAR ADMIN BLOCK		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.130 mtr³/min	Sampling Machine Placed At Height (From Ground)	1.6 mtr
Sample Flow Rate For Gas	0.5 LPM	Sample Duration	24 HRS
Equipments Used	RDS GSA-AI101-S.NO-117 DTA-2017+Pm 2.5 sampler AI-102 S.NO-119 DTA-2017. .		

PHYSICAL OBSERVATIONS

Ambient Temperature	23°C	Wind Direction	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS:5182 Part 23-2006 R.A 2017	89	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav.Method	46	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS 5182 (Part 2)	28.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS.5182 (Part 10)	0.36	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS 5182 (Part 6)	44.0	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	26.0	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

CHECKED BY

PREPARED BY

AUTHORIZED SIGNATORY

Laboratory : 8th K.M. Stone, NH-58, Delhi Meerut Road, Morta (Opp. Manan Dham Mandir) GHAZIABAD - 201 003 (U.P.) Telefax : (0120) 2675225, Mobile : 9810430345
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Website : www.newconlab.in
ISO 9001/14001/OHSAS 18001
Reg. No. R191/7381

TEST CERTIFICATE

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/5129/029/27/05/2020 DATE OF REPORT : 02/06/2020

Name And Address Of Customer: TEVA API INDIA LTD.
PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	27/05/2020	Analysis End Date	02/06/2020
Date Of Sampling	26/05/2020	Sampling Done By	NCL
Time Of Sampling	10:10 26/05/2020 To 10:10 27/05/2020		
Sampling Location	NEAR MATERIAL GATE OF FACTORY		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.125 mtr³/min	Sampling Machine Placed At Height (From Ground)	1.6 mtr
Sample Flow Rate For Gas	0.5 LPM	Sample Duration	24 HRS
Equipments Used	RDS NO-2 DRDS 002 (S.NO-04 DTI 070128 & 2280-DTI-2007+ PM 2.5 Sampler Sr No-90035346, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	40°C	Wind Direction	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS:5182 Part 23-2006 R.A 2017	89	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav Method	46	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS:5182 (Part 2)	24.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS:5182 (Part 10)	0.39	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS:5182 (Part 6)	49.0	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	26.0	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

INTEKHAB KHAN
M.Sc. (Env. Science)

CHECKED BY PREPARED BY AUTHORIZED SIGNATORY

Laboratory : 8th K.M. Stone, NH-58, Delhi Meerut Road, Morta (Opp. Manan Dham Mandir) GHAZIABAD - 201 003 (U.P.)
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Website www.newconlab.in
ISO 9001/14001/OHSAS 18001
Reg. No. R191/7381

TEST CERTIFICATE

AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/5129/030/27/05/2020 DATE OF REPORT : 02/06/2020

Name And Address Of Customer: TEVA API INDIA LTD.
PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	27/05/2020	Analysis End Date	02/06/2020
Date Of Sampling	26/05/2020	Sampling Done By	NCL
Time Of Sampling	10:20 26/05/2020 To 10:20 27/05/2020		
Sampling Location	NEAR ADMIN BLOCK		
Sampling Protocol	IS:5182(PART 5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.120 mtr³/min	Sampling Machine Placed At Height (From Ground)	1.7 mtr
Sample Flow Rate For Gas	0.5 LPM	Sample Duration	24 HRS
Equipments Used	RDS GSA-AI101-S.NO-117 DTA-2017+Pm 2.5 sampler AI-102 S.NO-119 DTA-2017, ,		

PHYSICAL OBSERVATIONS

Ambient Temperature	40°C	Wind Direction	West To East
Weather Condition	Clear		

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM_{10})	µg/m³	IS 5182 Part 23-2006 R A 2017	86	For 24 Hrs=100
2	Particulate Matters(Size Less Than 2.5 µm) ($PM_{2.5}$)	µg/m³	Grav Method	43.0	For 24 Hrs 60
3	Sulphur Dioxide (SO_2)	µg/m³	IS 5182 (Part 2)	26.0	For 24 hrs= 80
4	Carbon Monoxide (CO)	mg/m³	IS 5182 (Part 10)	0.34	For 08 Hrs= 02 For 01 Hrs=04
5	Nitrogen Dioxide (NO_2)	µg/m³	IS 5182 (Part 6)	46.0	For 24 hrs=80
6	Lead (Pb)	µg/m³	AAS Method	NIL	For 24 hrs=1.0
7	Ozone (O_3)	µg/m³	UV-Spectrophotometer	23.0	For 8hrs=100 For 1 hr= 180
8	Ammonia (NH_3)	µg/m³	Indophenol Blue Method	NIL	For 24hrs=400
9	Benzene (C_6H_6)	µg/m³	GC Method	NIL	For Annual =05
10	Benzo(a)Pyrene (BaP)	ng/m³	GC Method	NIL	For Annual=01
11	Arsenic (As)	ng/m³	AAS Method	NIL	For Annual =06
12	Nickel (Ni)	ng/m³	AAS Method	NIL	For Annual =20

FOR NEWCON CONSULTANTS & LABORATORIES

INTEKHAB KHAN
M.Sc (Env. Science)

CHECKED BY PREPARED BY AUTHORIZED SIGNATORY

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Telefax : (0120) 2675225, ***Mobile :*** 9810430345, 8744051924
E-mail : info@newconlab.in, newconlab@gmail.com, marketing@newconlab.in

teva | api

To,
The Chief Fire Officer,
Gajraula, Distt: Amroha

Date: 16/06/2020

Subject: **In reference to your letter no. FS-2020 (Industry – Fire Safety) / 358 dated 9th June 2020.**

Dear Sir,

With reference to the observations made by your good office vide your letter dated June 9th 2020, we would like to clarify few points, request you to go through the same.

- **Regarding delay in opening the gate:**

  As claimed in the said letter that factory staff did not open the gate for 20 minutes, we reviewed our records and found that it took ~2 minutes, and the same was also shown to you during the joint team inspection dated 9th June 2020. Keeping in view of the guidelines issued by Uttar Pradesh government regarding COVID-19 pandemic we are following the same at our site for any entry inside the Site after certain pre-checks (like thermal screening, sanitization, PPE's etc.) and it may take the reasonable time. We are sure that a responsible officer like you will appreciate the mandatory procedural requirements and the time required to complete the same.

- **Leakage of HCL gas from tank:**

  We were not allowed to accompany the inspection team on 07th June 2020 at the site, whereas claim of identification of HCL leak from tank has been made in the letter. As we were not provided with any report/ letter/ evidence, we cannot comment on it. Kindly share if you have any evidence, so that we can study and respond to it appropriately.

  We would like to bring to your kind notice that we inspected immediately after the departure of fire team from our site and continuing it since then. However, during our round, we did not see any HCL gas leakage. We would like to highlight that we have two numbers of 40 KL each storage tanks. Each of this tank stores ~30 % aqueous HCL solution in tank, which is in liquid form and not as compressed gas. Hence you will agree that there will be no chance of gas leak in storage system, which is at atmospheric temperature and pressure.

Post your inspection we have proactively looked at our system. We have started preventive maintenance which has been seen already by the joint team during visit on 9th June, 2020. We would like to bring to your kind attention that none of the Teva employees were allowed to be part of the inspection nor any report was shared with us. Hence, we did not get an opportunity to explain our side and to look at the findings. We again request you to share any evidence or report so that we can respond technically and factually to the same.

We assure you that we have adequate facility to handle all types of the materials which we are storing and using in our factory. The same is duly verified and approved by the Fire Department. We don't have any such history of leak from factory premises. All the required details have already been submitted as part of NOC application.

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

We also would like to bring to your kind notice that as a global pharmaceutical company, and the largest supplier of generic medicines worldwide, we are deeply committed to supply quality medicines to millions of patients we serve around the world every day and we do this with high standards of EHS&S. In this global pandemic situation, our company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through our Gajraula site. We ensure safe, healthy and secure working environment for all our employees, contingent workers, contractors and nearby society. We are a responsible corporate, committed towards the environment and community welfare including health of the people.

We humbly request your good office to review the observations and clarifications made on the said subject we request your technical guidance / suggestions to help us continually improve our systems where-ever possible, enabling us to work towards the noble cause of helping patients globally through high quality medicines, especially in this Covid-19 crisis.

For TEVA API INDIA PRIVATE LIMITED
For **Teva API India Private Limited**

Authorized Signatory
Authorized signatory,

Copy to:

District Magistrate, Amroha

Superintendent of Police, Amroha

Joint Director (F/P)/ Establishment, Headquarter Fire service Uttar Pradesh Lucknow.

Deputy Director Fire Service Meerut/Bareilly, Agra region

16/06/20

Milestone XProtect Smart Client 2014

13/06/2020 16:23:29

Live | Playback | Sequence Explorer | Alarm Manager | System Monitor

6/

222

XProtect

All Cameras

Views

Cameras

WINDOWS-AE1GTMU

MATERIAL GATE OUTER (192.168.2.17) - 07/06/2020 22:11:10

Playback

@mrdwt qd Q,4 'Bnlkx(

Milestone XProtect Smart Client 2014

13/06/2020 16:40:40

Live | Playback | Sequence Explorer | Alarm Manager | System Monitor

60

223

XProtect

All Cameras

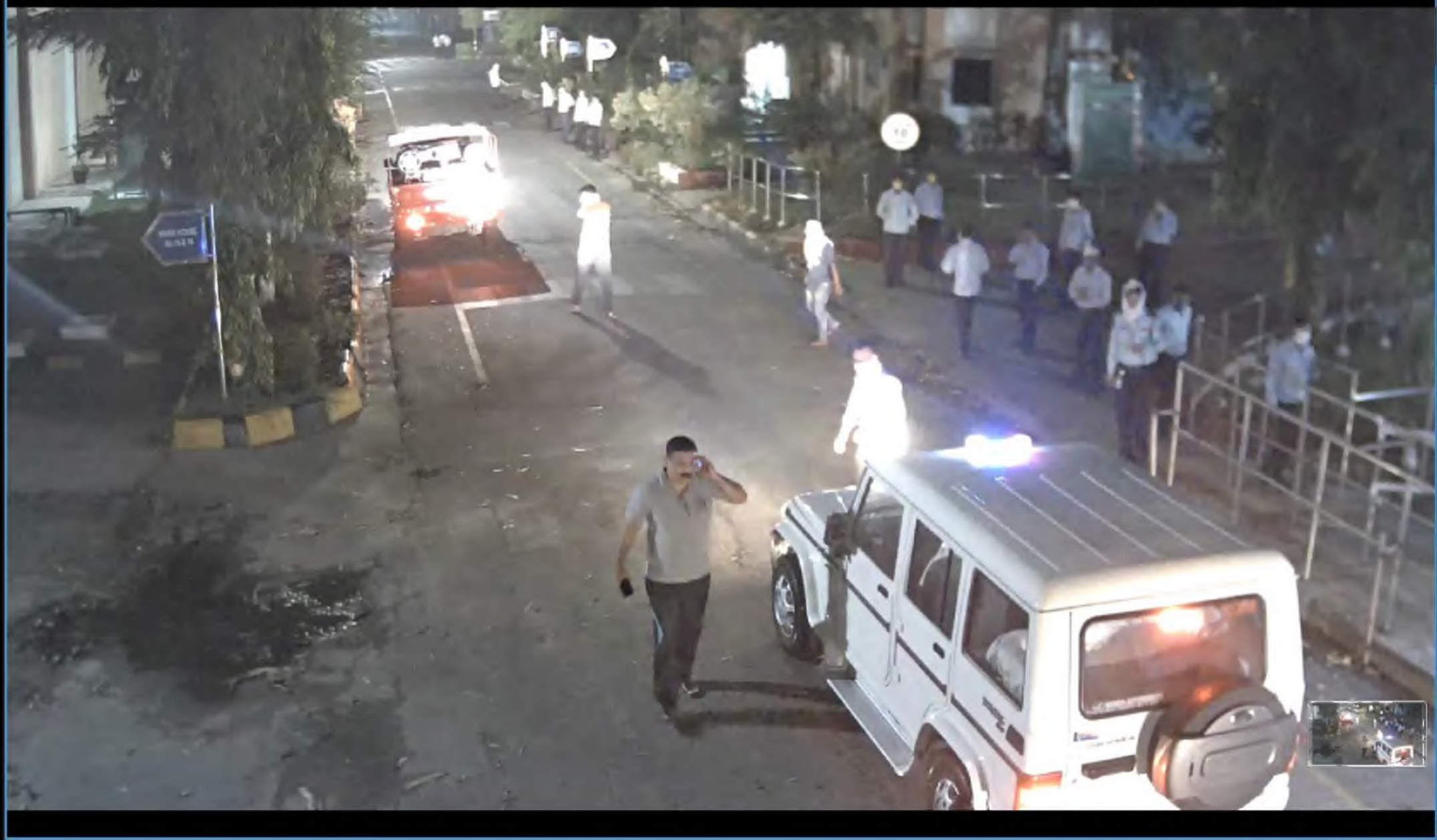
Views

Cameras

WINDOWS-AE1GTMU

MATERIAL GATE INSIDE (192.168.2.29) - 07/06/2020 22:12:21

Playback



Preventive Maintenance Report No. EY1911254
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	Annual	
Factory:	EOU - ||	System:	SC-11001		Planned Service week:	3	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	12/01/20 To Date: 18/01/20	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	17/02/20	
Special Instructions					Technician Name:	Amit Saraswat	
Call Opener:	aksharma	Open Date:	16/12/19 16:16				
					Actual Start Date:	20/01/20	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			
1	.				NA			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	asingh48	Date of insertion:	21/01/20	Entered By:	asingh48
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
20/01/20	outsrc	14:45	17:30	2.750

Preventive Maintenance Report No. EY1905059
Equip: SC-11001

SOP No.:	ENG/SOP/008				**Equip. Type:**	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	**Edition:**	3	**Creation Date:** 25/10/08	**Equip. Sub-type:**	FRP-BLOWER	
Plant:	WH EOU II				**Frequency:**	6 Months	
Factory:	EOU - ||	**System:**	SC-11001		**Planned Service week:**	29	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				**From Date:**	14/07/19	**To Date:** 20/07/19
Location:	GROUND FLOOR				**Allowed deviation date for max freq.:**	03/08/19	
Special Instructions					**Technician Name:**	Amit Saraswat	
Call Opener:	aksharma	**Open Date:**	17/06/19 10:24				
					Actual Start Date:	24/07/19	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			Found ok.
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	asingh48	Date of insertion:	26/07/19	Entered By:	asingh48
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
24/07/19	outsrc	14:15	16:10	1.917

Preventive Maintenance Report No. EY1809188
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	Annual	
Factory:	EOU - II	System:	SC-11001		Planned Service week:	3	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	13/01/19 To Date: 19/01/19	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	18/02/19	
Special Instructions					Technician Name:	Amit Saraswat	
Call Opener:	vkumar27	Open Date:	22/12/18 23:17				
					Actual Start Date:	19/01/19	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			
1	.				NA			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	asaraswat	Date of insertion:	21/01/19	Entered By:	asaraswa
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
19/01/19	outsrc	14:30	16:00	1.500

Preventive Maintenance Report No. EY1804345
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	6 Months	
Factory:	EOU - ||	System:	SC-11001		Planned Service week:	29	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	15/07/18 To Date: 21/07/18	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	04/08/18	
Special Instructions					Technician Name:	Dharmendra Singh Senger	
Call Opener:	aksharma	Open Date:	19/06/18 12:24				
					Actual Start Date:	21/07/18	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			

Additional Findings: _____

Additional findings for sec. (write down section num): _____

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	rkumar36	Date of insertion:	23/07/18	Entered By:	rkumar36
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
21/07/18	outsrc	10:00	13:00	3.000

Preventive Maintenance Report No. EY7008700
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	Annual	
Factory:	EOU - ||	System:	SC-11001		Planned Service week:	3	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	14/01/18 To Date: 20/01/18	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	19/02/18	
Special Instructions					Technician Name:	Dharmendra Singh Senger	
Call Opener:	aksharma	Open Date:	23/12/17 12:32				
					Actual Start Date:	17/01/18	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			
1					NA			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	rkumar36	Date of insertion:	18/01/18	Entered By:	rkumar36
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
17/01/18	outsrc	16:50	17:45	0.917

Preventive Maintenance Report No. EY7004092
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	6 Months	
Factory:	EOU - II	System:	SC-11001		Planned Service week:	29	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	16/07/17 To Date: 22/07/17	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	05/08/17	
Special Instructions					Technician Name:	Dharmendra Singh Senger	
Call Opener:	aksharma	Open Date:	26/06/17 13:15				
					Actual Start Date:	18/07/17	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	dsenger	Date of insertion:	20/07/17	Entered By:	dsenger
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
18/07/17	outsrc	10:00	12:30	2.500

Preventive Maintenance Report No. EY6008088
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER
Plant:	WH EOU II				Frequency:	Annual
Factory:	EOU - II	System:	SC-11001		Planned Service week:	3
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	15/01/17 To Date: 21/01/17
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	20/02/17
Special Instructions					Technician Name:	Sanjay G joshi
Call Opener:	aksharma	Open Date:	28/12/16 09:18			
					Actual Start Date:	16/01/17

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			
1	.				NA			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	dsenger	Date of insertion:	16/01/17	Entered By:	dsenger
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

Date:	Technician:	Start Time:	End Time:	Actual Hours:
16/01/17	outsrc	11:45	13:00	1.250

Preventive Maintenance Report No. EY6003709
Equip: SC-11001

SOP No.:	ENG/SOP/008				Equip. Type:	FRP-BLOWER	
Maint.Master No.:	E/MECH/004	Edition:	3	Creation Date: 25/10/08	Equip. Sub-type:	FRP-BLOWER	
Plant:	WH EOU II				Frequency:	6 Months	
Factory:	EOU - ||	System:	SC-11001		Planned Service week:	30	
Serial:	SCRUBBER SYSTEM WITH BLOWER FOR 1600000002				From Date:	17/07/16 To Date: 23/07/16	
Location:	GROUND FLOOR				Allowed deviation date for max freq.:	06/08/16	
Special Instructions					Technician Name:	Dharmendra Singh Senger	
Call Opener:	aksharma	Open Date:	27/06/16 18:54				
					Actual Start Date:	20/07/16	

Section	Maint.Description	Upper Limit	Lower Limit	Result	Done/Normal	Prel. Result	Opened Call	Section comments
1	ENSURE ELECTRICAL DISCONNECTION OF EQUIPMENT BY TAKING OUT THE FUSES				Y			
2	REMOVE THE BELT PULLEY GUARD AND TAKE OUT THE BELT.				Y			
3	CHECK ALIGNMENT OF PULLEYS WITH HELP OF THREAD & CORRECT/ADJUSTING.				Y			
4	FIX THE BELT AFTER CHECKING CONDITION OF BELT & REPLACE IF REQUIRED.				Y			
5	FIX THE BELT GUARD.				Y			
6	OPEN THE COVER OF PLUMMER BLOCK FOR BEARING LUBRICATION.				Y			
7	PUT THE CASTROL MAKE AP-3 GREASE IN THE BEARINGS.				Y			
8	FIX THE COVER OF PLUMMER BLOCK.				Y			
9	CHECK THE FOUNDATION BOLTS FOR LOOSENING AND TIGHTEN IT.				Y			
10	CARRY OUT THE VISUAL INSPECTION OF FRP LINING.				Y			
11	CARRY OUT THE GRINDING OF THE DAMAGE PORTION OF THE FRP LINING.				NA			
12	REPAIR THE DAMAGE PORTION BY RELINING WITH FRP.				NA			
13	OPEN THE SUCTION FILTER COVER.				NA			
14	TAKE OUT THE SUCTION FILTER.				NA			
15	CLEAN THE FILTERS WITH THE COMPRESSED AIR.				NA			
16	AFTER CLEANING INSTALL THE FILTERS IN THEIR RESPECTIVE POSITION.				NA			
17	REPLACE THE FILTER IF IT IS FOUND DAMAGED OR PUNCTURED.				NA			
18	CLOSE THE FILTER COVER.				NA			
19	TAKE THE TRIAL OF EQUIPMENT AFTER GETTING IT ELECTRICALLY CONNECTED.				Y			

Additional Findings:

Additional findings for sec. (write down section num):

Done By:		On Date:		Signature:	
Start Time:		End Time:		Notes:	
Maint. Manager App.:					
Approver Name:	dsenger	Date of insertion:	21/07/16	Entered By:	dsenger
Plant user App.:					
Approver name:		Date of insertion:		Signature:	

Updated maint execution reports:

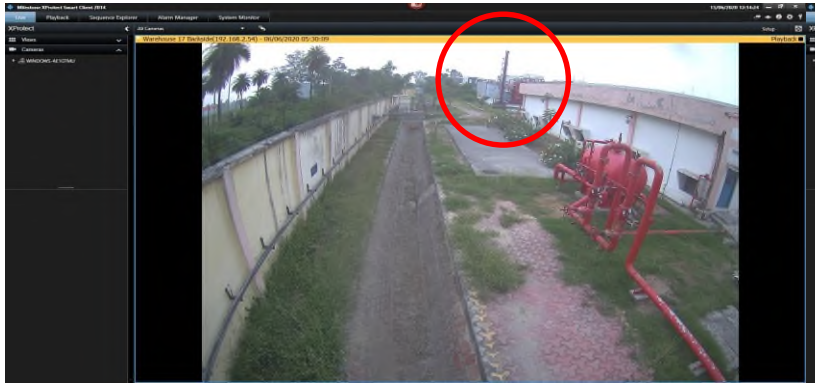
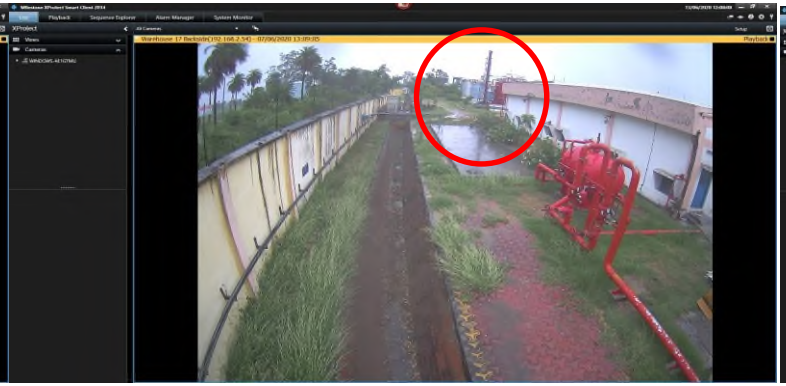
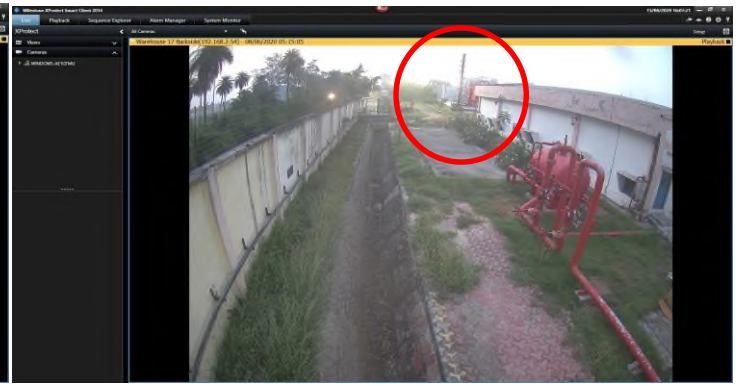
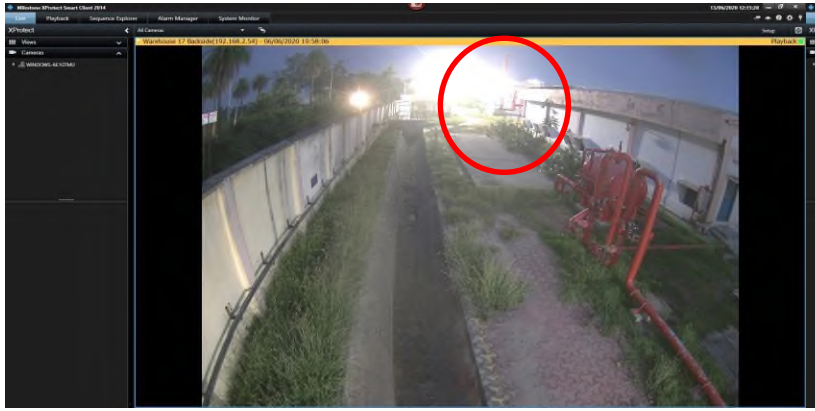
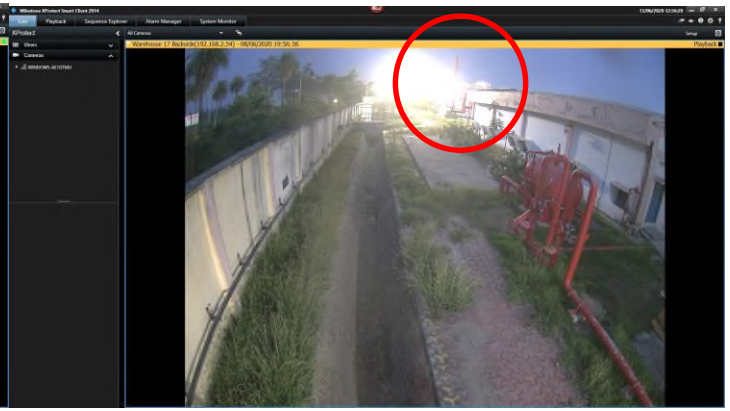
Date:	Technician:	Start Time:	End Time:	Actual Hours:
20/07/16	outsrc	14:15	16:00	1.750

	
HCl scrubber stack	***HCl unloading***

	
HCl scrubber monitoring	***HCl unloading***

TEVA API INDIA PVT LIMITED, Gajraula CCTV Camera footage behind HCL Tank

@mndwt qd Q,7
'Bnlkx(

Day and Time	06-06-2020	07-06-2020	08-06-2020
Day			
Evening 7:50~8:00 PM After Light On			
Night 8:00 ~10:00 PM			

Copies of the Emission Test Reports of the HCl Scrubber Outlet Gases (NABL accredited lab test reports)

Emission of HCl Scrubber Outlet Gases (NABET accredited lab test reports)

Parameter	Acid mist(HCl) (in mg/Nm^3)
Before unloading of the tanker	9.0
During unloading of the tanker	24.0
CPCB limits	35.0

Newcon Consultants & Laboratories
An ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 Certified Laboratory
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accreditated Laboratory
Website : www.newconlab.in

ISO 9001/14001/45001 Reg. No. R181/7381

TEST CERTIFICATE

STACK EMISSION MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/7226/010/09/03-2021 DATE OF REPORT : 11-03-2021

Name And Address Of Customer: TEVA API INDIA LTD.
PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	09-03-2021	Analysis End Date	11-03-2021
Date Of Sampling	06-03-2021	Sampling Done By	NCL
Sampling Protocol	AS PER CPCB GUIDELINES	Duration Of Sampling	30 Minutes
Equipment Used	Vayubodhan Stack Sampler No 1 VSS-1(S.No 321 DTC 01).		

DETAILS OF STACK

Stack Attached To	SCRUBBER NO-SC-11001		
Capacity	-		
Type Of Fuel Used	-		
Quantity Of Fuel Used	-		
Stack Height Above The Ground level	10 Mtr	Stack Dia At The Top	300 mm
Attached APCS	ALKALI SCRUBBER	Material Of Construction	FRP
		Normal Operation Schedule	AS PER REQUIREMENTS

PHYSICAL OBSERVATIONS

Ambient Temperature	25°C	Flue Gas Temperature	37°C
Velocity Of Flue Gases	7.3 Mtr/Sec	Sampling Flow Rate For SPM	19.0 LPM
Sampling Flow Rate For Gases	2.4 LPM	Quantity Of Emission Discharged	1856.682m³/hr

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Acid Mist (HCl)	mg/Nm³	Vol. Method	24.0	35

Monitoring done during unloading of tanker.

**** End Of Report****

FOR NEWCON CONSULTANTS & LABORATORIES

INTEKHAB KHAN
M.Sc.(Env. Science)
CHECKED BY

PREPARED BY

AUTHORIZED SIGNATORY

Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 Certified Laboratory
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accredited Laboratory

Website: www.newconlab.in

ISO 9001/14001/45001
Reg. No. R191/7381

TEST CERTIFICATE

STACK EMISSION MONITORING AND ANALYSIS REPORT

TEST REPORT NO : NCL/TAGJ/7226/011/09/03-2021 DATE OF REPORT : 11-03-2021

Name And Address Of Customer	TEVA API INDIA LTD. PLOT NO. A-2,A02/1,A-2/2, UPSIDC INDUSTRIAL AREA , DIST- , ,AMROHA,UTTAR PRADESH, INDIA

SAMPLING DETAIL

Analysis Start Date	09-03-2021	Analysis End Date	11-03-2021
Date Of Sampling	06-03-2021	Sampling Done By	NCL
Sampling Protocol	AS PER CPCB GUIDELINES	Duration Of Sampling	30 Minutes
Equipment Used	Vayubodhan Stack Sampler No 1 VSS-1(S.No 321 DTC 01), , ,		

DETAILS OF STACK

Stack Attached To	SCRUBBER NO-SC-11001		
Capacity	-		
Type Of Fuel Used	-		
Quantity Of Fuel Used	-		
Stack Height Above The Ground level	10 Mtr	Stack Dia At The Top	300 mm
Attached APCS	ALKALI SCRUBBER	Material Of Construction	FRP
		Normal Operation Schedule	AS PER REQUIREMENTS

PHYSICAL OBSERVATIONS

Ambient Temperature	25°C	Flue Gas Temperature	34°C
Velocity Of Flue Gases	7.0 Mtr/Sec	Sampling Flow Rate For SPM	19.0 LPM
Sampling Flow Rate For Gases	2.1 LPM	Quantity Of Emission Discharged	1780.38m³/hr

TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Acid Mist (HCl)	mg/Nm³	Vol. Method	9.0	35

Monitoring done before unloading of tanker.

**** End Of Report****

FOR NEWCON CONSULTANTS & LABORATORIES

INTEKHAB KHAN
M.Sc (Env. Science)

CHECKED BY PREPARED BY AUTHORIZED SIGNATORY

NEWCON CONSULTANTS & LABORATORIES GHAZIABAD

AMIT KUMAR SINGH TECHNICAL

NOTE : 1. The Results reported above pertains to the Tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to **GHAZIABAD JURISDICTION.** 3. The Report shall not be reproduced except in full without the permission of **MANAGING PARTNER.** 4. Our liability is limited to invoiced value only.

Format no NCL/QSF-38/TC-SET/EMT-01 Rev No.1 Date 18.07.2011

Laboratory : A-1/156, Sector-17, (Swadeshi Compound) Kavi Nagar Industrial Area, GHAZIABAD - 201 002 (U.P.)
Phone No.: 0120-2803115 | ***Mobile :*** 9810430345 | ***Website :*** www.newconlab.in
E-mail : newconlab@gmail.com, newconlabfinance@gmail.com

TEVA API India Pvt. Ltd , Gajraula U.P)

Details of Pond adoption for rain water harvesting system

The artificial ground water recharge scheme implemented in the nearest villages of Dhanura Block, Amroha District.

Details of the ponds for recharge and water recharged quantity through ponds are as below,

Sr. No.	Name of Villages	Area in sq.m.	Average Depth (M)	Volume of water stored in ponds	40 % water for usage, evaporation, & ecological (cum)	60 % Water available in pond for recharge (cum)	No. of times filling	Total water availabl e for recharge (cum)	No. of recharge structures.
1	Kumrala	4620	3	13860	5544	8316	3	24948	2
2	Kumrala	5140	3	15420	6168	9252	3	27756	2
3	Sayal Gosai	4050	3	12150	4860	7290	3	21870	1
4	Sayal Gosai	7390	3	22170	8868	13302	3	39906	2
5	Kherki Khadar	1940	3	5820	2328	3492	3	10476	1
6	Kherki Khadar	3280	3	9840	3936	5904	3	17712	1
7	Shahpur	5120	3	15360	6144	9216	3	27648	2
8	Pakharaula	11170	3	33510	13404	20106	3	60318	4
	Total	42710		128130	51252	76878		230634 cum/year	15

Annexure 11

Certificates of
ISO 14001:2015 and ISO 45001:2018

bsi.

By Royal Charter

Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

TEVA API India Pvt. Ltd.
Plot No. A-2/1, A-2/2
UPSIDC Industrial Area
Bijnor Road, Gajraula
Distt. Amroha 244 235
Uttar Pradesh
India

Holds Certificate No: **EMS 723189**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The Manufacture of Active Pharmaceutical Ingredients and Intermediates.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2020-02-21
Latest Revision Date: 2020-02-21

Effective Date: 2020-02-21
Expiry Date: 2023-02-20

...making excellence a habit.

bsi.

By Royal Charter

Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

TEVA API India Pvt. Ltd.
Plot No. A-2/1, A-2/2
UPSIDC Industrial Area
Bijnor Road, Gajraula
Distt. Amroha 244 235
Uttar Pradesh
India

Holds Certificate No: **OHS 723190**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The Manufacture of Active Pharmaceutical Ingredients and Intermediates.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2020-02-21
Latest Revision Date: 2020-02-21

Effective Date: 2020-02-21
Expiry Date: 2023-02-20

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Safety System at Teva, Gajraula

1. Nitrogen Blanketing to solvent storage tanks
2. Overfill protection to acid/alkali storage tanks
3. Fall protection and secondary containment
4. LOTO and intelligent earth monitoring system
5. Material Charging system and Atmosphere analyzer
6. Gas Cylinder Safety Management
7. Risk Assessment and HAZOP Studies
8. Training and awareness management
9. PPE management for personal safety
10. Occupational Health Centre Facilities
11. Environment Management System

1. Nitrogen Blanketing to solvent storage tanks

In areas where a flammable or combustible Gas, Vapor, Mist or Dust is present, a hazardous atmosphere may arise, so protective measures must be applied to reduce the risk of fire or explosion. Among other Prevention and Mitigation measures, Inertization or Blanketing may be used for preventing fire or explosion, by limiting the Oxygen Content in the contained hazardous environment. The primary purpose of the nitrogen blanketing system is to prevent flammable mixtures to exist in the vapor space of tanks/vessels. This is done by displacing oxygen with nitrogen and by maintaining the entire header system and tanks under a positive pressure. While the flammability and other critical design parameters vary with the solvent, a “worst case” design basis is applied to every tank / vessel to provide flexibility for future solvent usages.

The installation of system:

- Nitrogen Blanketing in 409 flammable solvent storage tanks.
- Nitrogen blanketing in All Centrifuge (54 Nos.)
- Nitrogen blanketing in all Reactors, Dryers & filters inside the plant.

Nitrogen Blanketing in tank

Nitrogen Blanketing in vessel

Nitrogen Blanketing in Reactor

2. Overfill protection to acid/alkali storage tanks

Solvent storage tanks and all of acid & alkalis tanks are equipped with measuring and control instruments to prevent the overflow of tanks.

The Overfill protection is provided in 453 solvent storage tanks including all acid & alkali tanks.

Overfill Protection

3. Fall Protection and secondary containment

Fall Protection system is a planned system used to protect workers from death or potential injury in the event that they lose their balance while performing a task at height. A pre-engineered fall protection system consists of a personal fall arrest system (PFAS), engineered anchorage points, restraints or other protection systems that manage the safe and routine use of the system. The objective of the installation of permanent fall protection and prevention system, to prevent the fall from height and eliminate the serious work related injuries and deaths ,where workmen perform the sampling, inspection, loading, unloading and other activities.

The fall protection system is

- Certified as per EN 795:2012 Class C and CEN 16415:2013.
- ATEX Approved for Zone 1.
- Energy absorption 12KN to 18 KN.

Secondary containments are provided to collect hazardous material into impervious area.

The prime objective is to

- To collect any hazardous material spillage in the event of loss of integrity or container failure of Primary containment.

In case Hazardous material is spilled, following process takes place:

- The spilled material collection in done in guide tank.
- The collected waste material sent to ETP for further treatment.

Secondary containment & Fall arrestor

Secondary containment & fall arrestor

Worker using PFAS during Loading/Unloading activity at Height

4. LOTO and intelligent Earth Monitoring system

LOTO (Lock Out Tag Out)

Purpose:

Installation, service, maintenance, repair, cleaning, testing set-up or decommissioning of any equipment and process that possess the potential hazard from an unexpected release of hazardous energy.

If energy sources are not managed properly, before start of such activities, *it may result into serious incident at work place.*

LOTO is a process to prevent the release of stored energy or hazardous materials which are likely to cause injury/fatality to the people.

Types of hazardous energy are:

- Electrical
- Hydraulic
- Pneumatic
- Chemical
- Thermal
- Ionizing Radiation
- Gravity
- Inertia
- Stored energy
- Mechanical
- Tension/compression

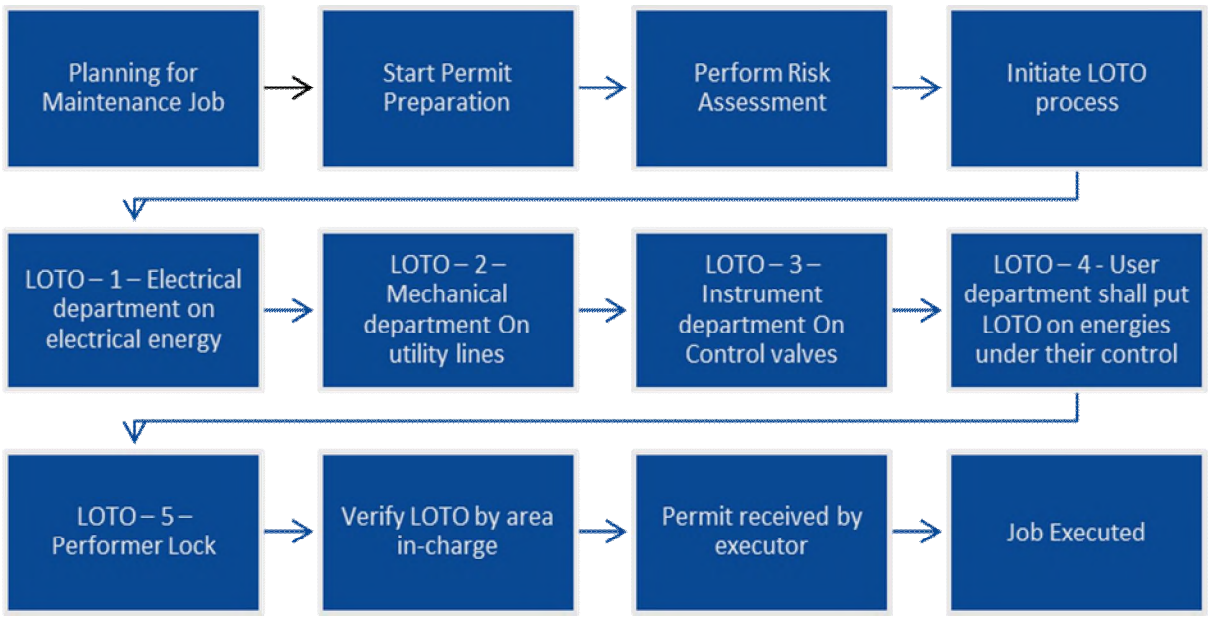
Energy Sources:

- **Electrical:** Electrical Panels, Electrical Pumps, circuit breaker
- **Mechanical:** Moving part of equipment, different type of valves e.g. gate valve, globe valve, butter fly valve, ball valve etc.
- **Chemical:** Tanks, Vessels and associated pipelines and fitting having Solvent, HCl, Caustic, Sulphuric acid, and gases.
- **Thermal:** Hot water, steam line and cryogenics line.
- **Hydraulic/Pneumatic:** Air operated Valve, Pressure in lines.
- **Gravity:** Suspended parts of equipment such as lifting through crane/ hydra machine.

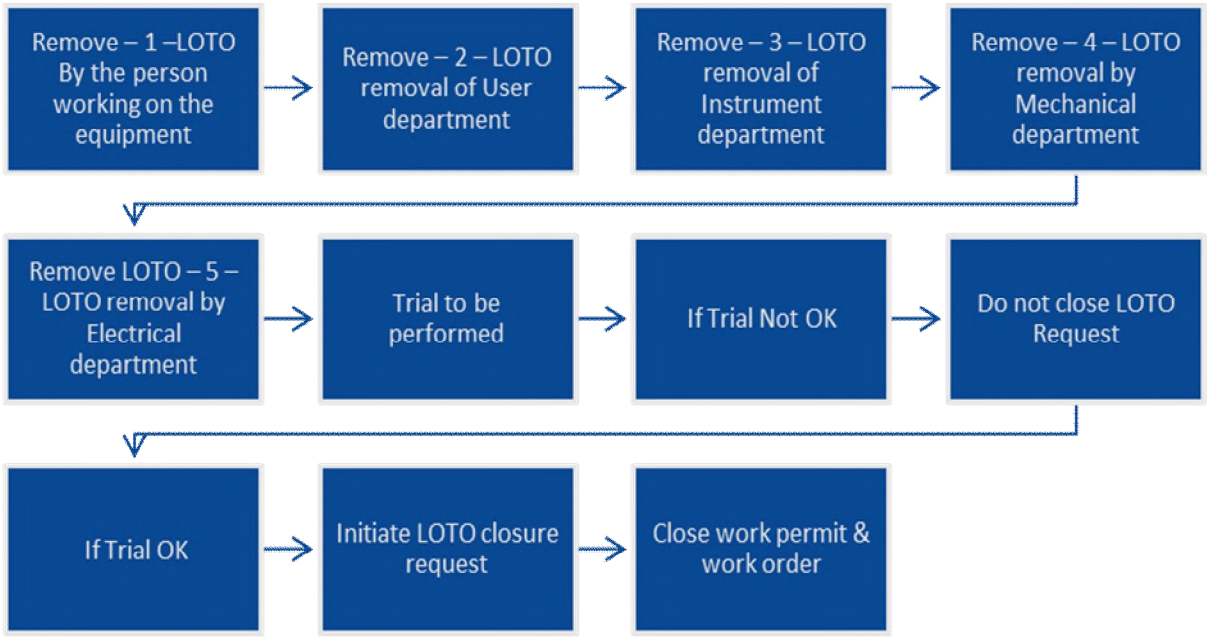
Definitions:

Lockout:	The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.
Lockout device:	A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in safe position and prevent the energizing of a machine, system or equipment. Included are blank flanges, bolted slip blinds, valves, gates and chains.
Tagout device:	A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.
Lockout Tags:	Tags stating "danger - do not operate" or similar wording and intent.

LOTO Procedure: Initiation



LOTO Procedure: Removal



- Identification of individuals Locks as department wise by defined colors as mentioned below

  - Red - Electrical
  - Blue - Mechanical
  - Orange - User
  - Green – Instrumentation
  - Black - Contractor
  - Yellow- Out of Service

LOTO Tag

Tag for Out of Service

LOTO BOX

LOTO

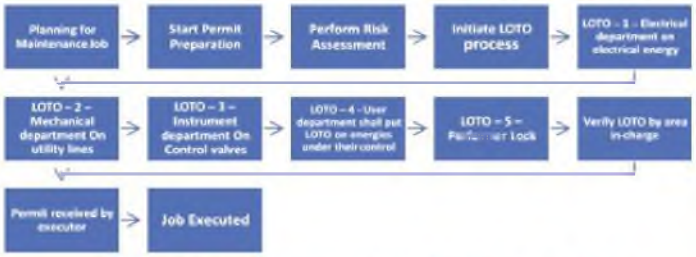
SINGLE ISOLATION

MULTIPLE ISOLATION

Identification of individuals LOTO as department wise by defined colors as mentioned below

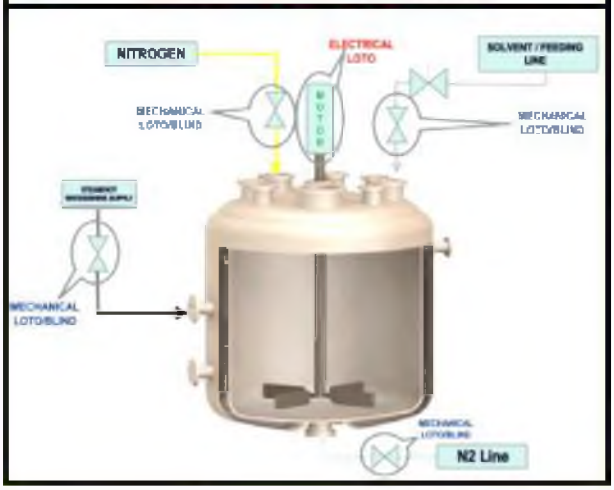
- Red – Electrical
- Blue - Mechanical
- Orange - User
- Green – Instrumentation
- Black - Contractor
- Yellow- Out of Service

LOTO Initiation Process

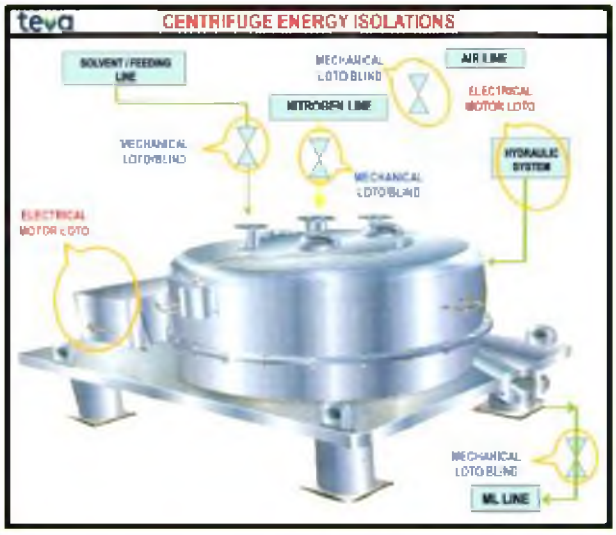


LOTO Removal Process

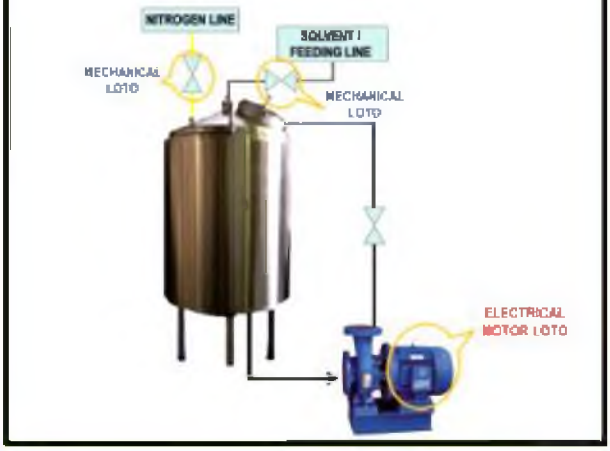
REACTOR ENERGY ISOLATIONS



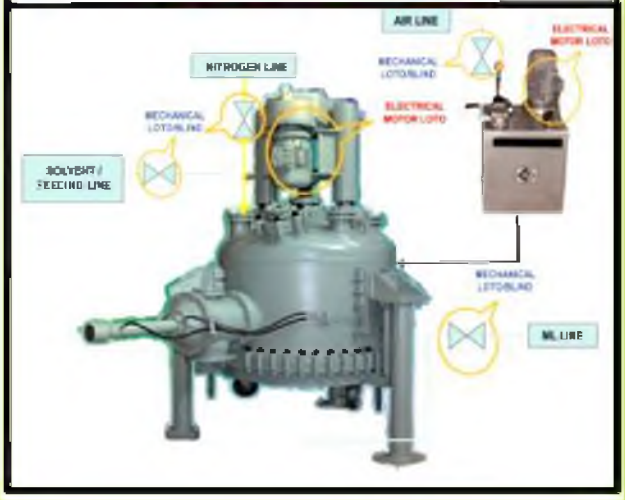
CENTRIFUGE ENERGY ISOLATIONS



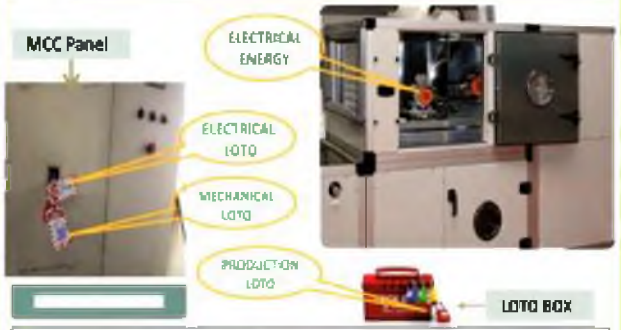
TANK/VESSEL ENERGY ISOLATIONS



ANFD ENERGY ISOLATION

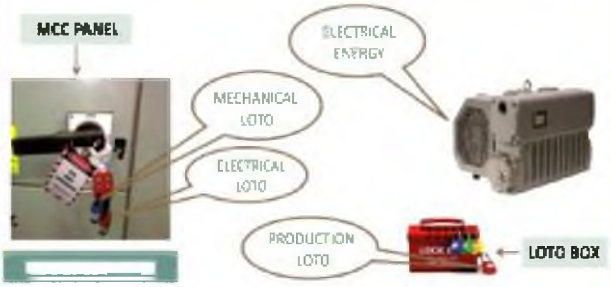


AHU ENERGY ISOLATION



1. Electrical LOTO (Red Color) on MCB panel of the AHU is to be done by Electrician.
2. Mechanical LOTO (Blue Color) on MCB panel of the AHU is to be done by Work Performer.
3. Production LOTO (Orange Color) on the LOTO Box is to be done by Work Issuer.

VACUUM PUMP ENERGY ISOLATION

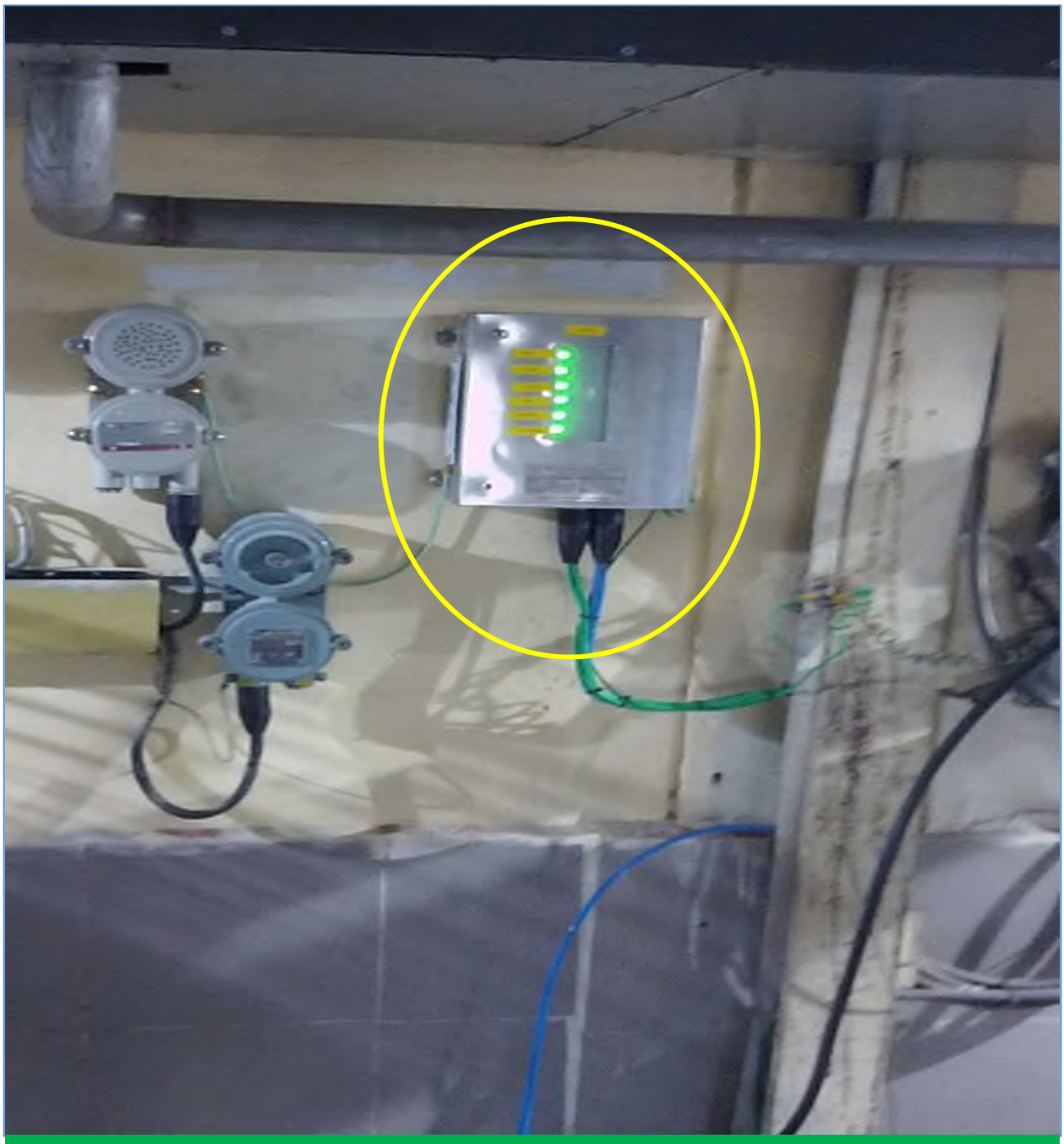


1. Electrical LOTO (Red Color) on MCB panel of the VP is to be done by Electrician.
2. Mechanical LOTO (Blue Color) on MCB panel of the VP is to be done by Work Performer.
3. Production LOTO (Orange Color) on the LOTO Box is to be done by Work Issuer.

Intelligent Earth Monitoring System

During operation or loading/unloading of centrifuge if there is earthing break then Intelligent earth monitoring system will provide audio visual alarm to the user.

It is provided on all 54 centrifuges to prevent fire due to static charge.



Smart Earth monitoring System

5. Material charging & Atmosphere analyzer

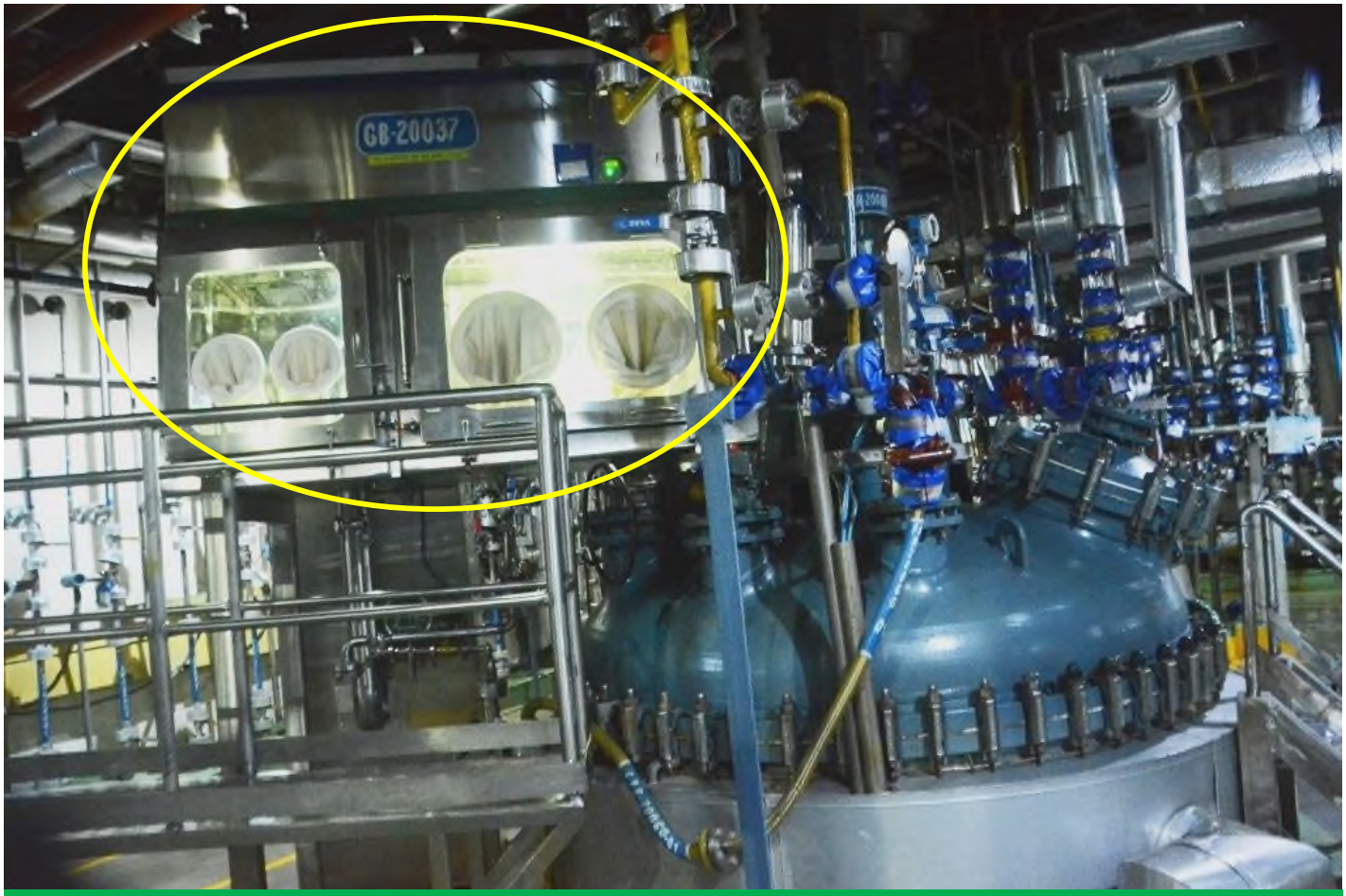
Solid Material charging system under closed condition through:

- Glove box: it is a sealed box manufactured using materials such as acrylic, static-dissipative PVC or stainless steel that includes two or more gloves, used to handle the contents within. While there are several types of glove boxes, the basic premise behind them all is the same…to give the user the ability to handle substances or objects without breaking strict isolation protocols.

- PTS (powder transfer system): It is a highly effective method for transferring and dispensing both dry and wet powders and granules in a safe and contained manner. The system is ideal for transferring highly explosive powders and the transfer of toxic and hygroscopic materials.

- DVCS (Double valve charging system): It is a highly effective method for charging hazardous material in reactor. The reactor remains intertized even during charging of material. The atmosphere does not come in contact with the reactor content. This removes the possibility of oxygen being entered in reactor.

PTS



Glove Box

DVCS

Atmosphere analyzer to detect leakage/emission

Oxygen Analyzer: These are provided to detect oxygen content in atmosphere. These devices are provided with alarm to alert about the deficiency of oxygen in the atmosphere.

VOC Analyzer: By using a process analyzer to continuously measure for Volatile Organic Compounds, the environment is protected and a possible explosion is prevented if the leak is large enough and the VOC reaches LEL.

- Oxygen analyzer with alarm and hooter (167 Nos.)
- VOC analyzer with interlock in tank farm (74 Nos.)

VOC analyzer with interlock

VOC analyzer with interlocks

VOC analyzer with interlocks

6. Gas cylinder safety management

Ammonia Cylinder storage area:-

- Cylinders are kept in permanent shed.
- Ammonia sensors are provided in the storage area.
- Hooters are provided with sensors. in storage
- Ammonia sensors are also provided in production area.
- Sprinkler system is provided to suppress any leakage.
- Cylinders are kept in cage with locking system to avoid falling.
- Cylinders are kept in proper ventilated area.
- Quenching pit with water is available.

Ammonia Sensor in storage area

Ammonia Sensor in storage area

Ammonia storage area with display and hooter

HCl Cylinder storage area:-

- Water Scrubber is provided in HCl storage area.
- Cylinders are kept in permanent shed.
- HCl sensors are provided in the storage area.
- Hooters are provided with sensors. in the storage area
- Sprinkler system is provided to suppress any leakage
- Cylinders are kept in cage to avoid falling.
- Cylinders are kept in proper ventilated area

Scrubber system at HCl storage area

HCl storage area

HCL storage area with scrubber

HCL sensor Hooter with display outside storage area

Hydrogen Cylinder storage area:-

- Cylinders are kept in permanent shed.
- Hydrogen sensors are provided in the storage area.
- Pressure Reducing Station is provided in storage area
- Flame arrestors are provided to the vent with rating of 2C.
- Interlocking is provided with the supply line and PRS.
- All the equipment and fixture are flame proof.
- Emergency switch button is provided in case of any failure.
- Fire alarm and smoke detector system is available.
- Sprinkler system is provided to suppress any leakage.
- Cylinders are kept in cascade to avoid falling.
- Cylinders are kept in proper ventilated area.

Hydrogen Sensor in storage area

Hydrogen supply emergency shut off valve

Inert gas Cylinder storage area:-

- Cylinders are kept in permanent shed.
- Cylinders are kept in cage to avoid falling.
- Cylinders are kept in proper ventilated area.
- Fire alarm and smoke detector system is available.
- Cylinders are stored upright.

7. Risk Assessment and Hazop studies

Risk Management:

Methodology adopted to identify hazards and action plan to eliminate the risk.

- HAZOP (Hazard and operability study)
- PHA (Process Hazard analysis)
- RA (Risk Assessment)
- Tool Box talk
- Work Permit System
  - Work at height
  - Hot Work
  - Confined Space Entry
  - Cold Work- Maintenance of Pipelines and Equipment
  - Work on energized electrical systems.
  - Movement of equipment or materials using a mobile crane or helicopter.
  - Trenching, excavation.
  - Use of power actuated fastening tools.
  - 'hot tap'
  - Impairment of Fire Protection Systems or other Safety Critical Systems.
  - Management of Change

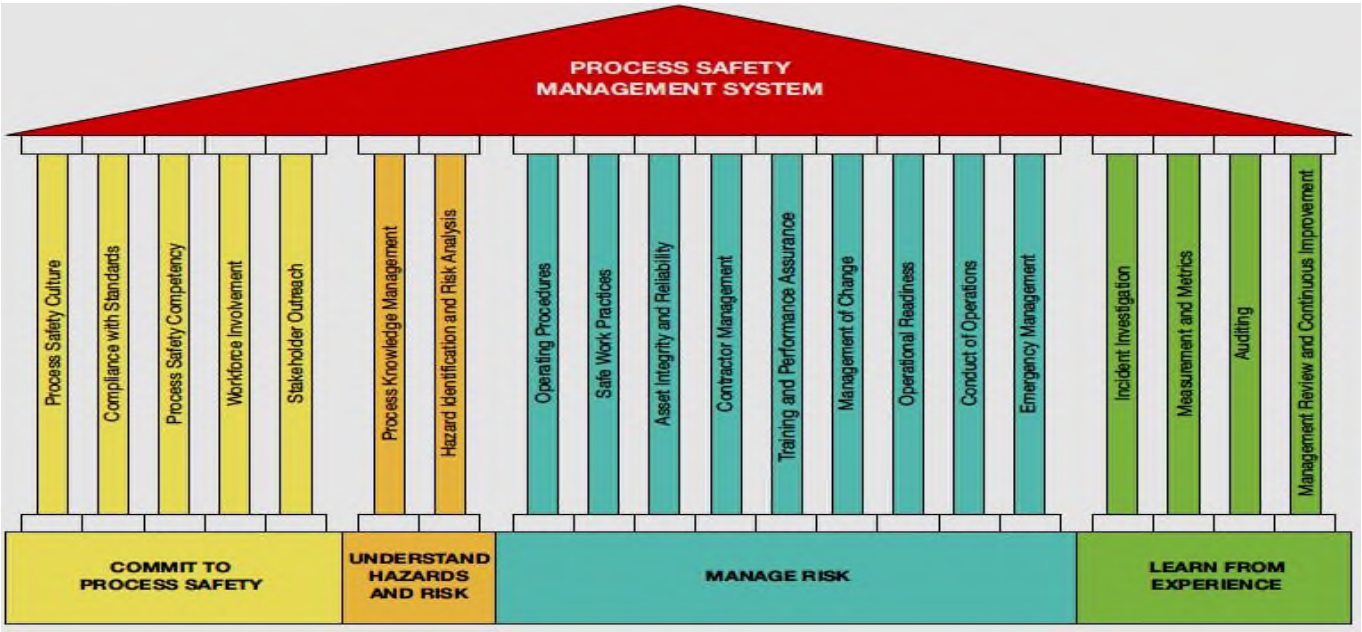
Process Safety

Process Safety Management is the application of management principles and systems to the identification, understanding, and control of process hazards to protect employees, facility assets and the environment.

Production Process

Physical Process **Chemical Process**

Verticals of Process Safety Management at TIG



<u>Prevention & Mitigigation of process incident</u>:

- Conduct detailed Risk assessment (HAZOP study, JSA etc.)
- Risk assessment should be done by competent cross functional team (i.e. project, production, R&D, TT, EHS)
- Following documents are required to evaluate the latent process risk-
  - ✓ Safety Report Phase-3 or
  - ✓ RC Data (to know the exothermicity in reaction)

- ✓ DSC data
- ✓ ARSST data (to evaluate the rate of pressure & temp. rise during runaway reaction.
- ✓ Reaction criticality class

- Use of double control systems which have been inspected and periodically calibrated,
- Frequent cleaning of the reactors relating to process and cooling.
- Periodic maintenance of the stirrers, motors, all FLP fitting and safety valves.
- Reporting and investigation of every deviant phenomenon in order to discover the failure causes and implementation of corrective and preventative actions.

Confined Space Entry in Reactor

Solvent tank spray in summer season

8. Training and awareness management

Training Management System:

- EHS Induction Training given to all new joined employees (FTE and contractual)
- Refreshing Training to all employees (FTE and contractual) every year

(Major subjects covered in EHS Refresher training:- Site Safety Rules, EHS Policy, Process safety management, Chemical Hazards Communications, Industrial Hygiene, Use Of PPE's, Work Permit System, LOTO, Electrical Safety, Gas cylinder safety, Emergency response, Environment protection)

- First Aider Training
- Emergency Response Team (ERT) employees Training

Awareness Program Conducted every year

- Celebration of National Safety Week

*Photo taken before Covid-19

*Photo taken before Covid-19

*Photo taken before Covid-19

*Photo taken before Covid-19

*Photo taken before Covid-19

9. PPE management for Personal safety

Personal protective equipment - equipment intended for a workman's personal use, by wearing, putting on or carrying, and specially designed for his protection against a hazard that may harm his safety or health.

Personal protective equipment constitutes a means for personal protection of a workman and those working in his vicinity. Personal protection of the workman may include protection of a body part or a number of parts or personal protection of his entire body; this depends on the nature of the activity and the level of exposure to risks and hazards derived from the work activity.

The use of PPE's is as follow:

PPE	Details	Equipment
Head Protection – Safety Helmet	Usage: 1. Works that involve the hazard of injury by a falling object. 2. Construction and engineering works where there is no ceiling or roof to prevent the hazard of injury by a falling object. 3. Works under or next to a lifted load. 4. Works under or next to a location over which other people work, and there is no Partition between the locations. 5. Works in locations where there is a hazard of encountering pipes, beams, Protrusions, etc. 6. Works with instruments for riveting, or portable instruments for pinning, or Inserting nails upwards. 7. Locations which have been marked and signposted as requiring the use of head protection.	

Hearing protection by earplugs, earmuffs	Usage: 1. Places which have been marked and signposted with the obligation to use hearing protection. 2. Works of sawing, filing and mechanical polishing. 3. Locksmith ' s work, riveting, cutting with gas and autogenic & electrical welding. 4. Machining works. 5. Using pneumatic or hydraulic hammers. 6. Cleaning with compressed air. 7. Operating presses, except for hydraulic presses. 8. Operating internal-combustion engines, except for turbines and generators. 9. Heating steam and water boilers. 10. Operating air compressors. 11. Operating diesel or gas forklift trucks, without a closed operator ' s cab. 12. Single protection is required where measured noise levels exceed as below: 85 dBA 8-hour TWA. 13. Double protection is required where measured noise levels exceed: 100 dBA TWA (regardless of shift length).	
Face & eye protection by safety glasses, face shield.	Usage: The safety glasses are generally a means for protecting the eyes. However, there are activities where the face is likely to get injured as well; for example: coating baths, welding works etc. in which case the eye protection is achieved by a full face protection. Work with powders and dust requires the use of goggles. **Face and eye protection is required in the following places and activities:** Field processing, such as: 1. filing, milling,	

	polishing Engraving, drilling, cutting 2. Pounding with a metal object 3. Spraying and splashing 4. Electrical and autogenic welding, including removal of slag after welding. 5. Handling chemicals and biological materials, including carrying and transportation Stone or concrete masonry 6. Cleaning with a metal brush operated mechanically. 7. Assembly and disassembly of retractable/spring-like objects that may cause eye injury. 8. Demolition. 9. Other types of work, which have not been specified but are likely to endanger the face or the eyes.	
Respiratory protection by a mask with an air-purifying filter, positive pressure respirator	Usage: 1. Locations where there is/are likely to be gas, dust, volatile materials, smoke, droplet aerosols, toxic fumes, hazardous biological agents or lack of oxygen. 2. Work in any place where possible harmful dust may be found. 3. Painting job that causes the emission of toxic volatiles or toxic gases in places where there is no efficient system for their removal. 4. Work in sewage systems and underground sewage-related areas. 5. Work in cooling facilities where there is a hazard of coolant leak. 6. Any work with hazardous agents in the air, at a concentration that exceeds the exposure limit permitted in the	 

	regulations.	
Hand protection	Usage: Welding • Handling sharp and abrasive objects, except for processes where there is a hazard of the glove being entangled around a machine part or a part connected thereto. • Handling acids, basic solutions, harmful biological agents and other materials which • are likely to harm the skin. • Handling very hot or very cold materials. • Work under extreme cold conditions. • Work in a live installation.	 
Foot protection	Usage: Construction of metal structures and related works • Construction and engineering construction • Industrial pipe laying and its maintenance • Work in storage sites of construction materials • Steel processing • Works related to steam systems • Building ovens, assembly & maintenance of heating and ventilation systems • Metal works, cold and hot	

	processing of metals • Handling, transport and storage • Work with hot bitumen • Work under extreme heat or cold conditions • Work that requires the handling of hazardous liquid chemicals • Work in a live facility • Work in a place where there is a hazard of slipping • Operating earth-moving equipment.	
Body protection	Usage: Body protection shall be required in areas where risk assessment indicates that there is a potential for injury to the body from chemical, physical and biological exposures and/or from contact with solid, liquid or gaseous substances.	 
Full body protection against fall from heights	Usage: Full body protection against fall from heights and entrapment in a confined space, by a safety belt with all its accessories, a safety harness with all its accessories, while performing the following types of work: 1. Work in locations from where the employee may fall to a depth exceeding 2m, and which cannot be fenced. 2. Work in confined spaces. 3. Work in sewage system.	

10. Occupational health Center facilities

Health Management

- Services available 24X7
- Doctor (02 Nos.)
- Nurse (05 Nos.)
- Ambulance (02 Nos.)

Ambulance

11. Environment Management System at Teva, Gajraula

Water Pollution Control Systems :-

Effluent Treatment Plant: Zero Liquid discharge ETP with a capacity of 400 KLD

Low TDS:

- 7 Steps of treatment through Oil & Grease removal, Equalization, Primary Clarifier, Double stage Biological system, Secondary Clarifier, RO, Polisher RO.
- Decanter: Flow rate of 5 KL/ hrs.
- Mechanical Vapor Recompressor Evaporator:100 KLD
- R.O: 400 KLD (2 Nos)
- Polisher R.O: 620 KLD

High TDS:

- Multi Effect Evaporator Capacity: 100 KLD (2 Nos.)
- Agitated Thin Film Dryer Capacity :10 KLD
- Vertical Thin Film Dryer Capacity :20 KLD
- Incinerator for treatment of high TDS/COD of liquid and solid waste.

Sewage Treatment Plant:

- 100 KLD for factory sewage and 70 KLD for colony sewage

Environment Management at TIG

Air Pollution Control system :

- Scrubbers in process area to control fugitive emissions
- HEPA filters are used in the dry processing area
- Multi cyclone and pack bed scrubber at incinerator
- All stacks are monitored monthly basis

Hazardous Waste Management :

- Solid hazardous waste is disposed off to TSDF site, duly approved by UPPCB.
- Bio medical waste is disposed off for incineration to M/s Medicare ltd, duly approved by UPPCB.
- E-waste, used Batteries, spent oils are sent for recyclers, duly approved by UPPCB

Noise Pollution Control system :

- Acoustic enclosure is provided on the Diesel Generators to control the noise pollution
- Personal and Area monitoring is done half yearly.

Greenbelt

- We have 33.5% area of greenbelt at site, and have planted over 6,000 plants.

Rain Water Harvesting at site & Adopted nearby Ponds to recharge rain water.

Scrubber System

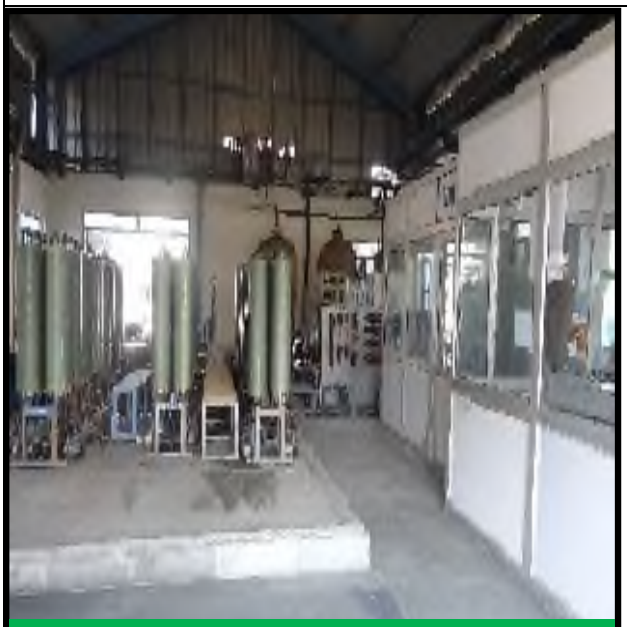
Equalization Tank

Bio Reactor-I

Clarifier -I

Bio Reactor-II

Clarifier – II



RO Plant

MVRE Plant

MEE Plant

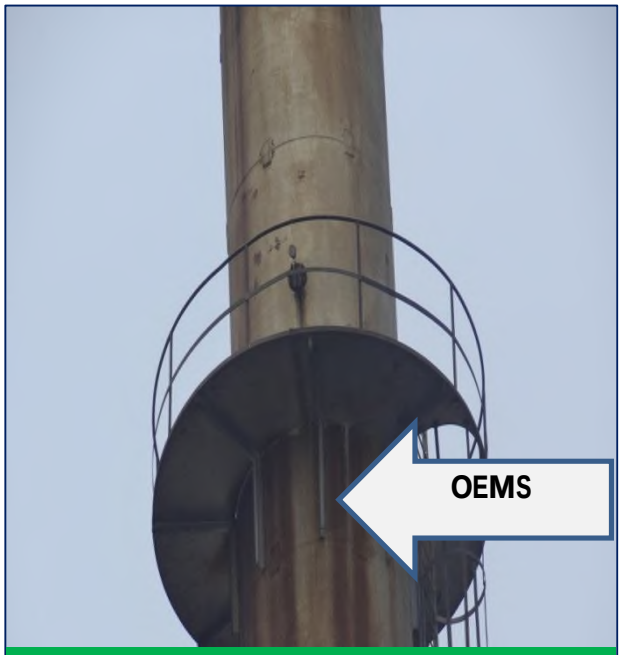
ATFD Plant

Incinerator Plant

Decanter Plant

STP Plant

Effluent online monitoring system



Online emission monitoring system

PTZ CCTV Camera along Storm water drain

BOILER SAFETY & CONTROLING MOUNTINGS

SAFETY MOUNTINGS

1. Safety Valves (2 Nos)
- Opening 11.2 Kg/Cm2
- Closing 11.0 Kg/Cm2
- Opening 11.5 Kg/Cm2
- Closing 10.9 Kg/Cm2
2. Fusible Plug (1 Nos)
3. Explosion Door (2 Nos) – In case of back fire

CONTROL MOUNTINGS

- Feed Check Valve
- Steam Stop Valve
- Mobrey
- Water Level Indicator
- Blow off cock
- Pressure Gauge
- Feed Water pump Auto ON/OFF

Emergency Response Management at Teva, Gajraula

"On-Site Emergency Plan"

- Fire Hydrants lines installed inside the plant covering all zones (106 Nos.)
- Fire alarm panel installed with Smoke/Heat detector at site. (817 Nos.)
- Availability of Water and Foam Monitors (29 Nos.)
- Placement of AFT (Advance firefighting technology) in Plants (27 Nos.)
- Placement of Fire extinguisher in all area of Site (962 Nos.)
- Water/Foam Automatic Sprinkler system in plant (6261 Nos.)
- Site is equipped with fire tender and fire jeep.
- 02 Site level Mock drills are conducted in a year.
- 64 Plant level mock drills are conducted in a year.

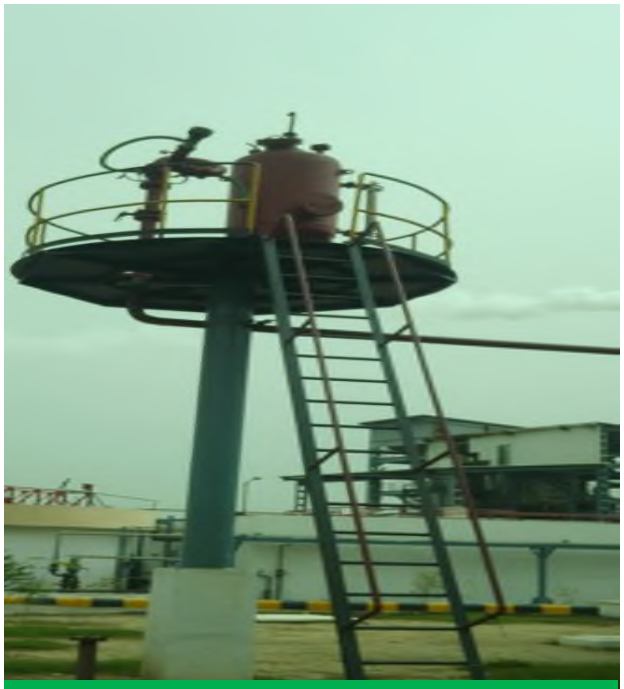
"Off-Site Emergency Plan"

- Off-Site Emergency Plan is being prepared under guidance of District Collector.

Fire Extinguisher

Foam trolley

Foam Monitor



Elevated Foam Monitor

Foam Bladder Tank

Water Hydrant

Self-Contained Breathing apparatus

Fire Tender

Fire Jeep

Water / Foam Sprinkler


AMBULANCE


teva
teva


Assembly Point # 1
SRT

teva api

दिनाँक 07/01/2021

सेवा में,

श्रीमान सहायक निदेशक कारखाना उ0प्र0
मुरादाबाद क्षेत्र, मुरादाबाद ।

विषय:– आपके पत्र सं0 1222–30, एफ/आ0सा0इ0प्लान/पूर्वाभ्यास/2020, दिनांक 09/12/2020 के सम्बन्ध में।

महोदय

आपके पत्र सं0 1222–30, एफ/आ0सा0इ0प्लान/पूर्वाभ्यास/2020, दिनांक 09/12/2020 के सम्बन्ध में आपको अवगत कराना है कि दिनाँक 17/12/2020 को कराये गये ऑन साईट इमरजेन्सी प्लान की चेक लिस्ट assessment of preparedness की कॉपी आपके अवलोकनार्थ प्रेषित है।

धन्यवाद।

कृते तेवा0ए0पी0 आई इंडिया प्रा0 लिमिटेड

गुरविन्दर सिंह
कारखाना प्रबन्धक

8/1/2021
कार्यालय सहायक निदेशक कारखाना उ0प्र0
4बी/401-402 सुदि वितार
मुरादाबाद क्षेत्र, मुरादाबाद

ON-SITE EMERGENCY PLAN
CHECKLIST FOR ASSESSMENT OF PREPAREDNESS

S. No.	General	
1.	Name and Address of the factory	Teva API India Pvt Limited, Plot No. A-2, UPSIDC, Industrial Area, Bijnor Road, Gajraula, Distt. Amroha, (UP)
2.	Industrial Activity	Manufacturing of Active Pharmceutical Ingrediant and Bulk Ingrediants
(a)	Main product Manufactured	Famciclovir, Pioglitazone HCl, Ezetimibe Enzymatic, Caspofungin Acetate, Pregabalin, Montelukast Sodium, Olanzapine, Valsartan Azide, Diltiazem HCl, Eletriptan HBr, Maleate, Hydroxy, Empagliflozin, Rosuvastatin Calcium, Venlafaxine, CLP-8, Trityl Losartan, Diene, Vortioxetine, Hydantoic, Sitagliptin, Tadalafil, Safinamide, Phenyl Piracetam, Simvastatin Ammonium Salt.
(b)	Hazardous materials stored/handles on the premises and the quantities in metric tonnes	Acetone-20 MT, Acetonitrile-10 MT, Cyclohexane-10 MT, Cyclohexanon-8 MT, D N S (De Natured Sprite) -4 MT, Hexane-3 MT, I P A (Iso Propyle Alcohol)-125 MT, Isobutyl Alcohal-10 MT, M T B E (Tert-Butyl Methyl Ether) 15 MT, Methanol -180 MT, N- Heptane-5 MT, N-Hexane -4 MT, T E A (Tri Ethyle Amine)-5 MT, T H F (Tetra Hydro Furan)-40 MT, Toluene-140 MT, Ethyl Acetate- 40 MT, Methyl Ethyl Ketone- 10 MT, Pure Ethanol - 10 MT
(c)	Hazardous processes conducted on the premises	Acidification, basification, hydrogenation and Azide reaction.
(d)	Nature of identified hazards	
	[Please tick (√) the relevant ones]	
	Fire	√
	Explosion	√
	Release of toxic vapour	√
(e)	Techniques adopted to access the hazards	
	HAZOP	√
	Safety Audit	√
	Risk Assessment	√
	Any other	Not Applicable
3.	Total number of workers	1027 (Teva Employee=298, Contract Employee=729)
(a)	employees in a day	298
(b)	present during the visit	298
4.	Number of shifts	Four (G, A, B and C)
5.	Number of entry and exit points of the factory	Three (Main Gate, Material Gate & Colony gate)
6.	Condition of approach roads:	Good Condition
(i)	to the factory	Good
(ii)	to the plant inside the factory	Good
7. (i)	Number of Safety officers	5
(ii)	Name and address of Chief Safety Officer	1. Niraj Ranjan (Teva, Gajraula)
8.	Whether adequate safety equipment available?	YES
9.	Fire Fighting facility certified by:	
	[Please tick (√) the relevant ones]	

	State / Local authority	√ (NOC from state Fire Department)
	Tariff Advisory Committee	NR
10.	Whether adequate emergency equipment available?	Yes
11.	Whether adequate first aid antidotes and Medical facilities available?	Yes
12.	**Type of training given to:**	
	First Aider	Yes
	Essential Persons	Yes
	General Public	No
	Fire Fighter	Yes (ERT)
	Key Persons	Yes
13.	Provision for emergency power supply for essential services?	Yes (DG Sets available with us)
14.	Whether mutual aid scheme exists?	M/s RACL Gear tech (Gajraula), M/s C L Gupta (Moradabad).
15.	Number of factories included in mutual aid scheme and types of facilities available (attach details)	Four Fire Tender and Medical Facilities.
16.	Does the emergency plan incorporate a directory of external technical support?	Yes
17.	Does evacuation procedure exits?	Yes
18.	Arrangement of keeping details of visitors at site.	Yes
II	ALARM SYSTEM	
(a)	Total number of alarms installed	764
(b)	Type-Electrical/ Mechanical/ Manual	Electrical
(c)	Whether this system of alarming is available in all work area?	Yes
(d)	Whether distinct alarm signals adopted for different types of emergencies?	No
(e)	Are all the alarms in good working condition?	Yes
(f)	Alarm signals for	Yes
(i)	Employees	Yes
(ii)	Public	No
III.	CONTROL ROOM AND COMMUNICATION SYSTEM	
(a)	Whether Control Room exists?	Yes
(b)	Numbers of Control Rooms	2.
(c)	Is the Control room (s) in Minimum Risk Area?	Yes
(d)	Facilities available in the Control Room [Please (√) appropriate ones]	
	Emergency plan- (a) On-site	√
	(b) Off-site	√
	Plan of the factory	√
	Plan of the area	√
	Public address system Telephone	√ **(Megaphone)**
	List of important phones numbers	Yes
	Hotline to District Magistrate	Yes (No Hotline but Contact can be made through Landline telephones and Mobiles.)
	Facilities available in the Control Room [Please (√) appropriate ones]	

	Hotline to Police Control Room	Yes (No Hotline but Contact can be made through Landline telephones and Mobiles.
	Hotline to Fire Brigade	Yes (No Hotline but Contact can be made through Landline telephones and Mobiles.
	Hotline to Emergency/Causality ward of the hospitals	Yes (No Hotline but Contact can be made through Landline telephones and Mobiles.
	Wireless sets	Yes
	Vehicles	Yes
	Clear access	Yes
	Non-stop power supply	Yes
	Meteorological Information	Yes, through Internet
IV.	ASSEMBLY POINTS AT THE TIME OF EMERGENCY	4
(a)	Assembly points details	Yes
(b)	Whether there is any board/ display to indicate the point of assembly?	Yes
(c)	It is a safe place?	Yes
(d)	Whether routes to the assembly points have been identified and marked?	Yes
(e)	Whether the place is under the charge of a person?	Yes
(f)	Whether roll-call arrangements exists?	Yes
V.	**EMERGENCY SHUTDOWN AND START UP**	
(a)	Does the emergency plan provide for the emergency shutdown and start up procedure of equipment/ unit/ plant?	Yes
(b)	Have specific individuals been designated to be responsible for shutdown implementation?	Yes
VI.	**ALL CLEAR SIGNAL**	
(a)	Whether there is any "all clear signal" system in existence?	Yes
(b)	Is the code for giving "all clear signal" established?	Yes
(c)	The person responsible for giving "all clear signal"	Yes
VII.	**INFORMATION REGARDING MOCK DRILL/ REHEARSAL**	
(1)	Date	17/12/2020
(2)	Time	15:00:00
(3)	Place of Mock drill/ rehearsal	Tank Farm Area - EOU II
(4)	Type of Mock drill/ rehearsal	Spill, Fire and Injury
(5)	Total time for	
(a)	Execution of emergency plan	15 minute
(b)	Control of emergency	10 minute
A.	**INFORMATION GIVEN TO:**	
	Officers of the Factory Deptt.	2. Yes
	Pollution Control Board	3. Yes
	Police	No
	District Medical Authority/ Local Hospital	No
	Fire Brigade	1.Yes
	Civil Defence	No
	District Emergency Authority	No
	(Note: Indicate the number in the box according to the contact made. For example	

	if the contact made to the police is first, the number in the box against police should be 1)	
B.	**ALARM SYSTEM**	
	Does alarm audible in all work area?	Yes
C.	**WIND DIRECTION INDICATOR**	
	Whether the indicator for wind direction visible from all places in the plant?	Yes
D.	**CONTROL ROOM AND COMMUNICATION SYSTEM**	
(a)	Were the communication systems and their maintenance adequate?	Yes
(b)	Communication system available in the case of power failure including the name of messenger	Yes
E.	**ASSEMBLY POINTS**	
(a)	Whether any confusion noted?	No
(b)	Whether people assembled in the designated area	Yes
(c)	Whether roll-call taken?	Yes
(d)	Whether evacuation procedure followed?	Yes
F.	**REPORTING OF KEY PERSONS**	
(a)	Incident controller at site	Yes
(b)	Site Controller at control room	Yes
(c)	Communication Officer at control room	Yes
(d)	Other Key persons at control room	Yes
(i)	Transport	Yes
(ii)	Medical	Yes
(iii)	Security	Yes
(iv)	Safety	Yes
(v)	Fire Fighting	Yes
(e)	Assisting teams at control room	Yes
(f)	e.g. Electrical/ Mechanical crew, salvage team, drivers, rigger, runners, volunteers, home guards etc.	Yes
G.	Were the Site Controller and Incident Controller in distinct clothes, helmet, or coloured apron?	Yes
H.	Number of mutual aid factories participated in rehearsal	02 (M/s RACL Gear tech, M/s CL Gupta)
(a)	Fire fighting	No
(b)	First aid and medical management	No
(c)	Any external technical support utilised during rehearsal (Attach details)	

I. Fire Brigade

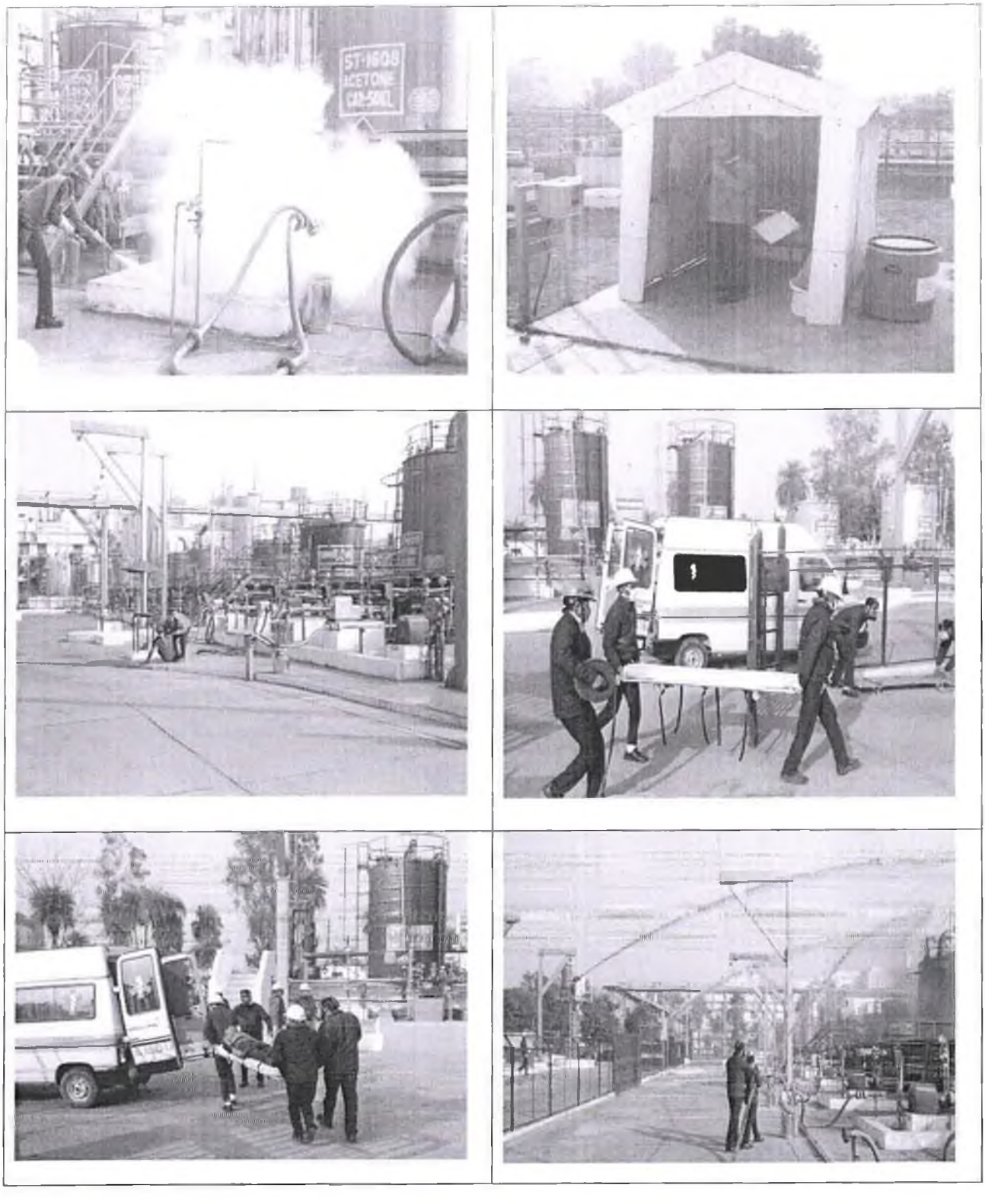
Sl. No.	Name of Fire Brigade	Name of Fire Station	Distance from factory	Whether equipment worked?	Whether equipment/system adequate?
1	2	3	4	5	6
I.	Internal	fire and safety dept.	0.0 km	yes	yes
II.	Under Mutual Aid Scheme	Jubilant Life science	3.5 km	NR	NR
		RACL Gear tech	3.0 Km	NR	NR
		C L Gupta	50.0 km	NR	NR
III.	External	Gajraula fire station	2.5 km	NR	NR

	Police			No	
J.	Time of first information			Attended	
				No	
	Ambulance/Transport			Yes/No	
K.	Sl. No.	Name of Organisation	Distance in Kms	Time of first information	If reported Punctual/Late
	1	2	3	4	5
L.	Assessment				
(a)	(i) Whether timely information given to concerned authorities?			Yes	
	(ii) Whether the execution of the emergency was within the time limit?			Yes	
(b)	Did alarm systems work properly? If not, state the reasons.			Yes	
(c)	Whether the facilities available in control room were adequate? If not, indicate short falls.			Yes	
(d)	Was there any confusion in the assembly point?			No	
(e)	Did the key persons report within minimum response time at the appropriate places?			Yes	
(f)	Was mutual aid assistance available in time and adequate?			Yes	
(g)	Indicate response time and adequacy of emergency system.			Approx. 03 minutes and Good	
(h)	Did police arrive at site in time?			Not Report	
(i)	Indicate response time and adequacy of ambulance/transport facilities.			Approx. 03 minutes and Good	
(j)	(i) Whether mock drill/rehearsal was carried out in the past?			Yes	
	(ii) Whether any improvement noticed from the previous rehearsal?			Yes	
	(iii) Whether the Emergency Plan is updated in view of the previous rehearsal and copy given to concern?			Yes	
(k)	Adequacy of training of key persons.			Good	
(l)	General Remarks.			Not reported	
(m)	Does the procedure for proper assessment for safe operation of the plant before recommissioning after the incident exist?			Yes	

Place: Gajraula
Date. 17.12.2020

Signature:
Name:
Designation: Factory Manager

Mock Drill Photographs:



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TEVA API India Pvt. Ltd
Gajraula

Subject: OFF Site Mock Drill in 150 Kl tank farm area

Date : 10 March 2021
Time : 12:20 hrs.
Location : 150 KL tank farm area ST-1609 (Methanol)

Scenario of incident:

On 10.03.2021 in 150 KL tank farm area, 1st operator was transferring Solvent (Methanol) from tank ST-1609. Methanol Storage tank was planned to be show cased, that gets leaked from one flange of discharge pipe line of pump. Due to damaged earthing wire of centrifugal pump P-16126, due to static charge when spilled solvent catches Fire. 1st operator after seeing the fire at pump starts shouting "Fire-Fire". He tries to extinguish fire by using portable fire extinguishers. 2nd Operator switched off the pump by pressing emergency stop button near phone station. 2nd Operator working near the incident site informs fire crew members using emergency dialing number about the incident. 2nd Operator inform Warehouse Manager about the incident.. Warehouse Manager informs to Incident Controller and emergency co-ordinator. Warehouse manager calla OHC for medical assistance. The Incident Controller informs to Site Main Controller about the gravity of the incident. After assessing the situation of the incident, Site Main Controller declares Emergency. Firefighting team reaches at location and starts firefighting. Security team reaches at location and secures the incident area by barricading the road and takes control of road traffic. Siren is blown with waxing and waning sound for 12 seconds three times. Admin block, WH – Finished goods & Raw material, Project dept. & PD lab People starts to evacuate their respective areas and assemble at the assembly points -03. Fire could not be controlled by internal fire team, hence off-site emergency was declared. Site Main Controller informs government authorities about the Incident. – CFO, CMO, SP Police, DM, CDO, UPPCB, ADF, Medical team with ambulance reaches at location and shifts injured to Occupational Health center with support of ERT members. All the

mentioned location/ area personnel working in plants, including contractual workers came out and assemble in their respective lines at the Assembly point. HR Team starts the head count at all assembly points. Fire is controlled by the firefighting team. HR Team confirms the head count after getting inputs from assembly point. Assembled team members to be sent to relief camp by maintaining covid protocols. After confirmation of head count, Site Main Controller instructs Security to announce All Clear Siren. After hearing the All Clear Siren employees go back to their respective areas.

Key personnel:

Site Main Controller	:	Mr. Rajesh Naik / Mr. Munish Var Singh
Site Incident Controller	:	Mr. S K Upadhyay / Mr. Ashu Rastogi
Emergency Co-coordinator	:	Mr. Niraj Ranjan / Mr. Asif Ali Khan
Plant Incident Controller	:	Mr. Prem Chand / Mr. Swarup Padhihari
Engineering Crew	:	Mr. Vishwajeet Nandkeolyar / Mr. P. K. Pandey
Head Counting	:	Mr. Vinit Kumar. Singh / Mr. Vipin Kumar
Security	:	Mr. Amit Kapoor

Observers:-

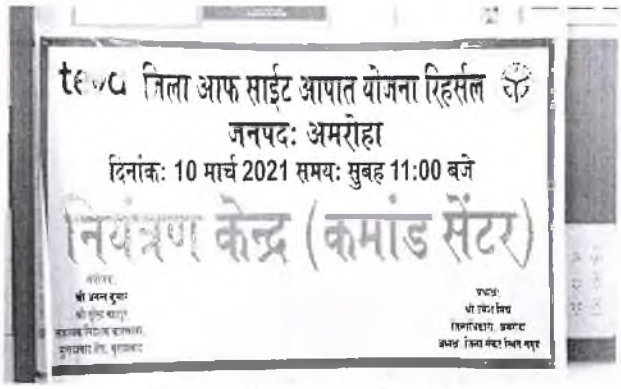
Mr. Ashu Rastogi	Incident Site
Mr. Nirmail Singh	Incident Site
Mr. Shobhit Sengar	Fire Pump House
Mr. Sadeesh Murthy	Main Security Gate
Mr. Sunil Pandey	Emergency Control Room
Mr. Manoj Chaudhary	Fire Station
Mr. Ashutosh Agarwal	Assemble point-01
Mr. Abhishek Singh	Assemble point-03
Mr. Alok Mahajan	OHC

Observations:

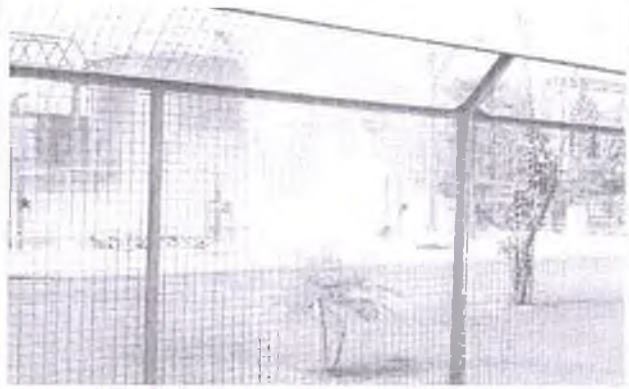
Following observations were made during the off-site mock drill:

1. Wind-sock to be available nearby 150 KL tank farm.
2. Site incident controller and other important responders to have clear visibility and differentiated from others.
3. Instead of Full-face cartridge respirators, SCBA could be used by the ERT members at incident location.
4. Communication could be improved for better coordination i.e. ambulance did not come quickly to pick up injured personnel.
5. Some Sprinklers were not working adequately for some of the storage tanks that were under cooling.
6. Foam monitors from the backside of the tank farm were not used for fire fighting at incident area.
7. Information was not clear at fire station about the incident details.
8. A security guard / volunteer to be posted near colony gate to guide outsiders about the incident spot to prevent wastage of response time.
9. PPE could be arranged for all visitors before entering into incident spot or keep them at distance from the incident spot.
10. Information shall be given to all government authorities as soon as possible.
11. Videography shall be done for entire scenario for future learning.
12. Ambulance driving over the fire hoses could be avoided.
13. A booklet on communication tree to be developed for ready use.

Off Site Mock Drill Photographs:



Emergency control center



Firefighting at incident place

Rescue operation by Rescue Team

Firefighting with foam monitor by Fire Team

Firefighting by Fire Office Team, Gajraula

Firefighting by Teva Fire Team

Employees at assembly point

Jubilant life science firefighting team at Incident place

Monitoring of drill by Government Authorities

Mock drill concluding meeting

Shri Surendra Bahadur, ADF – Sharing his observation

Shri SC Vishwakarma, ADF – Sharing his observation

Ms. Suniti, IPS – Sharing her observation

Shri Umesh Mishra, DM – Sharing her observation

Vote of thanks by site SLT

Tig vehicle ready for escape the employees

OHC Centre for first aid

Tig ambulance carrying the injured

---End of report---

Communication with Authorities wrt GW Renewal

Chronology of NOC application submitted to CGWA

S. No	Date	Description	Remark
1	04-12.2017	Previous NOC was Obtained from CGWA	
2	11-10.2019	Online Application for Renewal of NOC from CGWA	Submitted one month before expiry
3	14-10.2019	Hardcopy of the above Application submitted to CGWA Member Secretary	
4	14-112019	Previous NOC obtained from CGWA got expired	
5	08-02-2020	1st Request letter for NOC Renewal to Regional Director, CGWB up on the application submitted on 11-102019	After almost 4 months of expiry
6	17-03-2020	2nd Request letter for NOC Renewal to Regional Director, CGWB up on the application submitted on 11-102019	After a month of 1st request letter
7	15-05-2020	Letter submitted to District Magistrate for Registration of Bore well	As per UP Ground Water Act 2019 regulations

8	20-07-2020	3rd Request letter for NOC Renewal to Regional Director, CGWB up on the application submitted on 11-102019	After 4 months of 2nd request letter. The groundwater recharging potential details are specified in the letter.
9	31-12-2020	Online bore well registration for well-2 and sent to District Magistrate	As per UP Ground Water Act 2019 regulations

10	31-12-2020	Online bore well registration for well-1 and sent to District Magistrate	As per UP Ground Water Act 2019 regulations
11	**29-05-2021**	**Online NOC renewal application submitted to UPGWD for 2 nos. bore well**	**NOC renewal awaited**

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TIG/GAJ/E&S/UPGWD/2021/01

Date: 29.05.2021

To,

The Director,
Ground Water Department
9th Floor, Indira Bhawan,
Ashok Marg Lucknow 226001

Subject- Regarding Renewal application for our CGWA NOC for 2 (Two) nos. existing bore well.

Dear Sir,

We would like to inform you that we had NOC from CGWA vide NOC No. CGWA/NOC/IND /ORIG/2017/2872 dated 4.12.2017 and applied for renewal on 11.10.2019 that was pending at the CGWA end.

As per new guideline of CGWA and UPGWD, we have applied for renewal of our NOC from UPGWD with below details thru Nivesh Mitra and details are as under;

S. No.	Name of Application	Application No.	Fee	Date of Submission
1	Bore well 30 HP-I	AMRH0521RIN0029	Rs. 5000/-	29.05.2021
2	Bore well 30 HP-II	AMRH0521RIN0030	Rs. 5000/-	29.05.2021

Bore well -I withdrawal= 660KL per day total days 365
Bore well -II withdrawal =880 KL per day total days 365 Days

Total withdrawal per day applied =1540 M^3/day 562100 M^3
As per above details, we request you to kindly renew our NOC for ground water abstraction at the earliest.

With regards,

Yours Faithfully,
M/s Teva API India Pvt. Ltd.

(Authorized Signatory)

05/06/2021
Assistant Engineer
Minor Irrigation
Amroha

Encls.

1. Copy of Applied Application for both bore well.
2. Fee Receipt
3. Copy of our CGWA NOC.
4. NABL reports for both the bore wells
5. Rain water harvesting report
6. Ground water impact assessment and Hydrogeological study

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha (Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Mumbai [illegible], Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

@mmdwt qd Q, 03 'Bnlkx(321

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 1(B)/फॉर्म 1(बी)

[See rule 6(2)/नियम 6(2) देखें]

APPLICATION FOR REGISTRATION OF WELL
कूप के रजिस्ट्रीकरण हेतु आवेदन पत्र

(Commercial/Industrial/Infrastructural/Bulk user having N.O.C. issued by Central Ground Water Authority or by Ground Water Department)
(वाणिज्यिक/औद्योगिक/अवसंरचनात्मक/सामूहिक उपयोक्ता जिनके पास एन.ओ.सी. केंद्रीय भूगर्भ जल प्राधिकरण या भूगर्भ जल विभाग द्वारा जारी किया गया)

[UIS 10(1) or 11(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]
[उत्तर प्रदेश भूगर्भ जल प्रबंधन और विनियमन अधिनियम, 2019 का युआईएस 10 (1) या 11 (1)]

Applicant's Details **आवेदक का विवरण**			
Type of Applicant **आवेदक का प्रकार**	Behalf of Firm/Company	**Application Number** **आवेदन संख्या**	AMRH1220RIN0026
Name of the Applicant **आवेदक का नाम**	Asif Ali Khan	**Father's Name** **पिता का नाम**	Aas Mohammad
Date of Birth **जन्मतिथि**	26/09/1975	**Gender** **लिंग**	Male
Nationality **राष्ट्रीयता**	Indian	**ID as Address Proof** **निवास प्रमाण हेतु आईडी**	Aadhaar Card
Aadhaar Card Number **आधार कार्ड संख्या**	3728-8976-2909	**Uploaded Aadhaar Card** **अपलोड किया गया आधार कार्ड**	Download
House No./Flat No./Building No. **मकान सं0/फ़्लैट सं0/भवन सं0**	B-38	**Locality/Village** **मुहल्ला/गाँव**	Teva Gajarula
City/Town/Post Office **नगर/कस्बा/पोस्ट ऑफिस**	Gajraula	**State** **राज्य**	Uttar Pradesh
District **जनपद**	Amroha (J.P.Nagar)	**Pin Code** **पिन कोड**	244235
Designation **पद**	Sr. Manager EHS	**Company Name** **कंपनी का नाम**	Teva API India Pvt. ltd
Company Address **कंपनी का पता**	Teva API India Pvt. ltd.	**Authorization Letter** **प्राधिकार पत्र**	Download
Details of Existing Well **विद्यमान कूप का विवरण**			
District **जनपद**	Amroha (J.P.Nagar)	**Block** **ब्लॉक**	GAJRAULA
Plot No./Khasra No. **प्लॉट संख्या/खसरा संख्या**	A-2/1,A-2/2 , UPSIDC Industria area ,Gaj	**Municipality/Municipal Corporation** **नगर पालिक/नगर निगम**	Gajraula
Ward No./Holding No. **वॉर्ड संख्या/होल्डिंग संख्या**			N/A
Particulars of The Existing Well **विद्यमान कूप का ब्यौरा**			
Date of Construction/Sinking of Well **कूप की निर्माण तिथि**	04/05/2012	**Type of Well** **कूप का प्रकार**	Tube Well/Boring
Housing Pipe If Any **यदि कोई है**	Yes	**Approx. Length of Housing Pipe (In meter)** **हाउसिंग पाईप की अनुमानित लंबाई (मीटर में)**	37.17
Approx. Diameter of Housing Pipe (mm) **हाउसिंग पाईप का अनुमानित व्यास (मिलीमीटर में)**	300.00	**Material of the Housing Pipe & Blank Pipe** **हाउसिंग पाईप एवं ब्लैंक पाईप की सामग्री**	Iron
Strainer Details **स्ट्रेनर का विवरण**			
Material of Strainer **स्ट्रेनर की सामग्री**	Galvanized Iron	**Number of Strainer(s)** **स्ट्रेनर की संख्या**	2

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S.No. क्रम संख्या	Strainer Installed at what Depth from Ground Level (in Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई पर स्थापित है (मीटर में)	Strainer Installed upto what Depth from Ground Level (in Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई तक स्थापित है (मीटर में)	Length (In meter) लंबाई (मीटर में)	Diameter (In millimeter) व्यास (मिलीमीटर में)
1	90.86	123.86	33.00	200.00
2	135.49	138.49	3.00	200.00

Approx. Depth of Well (In meter) कूप की अनुमानित गहराई (मीटर में)	144.64	**Whether There has been Any Adverse Report Regarding Water Quality of the Well?** क्या कूप के जल की गुणवत्ता के संबंध में कोई प्रतिकूल रिपोर्ट है?	No

Details of Existing Pumping Device विद्यमान पंपिंग उपकरण का विवरण

Type of Pump to be Used प्रयोग किये जाने वाले पंप का प्रकार	Submersible	**Pump Capacity (In m3/hr)** पंप क्षमता (m3/hr)	110.00
Horse Power (H.P.) हॉर्स पावर (एच.पी.)		30.00	
Operational Device परिचालन उपकरण	Electric Motor	**Date of Energization** विद्युतीकरण तिथि	04/05/2012

Details of Utilization of Well कूप के उपयोग का विवरण

Purpose of the Existing Well विद्यमान कूप का उद्देश्य?	Industrial	**Annual Running Hours** वार्षिक उपयोग (घंटे में)	730.00
Daily Running Hours दैनिक उपयोग (घंटे में)	2.00	**Whether the Water Supplied in Well Area Through Pipe Water Supply or Not?** क्या क्षेत्र में जल की आपूर्ति पाइप जलापूर्ति के माध्यम से होती है?	No
Please Submit Mode of Treatment of Waste Water/Effluent (For Industries) अपशिष्ट जल की उपचार प्रणाली भरें (उद्योग हेतु)	ZLD based effluent treatment plant is available for industrial effluent and STP are provided for domestic effluent.	**Please Mention Whether Obtained NOC from Uttar Pradesh Pollution Control Board for Discharge of Effluent/Waste Water or Not?** कृपया उल्लेख करें कि क्या उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड से अपशिष्ट प्रवाह/अपशिष्ट जल प्रवाह हेतु अनापत्ति प्रमाण पत्र प्राप्त कर लिया गया है अथवा नहीं	Yes
Upload NOC अनापत्ति प्रमाणपत्र अपलोड करें		Download	
Whether Rain Water Harvesting Structure has been Constructed within the Premises? क्या परिसर में वर्षा जल संचयन संरचना का निर्माण किया गया है?	Yes	**Any Other Information Which You Would Like to Furnish** कोई अन्य जानकारी जो आप प्रदान करना चाहते हैं	2 Nos. Pizometer with telemetry system is provided Borewell are surrounded by RCC structure as Per CGWA guidelines Several steps taken for water conservation ZLD based ETP plant and STP plants are provided
Capacity of Structure, Constructed for Rain Water Harvesting (M^3) वर्षा जल के संचयन हेतु निर्मित संरचना की क्षमता (मी०^3)		9912.40	
NOC Issued By: अनापत्ति प्रमाण पत्र (द्वारा निर्गत)			
Central Ground Water Authority केन्द्रीय भूगर्भ जल प्राधिकरण			Yes
Certificate Number प्रमाणपत्र संख्या	ORIG/2017/2872	**Issue Date** निर्गमन तिथि	04/12/2017
Expiry Date अंतिम तिथि	11/11/2019	**Upload Certificate** प्रमाणपत्र अपलोड करें	Download
Ground Water Department Uttar Pradesh भूगर्भ जल विभाग उत्तर प्रदेश सरकार			No

Declaration by the Applicant
आवेदक द्वारा उद्घोषणा

I do hereby declare that the particulars fuenished herein above are correct and true . I understand that in case any of the information and particulars is found to be incorrect at any stage of scrutiny and investigation or thereafter, my application/registration is liable to be rejected/cancelled ..
मैं एतद्द्वारा घोषित करता हूँ कि ऊपर दिये गए विवरण सही व सत्य हैं | मैं जानता हूँ कि यदि जांच पड़ताल के दौरान किसी भी स्तर पर उपरोक्त विवरण असत्य पाये गए तो मेरा आवेदन/रजिस्ट्रीकरण अस्वीकृत/निरस्त किए जाने योग्य होगा"

I Agree/मैं सहमत हूं ☑

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Asif Ali Khan 323

Dashboard
डैशबोर्ड

ONLINE REGISTRATION FOR EXISTING WELL
ऑनलाइन विद्यमान कूप के लिए रजिस्ट्रीकरण

STEP 1/चरण 1 **DETAILS OF EXISTING WELL** **विद्यमान कूप का विवरण**	**STEP 2/चरण 2** **DETAILS OF EXISTING PUMPING DEVICE** **विद्यमान पंप डिवाइस का विवरण**
STEP 3/चरण 3 **DETAILS OF UTILIZATION OF WELL** **कूप के उपयोग का विवरण**	**STEP 4/चरण 4** **PREVIEW & FINAL SUBMIT** **पूर्वावलोकन एवं अंतिम रूप से दर्ज करें**

Details of Existing Well/विद्यमान कूप का विवरण

A. LOCATION OF THE EXISTING WELL/विद्यमान कूप का अवस्थिति

District
जनपद*

Amroha (J.P.Nagar)

Block
ब्लॉक *

GAJRAULA

Plot No./Khasra No.
प्लॉट संख्या/खसरा संख्या

A-2/1 , A-2/2, UPSIDC Industrial area Ga

Municipality/Municipal Corporation
नगर पालिका/नगर निगम

GAJRAULA

Ward No./Holding No.
वॉर्ड संख्या/होल्डिंग संख्या

N/A

B. PARTICULARS OF THE EXISTING WELL/विद्यमान कूप का विवरण

Date of Construction/Sinking of Well
कूप की निर्माण तिथि *

18/07/2009

Type of Well
कूप का प्रकार *

Tube Well/Boring

Approx. Depth of Well (In meter)
कूप की अनुमानित गहराई (मीटर में) *

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Asif Ali Khan

Dashboard
डैशबोर्ड

133.41

Housing Pipe If Any
यदि कोई है

(•) Yes/हां ( ) No/नहीं

Approx. length of Housing Pipe (in meter)
हाउसिंग पाईप की अनुमानित लंबाई (मीटर में)*

43.27

Approx. diameter of Housing Pipe (mm)
हाउसिंग पाईप का अनुमानित व्यास (मिलीमीटर में) *

300.00

Material of the Housing Pipe & Blank Pipe
हाउसिंग पाईप एवं ब्लैंक पाईप की सामग्री *

Iron

C. STRAINER DETAILS/स्ट्रेनर का विवरण

Material of Strainer
स्ट्रेनर की सामग्री *

Galvanized Iron

Number of Strainer(s)
स्ट्रेनर की संख्या*

2

S.No. क्रम संख्या	Strainer Installed at what Depth from Ground Level (in Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई पर स्थापित है (मीटर में) *	Strainer Installed upto what Depth from Ground Level (in Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई तक स्थापित है (मीटर में) *	Length (In Meter) लंबाई (मीटर में) *	Diameter (In Millimeter) व्यास (मिलीमीटर में) *	Action कार्य
1	96.29	112.29	16.0(	200.0	+
2	115.41	131.41	16.0(	200.0	+ ×

Whether there has been Any Adverse Report Regarding Water Quality of the Well?
क्या कूप के जल की गुणवत्ता के संबंध में कोई प्रतिकूल रिपोर्ट है?

( ) Yes/हां (•) No

COMPANY/FIRM DETAILS/कंपनी/फर्म का विवरण

Company/Firm Name
कंपनी/फर्म का नाम *

Teva API India Pvt. ltd

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Company/Firm Address
कंपनी/फर्म का पता *

A-2/1 , A-2/2, UPSIDC Industrial area Gajrauala

Dashboard
डैशबोर्ड

Save and Next/दर्ज करें व आगे बढ़ें Reset/रीसेट

Hydro-geological and Groundwater Impact Assessment with Modeling and Feasibility of Rain Water Harvesting Report

For

M/s TEVA API India Pvt. Ltd.,

Plots A-2,A-2/1 & A-2/2, UPSIDC Industrial Area, Bijnor Road, Gajraula Taluka, Amroha District (Previously J P Nagar) – 244235 Uttar Pradesh

PROJECT PROPONENT

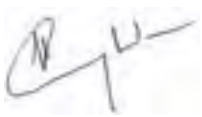
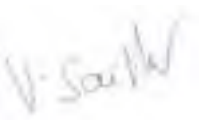
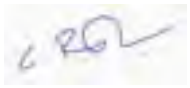
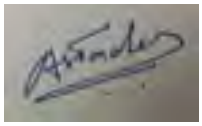
TEVA API India Pvt. Ltd.

Gajraula, Amroha District, Uttar Pradesh

PREPARED BY

Cholamandalam MS Risk Services Limited
QCI NABET Accredited Groundwater Consulting Organization
(Certificate No: NABET/GWCO/IA/GW008)
Gee Gee Universal, 6th Floor, Mc Nicholas Road,
Chetpet, Chennai – 600031 India
Tel. + 91 44 43665000
www.cholarisk.com
April 2021

Document Information

Subject	Ground Water Impact Assessment	
Project	Hydro-geological and Groundwater Impact Assessment Report as per CGWA Guidelines	
Client	TEVA API India Ltd,	
Site	Gajraula, Amroha District, Uttar Pradesh, India	
Project Coordinator	 31.01.2021 	Dr. V. Pugazhendi, *CGWA Accredited (Empanelled Expert)* Mr. S. Diganta *Senior Manager - NABET Accredited Expert*
Project Team	  	Mr. V.S.Bhaskar, *Senior General Manager – Water Quality Expert, NABET Accredited Expert* Mr. C. Rajadurai, *Manager - Remote Sensing and GIS Expert, NABET Accredited Expert* Mr. Ashish Tadas, *Deputy Manager – Hydro-geologist & Geologist, NABET Accredited Expert*
Reviewed & Approved by	Dr. V. Pugazhendi and Mr. S. Diganta	
Date of Issue	29-04-2021	
Document No.	EN20120341/V1	

Declaration by Project Proponent

TEVA API India Pvt. Ltd. has undertaken the ***"Hydro-geological and Groundwater Impact Assessment study for its facility located in Gajraula, Amroha District, Uttar Pradesh***".

The report has been prepared through NABET accredited consulting organization fulfilling the CGWA Guidelines. Information and content provided in the report is factually correct for the purpose and objective for such study undertaken.

We hereby declare the ownership of contents (information and data) of Hydrogeology and Groundwater Impact Assessment Report.

For on behalf of

M/S. TEVA API India Pvt. Ltd.

Signature :

Name :

Designation :

NABET Accreditation Certificate

QCI

NABET

Quality Council of India

National Accreditation Board for Education and Training

Certificate of Accreditation

Cholamandalam MS Risk Services Ltd.

Address: No.2, NSC Bose Road, Parrys, ChennaiTAMIL NADU CHENNAI-600001

SL. No.	SCOPE COVERAGE		
	Industrial Use	Mining Projects	Infrastructure Projects
1	Hydrogeological report: Comprehensive report on groundwater condition/situation		
2	Impact Assessment report: Dealing with existing/ proposed withdrawal on Ground Water Regime including Socio-Economic impacts		
3	Annual Water Audit Report Preparation		

Sr. Director, NABET
Issue Date: Jan 19, 2021

Certificate No.
NABET/GWCO/IA/GW008

Valid Upto
Jan 07, 2024

1 INTRODUCTION

TEVA Pharmaceutical Industries Ltd is a global scale, pharmaceutical company specializing in the development, production & marketing of generic and proprietary branded pharmaceutical with active pharmaceutical ingredients. It ranks among the leading pharmaceutical companies in the world and is active in 60 countries. TEVA is the leading global supplier of Active Pharmaceutical Ingredients (APIs), the essential raw materials of the drug manufacturing industry. TEVA India has one of its manufacturing plants at Gajraula, Uttar Pradesh.

Industries those who are drawing ground water for their various uses need to obtain ground water clearance from the competent authorities. In Uttar Pradesh, the CGWA is vested with the responsibility of issuing no object certificate for ground water clearance.

The TEVA API India Industry has obtained ground water clearance for 1455 cum/day (and not exceeding 531075 cum / year) through existing 2 tube wells during December 2017 vide ***NOC No. – CGWA / NOC / IND / ORIG / 2017 / 2872 dated 04-Dec-2017.*** While according the clearance, CGWA has given direction to the M/s TEVA API India Pvt. Ltd. to implement ground water recharge measures at least to the tune of 268355cum/year. NOC letter is attached as **Annexure-1.**

The water allocation and its current water use scenario are given as below,

Particulars	Production Capacity 303 TPA (48 %) for 2019 - 2020		Production Capacity 620 TPA (100 %) for future	
Water use	Fresh water use	Recycle water use	Fresh water use	Recycle water use
Consumption (cum/day)	770	454	1253	793
Total (cum/day)	1224		2046	

As per the guidelines issued on 24.09.2020 and subsequent amendment for ground water withdrawal, it is mandatory to study the detailed hydrogeological set up of the plant area, impact assessment (5 Km from the plant boundary) and implement recharge measures to recharge shallow/deeper aquifer to the extent possible within the industry area by an accredited consultant. A detailed plant report for rainwater harvesting and ground water recharge plan in the plant premise and / or same watershed/ assessment unit, should accompany the request for ground water withdrawal.

Accordingly, Hydrogeological aspects in and around plant site and feasibility for rainwater harvesting has been undertaken by Cholamandalam MS Risk Services Ltd., QCI Accredited Ground Water Consulting Organization for Hydrogeological and Impact Assessment Report Preparation.

The area details of plant site are given below.

Table 1: Area Details of Project Site

Sr. No.	Facility	Area in Sq.m.
1.	Roof area of the buildings and sheds	15737.74
2.	Road, asphalt and parking area	10895.05
3.	Green belt area	87109.81
4.	Open land / Vacant area	138707.07
	Total Area	**252449.67**

1.1 Need for the Study

The present Hydrogeological and Groundwater Impact Assessment study for the plant area depicts the ground water condition of the plant and the villages falling within the study area covering 5 km radius from the plant boundary.

The data from the villages, which are falling within the study area (5 km radius) with land use information, rainfall, surface water availability, ground water availability and aquifer parameters of the study area have been considered for report. The legacy rainfall, ground water level data have been collected from State and Central ground water departments have been analysed for the ground water availability in the study area.

1.2 Salient Features of Jal Shakti Notification

According the 24th Sept. 2020 notification from Jal Shakti,

- Those companies have withdrawn in excess of 100 cum/day quantum of ground water in Over-exploited/Critical/Semi-Critical areas shall have mandatorily submitted Impact Assessment Study Report.
- Industries withdraw ground water in excess of 100 cum/day shall be required to undertake Annual Water Audit Report.
- Report shall be preparing as per amendments in report format and criteria.

a. Study area for industry sector is 5 km
b. In Over-exploited/Critical/Semi-Critical, ground water withdraw more than 1000 cum/day in soft rock/alluvium. User required impact assessment report with modeling study.

1.3 Scope of Work

Hydrological and Hydrogeological Studies including assessment of ground water availability identify and suggest recharge measures to augment the ground water resources as per the CGWA guidelines. The study also focused on the ground water level, availability of ground water in and around the plant area, impact of the withdrawal of ground water for the industrial purpose. Feasibility study for the rainwater harvesting has conducted within the plant area as well as outside the plant area.

1.4 Methodology

To achieve the above scope of the work, the following methodology has been adopted as per below,

1) Pre-field preparation

- Collection of satellite data, maps and literature for aquifer characteristics etc.
- Collection of rainfall data for a period of 25 years.
- Collection of legacy pre and post monsoon ground water level data for period of 10 years.
- Preparation of base map, drainage & waterbodies map, geology map, geomorphology & structure map, land use map using satellite imagery & available relevant maps.

2) Field work

- Field verification of rock type, lithology, type of aquifer such as shallow/deep aquifer, ground water withdrawal and aquifer parameter test.
- Field verification of land use pattern, geomorphic features and structures such as fold, fault, fractures and fissures.
- Collection of well inventory data & measurement of well depth, water level, yield and water quality.

3) Post-Field Interpretation

- Preparation of ground water level zone map, water table contour (pre and post monsoon).
- Interpolation and superimposition of the observed data using statistical and standard hydrogeological methods.
- Estimation of aquifer parameters.
- Ground water impact assessment due to the pumping of water for industrial use.
- Study of aquifer within 5 km around the plant boundary and estimation of surface runoff from the plant area.
- Feasibility study for the rain water harvesting within the plant and suggesting the recharge structures to augment the ground water resources in and around the plant.

2 BRIEF ABOUT THE PROPOSED PROJECT

2.1 Location details, Coordinates, Google /Toposheet Maps, Demarcating the Project Area

TEVA API India Ltd. is located 1 km South West of Gajraula town of Amroha district. The plant facilities are distributed across an area approximately 8 km x 4 km, located to the North West of the NH24 highway. The administrative unit within the study area from the plant boundary comprises of 26 habitations within 5 km radius from the plant boundary. The plant falls in Gajraula Block of Amroha District (Jyotiba Phule Nagar) Uttar Pradesh State.

The study area (covering 5 km radius) lies in between Latitude 28° 47' 50" and Latitude 28°53'00" North and Longitude of 78°11'00" and Longitude 78°16'30" East and part of the Survey of India Toposheet Nos.53 L/1 and 53 L/5

The plant falls in 53 L/1 toposheet. The total aerial extent of the study area covering 5 km radius from the plant boundary is 76.75 Sq.km.

Table 2: The details of study area (covering 5 km radius) are given below.

Feature	**Details**
Site Location	The plant site is located near Gajraula industrial area, Gajraula Block of Amroha District (Jyotiba Phule Nagar), Uttar Pradesh State.
Topography	Site is located in uncultivable wasteland part in fallow land. Crop land is predominant in study area of 5 km radius.
SOI Toposheet	53 L/1
Above Mean Sea level	Highest point is average 217 m MSL and lowest point is average 197 m MSL. Plant elevation: Max and Min elevation 212 m and 207 m respectively.
Nearest habitation	Gajraula Town in the East
Nearest Water body	No water body nearby around the plant. Ganga River is located at a distance of 7.5 km in the western side of the plant.
Nearest River	Ganga River is located at a distance of 7.5 km in the western side of the Plant Site.
Geology of the Area	**Sedimentary Formation**

Figure 1: Index Map Showing the Location of Project Site

Figure 2: Google Image Showing the Plant Site

Project Site Boundary Coordinates		
Sr. No.	**Latitude**	**Longitude**
1	28°50'17.08"N	78°13'38.77"E
2	28°50'16.82"N	78°14'4.40"E
3	28°50'8.50"N	78°14'9.58"E
4	28°50'7.51"N	78°14'7.76"E
5	28°50'9.93"N	78°14'3.18"E
6	28°50'9.95"N	78°13'57.83"E
7	28°50'4.68"N	78°13'54.73"E
8	28°50'2.23"N	78°13'39.06"E

Figure 3: Toposheet Map Showing the Plant Site

The 5 km radius boundary from the Plant boundary falls in two toposheets (53L/1 and 53L/5). The industrial area, nearest built up and open scrubland are clearly visible.

Photographs of Plant Site

3 PHYSICAL ENVIRONMENT

3.1 Physiography

The District has almost monotonous plain with no distinct features except some sand ridges, river valleys and shallow depressions. The district in the north is bounded by Bijnor, in the east by Moradabad and in the south by Badun district. Ghaziabad is located in the west side of the project site. Ganga is being its western boundary separated the district from Ghaziabad and Bulandshahar. Geologically the area falls in the Ganga basin.

Physiographically, the study area (5 Km Radius) falls under Gangetic plain with flat topography. The study area elevation ranges from 197 m to 217 m above MSL. The maximum elevation is observed in the north eastern and south eastern part of the study area. The plant is located in the relatively higher elevation however overall terrain is flat. The maximum and minimum elevation of the plant site is 212 m and 207 m respectively. Physiography of the study area is shown in **Figure 4.**

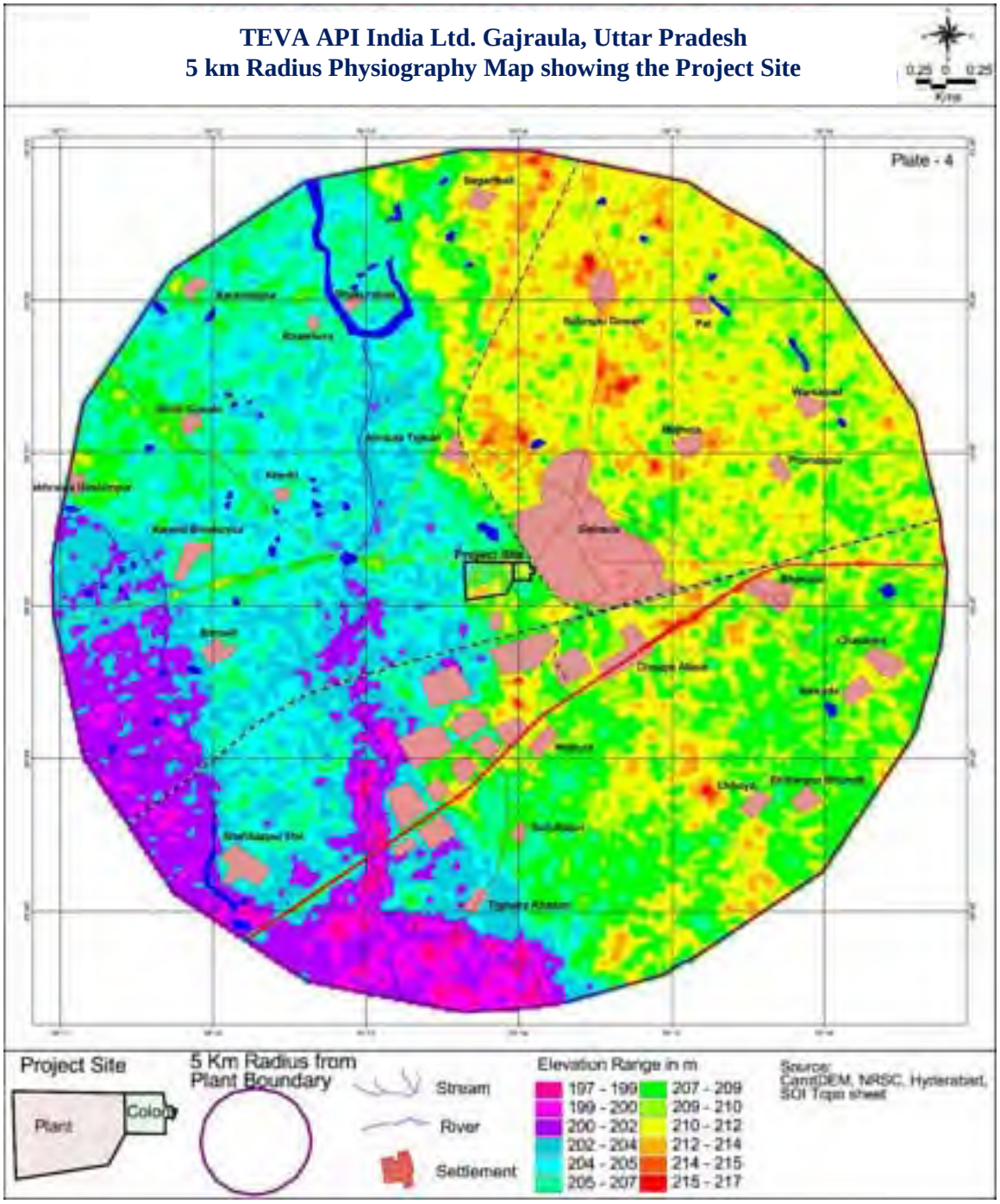


Figure 4: Physiography Map of 5 km Radius Area

The Physiography map exhibits the elevations within 5 km radius from plant boundary. Relatively higher elevation is observed in the north eastern and south eastern part of the study area. The plant located at the moderately elevated area.

3.2 Drainage and Waterbodies

The District falls in the Ganga basin. Ganga, Soht and Bagar Rivers constitute the drainage system of the area. Irrigation in the major part of the district is carried out by means of minor water sources, such as tube wells, ponds etc. There is no canal system prevailing in the area.

There is no major river system within 5 km radius study area. One nalla is occurring in the study area that is Chhoya nalla in the south west direction of project site. However, Bagar nadi flows at a distance of 2.9 km in the north western side of the plant. There are no major reservoirs / dam or irrigation tanks in the 5 km radius of study area. The surface water flows indicate that the study area is relatively plain and there is no definite flow pattern. However, the Bagar Nadi and Chhoya nalla flows towards south direction.

Ganga River is at a distance of 7.5 km flowing towards western side of the plant. The nadi and the Ganga River acts as ground water recharge of the shallow and deeper aquifer of the plant. The drainage map is presented as below,

	
Ganga River	**Bagar Nadi**

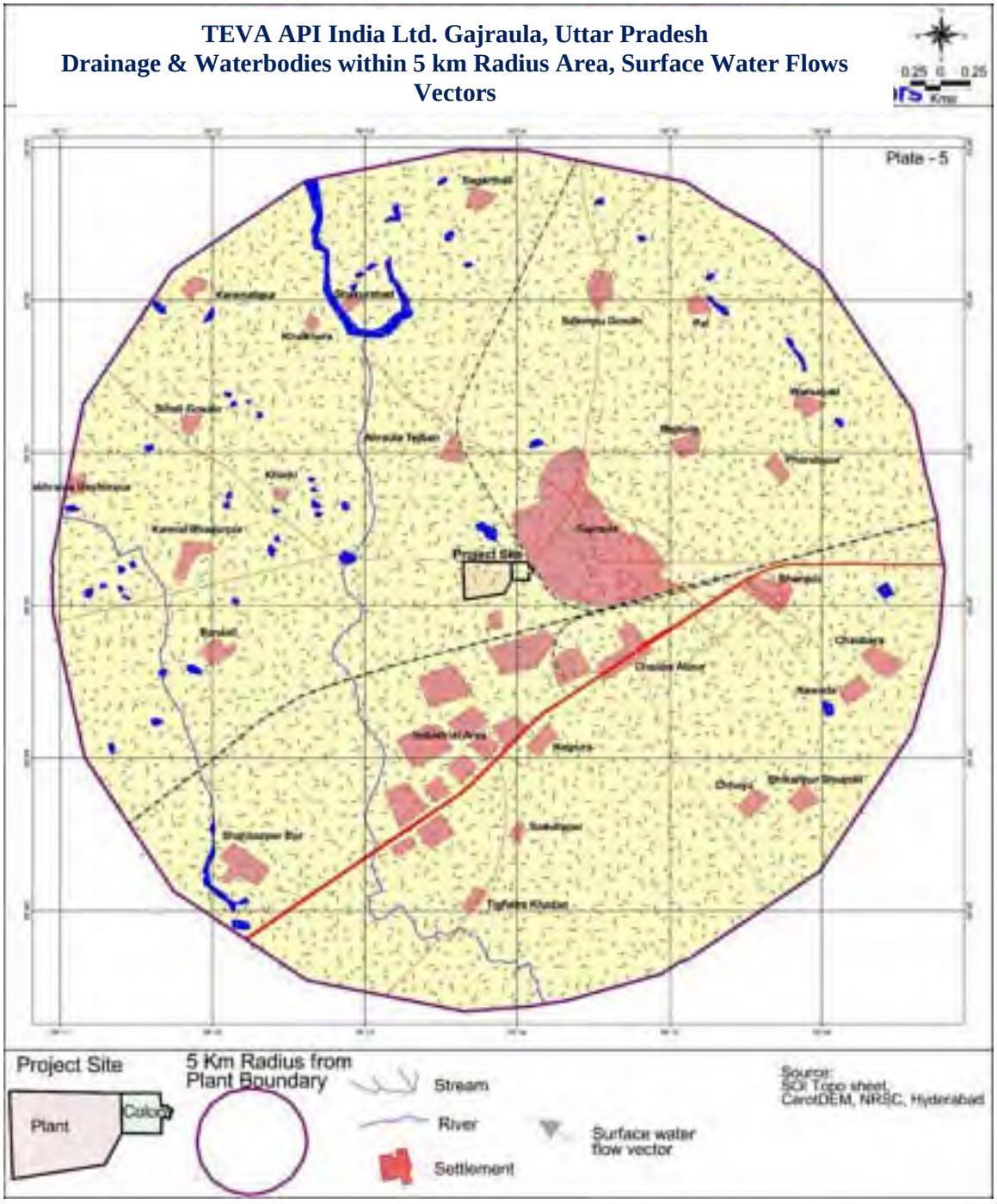


Figure 5: Map Showing Water Bodies

Bagar Nadi flows in the north western side of the plant is located at a distance of 2.9 Km. Ganga River, flows in the western side of the plant are located at distance of 7.5 km acts as ground water recharge.

3.3 Climate and Rainfall

The district falls in the subtropical climate type. The climate is characterised by a hot summer and biting cold, winter is associated with general dryness, except during the southwest monsoon where humidity is high. The rainy season extends from end of June to September or mid of October.

The 25 years rainfall data related to the plant area is downloaded from TRMM (Topographical Rainfall Measurement Mission).

The rainfall data for the period 1994 to 2018 has been collected from TRMM. The average annual rainfall for the period of 1994 to 2018 for the plant location (Gajraula) is 821.5 mm.

The monthly rainfall data collected for the plant location for the period of 1994 -2018, it is presented below.

Table 3: Monthly Rainfall Data

Year	Jan	Feb	Winter (Jan-Feb)	Mar	Apr	May	Summer (Mar-May)	Jun	Jul	Aug	Sep	South West Monsoon (Jun-Sep)	Oct	Nov	Dec	North East Monsoon (Oct-Dec)	Annual Total
1994	32.6	16.5	49.1	1.2	14.0	18.1	33.3	81.4	487.3	328.4	36.2	933.3	0.0	0.4	0.2	0.6	1016.3
1995	57.3	24.9	82.2	21.2	12.6	1.1	34.9	58.2	147.5	527.3	209.3	922.6	0.7	0.7	0.9	2.3	1042.0
1996	17.6	21.4	39.0	5.3	3.5	15.6	24.4	167.6	168.5	332.5	198.8	867.7	37.7	0.0	0.0	37.7	968.8
1997	10.4	2.9	13.3	8.7	35.2	41.0	84.9	157.7	104.0	245.9	105.5	613.1	55.6	18.4	89.2	111.2	822.5
1998	0.0	20.9	20.9	33.8	16.5	15.3	65.6	138.9	222.6	291.5	205.5	858.7	85.1	10.2	0.0	95.3	1040.5
1999	59.8	5.4	65.2	0.4	0.0	12.7	13.1	126.4	185.0	129.6	152.1	593.1	43.6	0.0	3.2	46.8	698.2
2000	24.1	42.2	66.3	16.6	3.5	22.2	42.3	108.4	270.3	266.1	59.5	704.3	1.3	5.5	0.0	6.8	819.7
2001	13.1	13.3	26.4	3.8	29.7	63.7	97.2	124.6	185.8	191.2	49.3	520.9	6.1	0.0	0.3	6.4	650.9
2002	23.4	24.9	48.3	8.6	3.8	1.9	14.3	47.4	48.5	142.5	244.2	482.6	2.4	0.0	10.0	12.4	557.6
2003	37.7	43.9	81.6	6.5	2.2	0.8	17.5	140.0	534.0	162.8	115.2	952.0	30.7	8.0	22.9	61.6	1112.7
2004	11.3	3.9	15.2	0.0	1.8	24.9	26.7	95.9	27.2	224.7	15.8	363.6	87.6	0.0	0.0	87.6	491.1
2005	5.2	53.0	58.2	20.7	3.5	2.0	32.2	61.1	234.7	136.8	204.5	637.1	8.0	0.0	0.0	8.0	735.5
2006	0.4	0.0	0.4	23.0	1.6	40.8	65.4	111.5	578.7	95.7	152.4	738.3	7.9	5.3	4.7	17.9	822.0
2007	1.8	44.9	46.3	55.9	15.2	54.7	123.8	129.6	136.9	246.8	72.3	585.8	2.9	1.6	1.5	6.0	761.9
2008	2.3	3.3	5.6	0.2	27.9	6.6	34.7	100.0	183.5	289.2	124.7	697.4	0.8	2.4	0.0	3.2	740.9
2009	4.8	5.5	9.9	6.5	5.6	61.2	73.3	47.7	145.5	101.3	227.3	581.8	41.6	14.3	1.9	57.8	722.8
2010	5.1	28.9	34.0	0.0	0.0	6.5	6.5	5.6	233.0	568.9	283.5	890.8	7.7	20.7	5.1	33.5	964.8
2011	6.1	45.6	51.7	5.1	10.0	24.0	39.1	138.0	186.2	549.4	189.8	863.4	2.2	2.0	0.9	5.1	959.3
2012	15.3	2.1	17.4	12.8	16.2	2.3	31.3	7.5	166.8	426.7	337.9	938.9	2.4	2.1	0.4	10.9	998.5
2013	54.7	64.3	99.0	10.2	12.5	3.6	26.5	134.5	364.1	225.0	85.2	828.8	60.0	1.0	0.4	67.4	1021.7
2014	14.6	49.1	63.7	28.7	9.3	40.7	78.7	88.5	133.0	163.0	83.2	427.7	41.1	0.0	12.4	53.5	623.6
2015	27.9	8.7	36.6	50.5	29.0	5.4	84.9	101.1	269.5	214.2	38.8	626.1	3.0	1.8	1.1	5.9	753.5
2016	0.5	3.4	3.7	28.5	4.2	27.2	59.9	45.3	398.3	159.4	83.7	686.7	2.6	0.0	0.0	2.6	752.9
2017	21.5	0.0	21.5	16.5	0.5	26.0	43.0	49.5	280.5	185.5	233.0	748.5	0.0	0.0	1.1	1.1	816.1
2018	1.0	0.0	1.0	0.0	0.0	0.0	0.0	9.5	234.0	223.0	166.0	637.5	5.0	0.0	0.0	5.0	643.5
Average	**16.4**	**21.1**	**37.5**	**14.8**	**10.3**	**21.0**	**46.1**	**88.3**	**227.9**	**244.9**	**146.9**	**708.0**	**21.4**	**3.8**	**4.7**	**29.9**	**821.5**

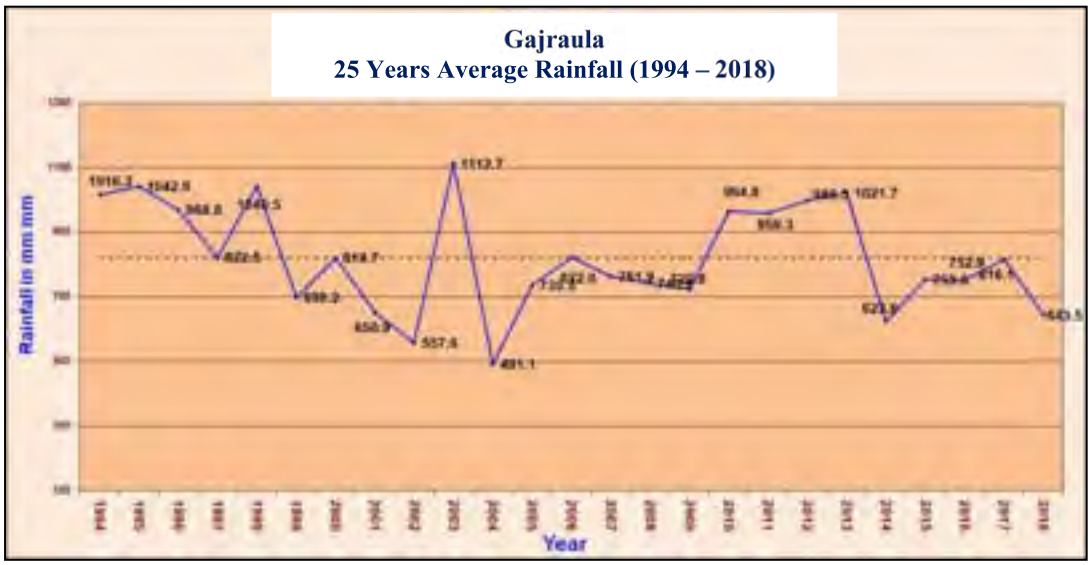


Figure 6: Average Rainfall of 25 Years

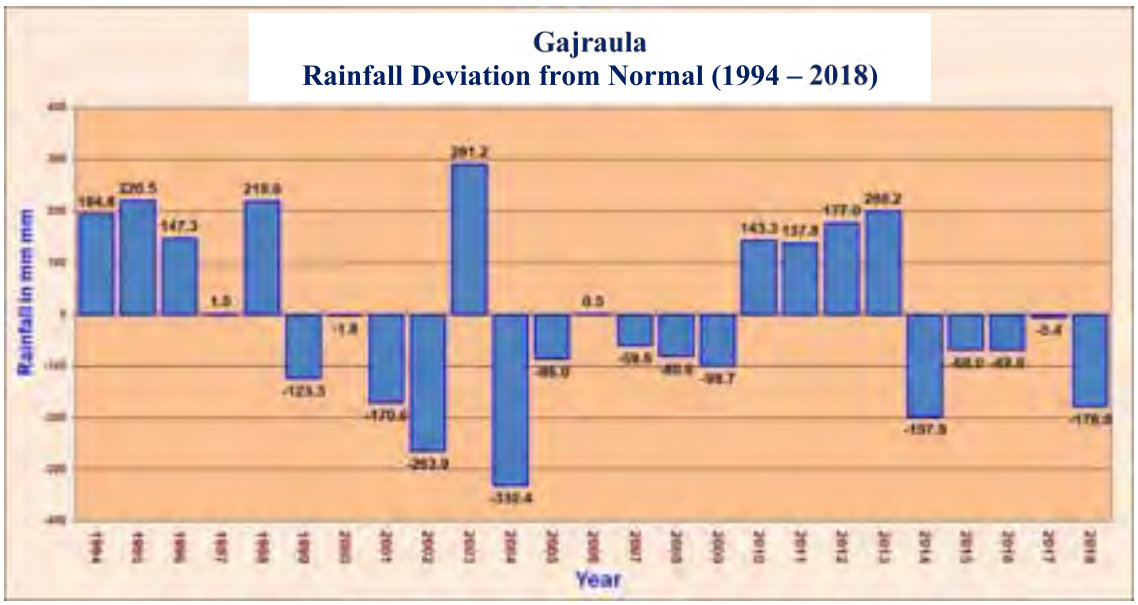


Figure 7: Rainfall Deviation of 25 Years

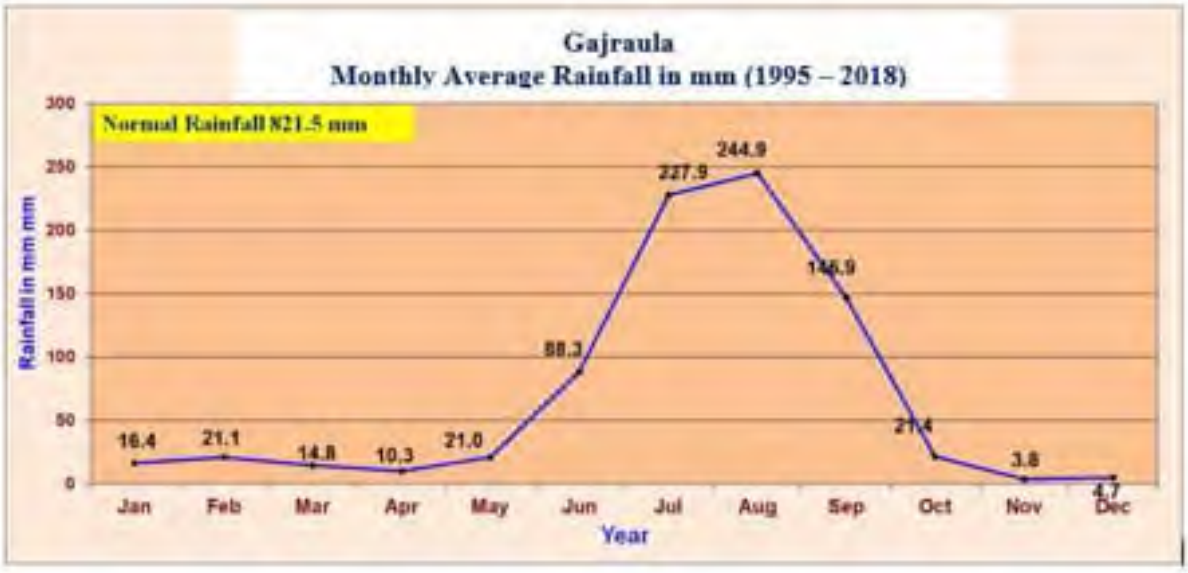


Figure 8: Monthly Average Rainfall of 25 Years

From the monthly average rainfall for the past 25 years, it is clear that the south west monsoon is effective in the study area. The season wise rainfall of the study area is as follows:

Period	Rainfall in mm	Percentage
Winter Period (January to February)	37.5	4.6
Summer Period (March – May)	46.1	5.6
South West Monsoon (June to September)	708.0	86.2
North East Monsoon (October to December)	29.9	3.6
Annual Average Rainfall	**821.5**	**100**

3.4 Geomorphology and Structures

The landforms / geomorphic units and structures such as fractures, fissures and faults have been interpreted from the recent satellite images. All the landform / geomorphic units and structures occurring in the study area are mapped.

The district has almost monotonous plain with no distinct features except some sand ridges, river valleys and shallow depressions. Geomorphologically, the district can be divided into two broad geomorphologic unit's namely younger and older alluvium.

The newer flood plain consists of sand, silt and silty sand with minor clays and forms the flood plain of river. It occupies the entire upland or inters fluvial area occurring between the major drainage. The soils are silty, clayey and sandy in varying proportions. The geomorphology and structures of the area play a vital role in identifying the ground water potential zones. The following geomorphic units have been interpreted.

1. Alluvial Plain Older Deep (AOD)
2. Alluvial Plain Younger Deep (AYD)

The above Geomorphic units are granular sediments, which has high ground water potential. The plant is located in Alluvial Plain Older deep. The occurrence of ground water in the region is high and the drawdown is very less. The Geomorphology and structure maps are presented in below **Figure 9.**

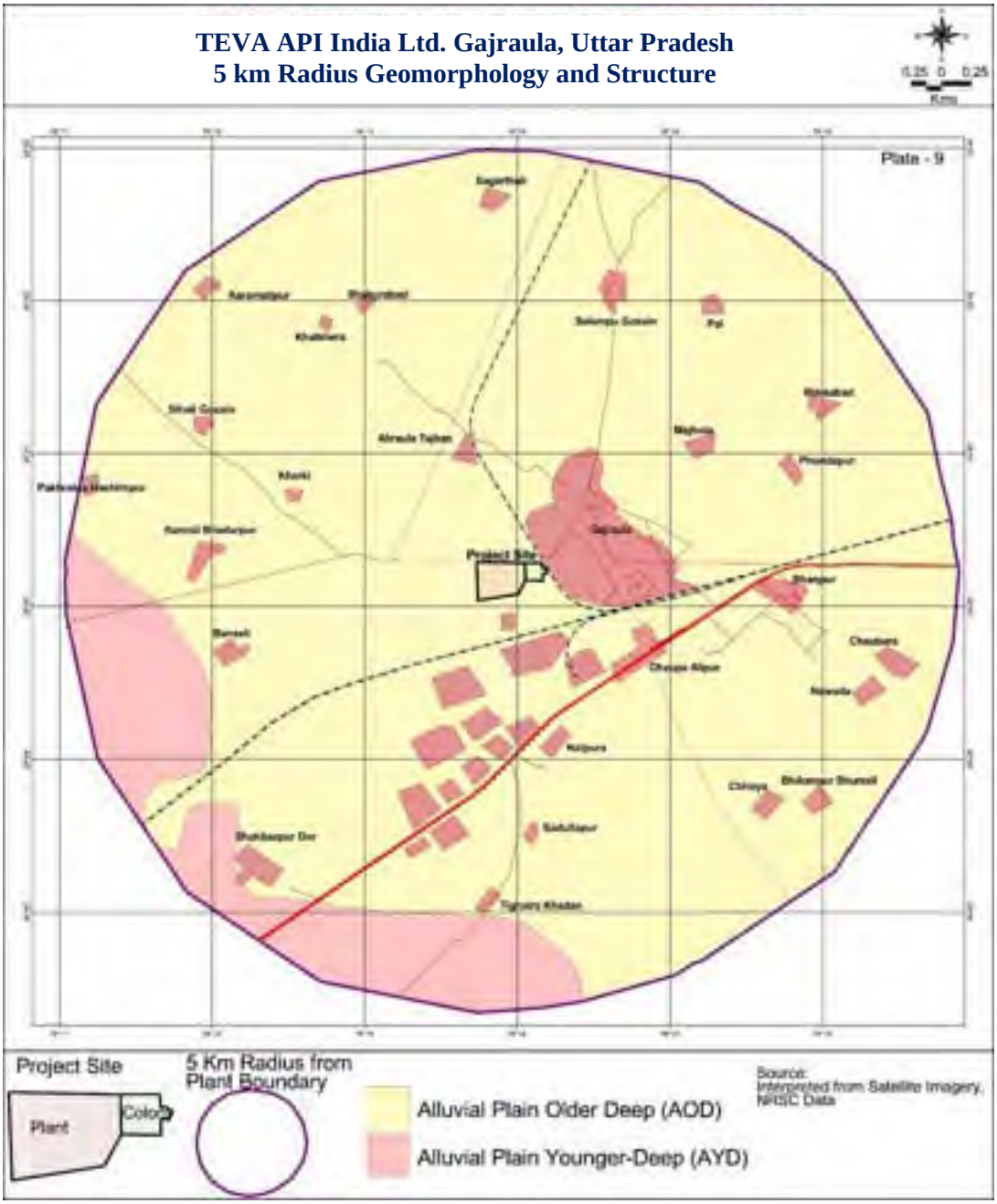


Figure 9: Map Showing Geomorphic Units

3.5 Soil Classification

The soil of the district is rich loam; the soil of the district can be classified into two major groups based on its texture & composition characteristics.

1. Khader and low land soil
2. Upland or Bangar soil.

The plant is located in Upland or Bangar soil. These soils occur in upland tract of older alluvium. The soil profile is generally mature, showing good development and alleviation of clay. It can be sub grouped depending upon its topography, occurrence and textural nature into sandy soil, clayey soil and loamy soil.

3.6 Land use/Land cover Pattern

Land use/Land cover classes in the study area have been broadly classified as Built up, Agricultural land and Barren land. This classification has been adopted considering the geomorphology of the area and classification adopted by NRSC IRS P-6 LISS IV MX has been procured from the NRSC.

The land use in the village reflects the socio-economic conditions of the people in addition to the natural environmental factors. The land use is also one of the prime parameters to be considered for the ground water estimation. Mostly, the land use/land covers of the study area are cropland around 82%. The second major land use is built-up land of urban and rural nature. The result has been showing significantly increase in cultivation land. This has been possible through irrigation from tubewell. Some of the area is temporary fallow land. In most part of the study area, irrigation is based on deeper aquifer. The satellite imagery and land use map are presented in **Figure – 10 and Figure – 11** the following land use has been depicted from the satellite imagery.

Table 4: Land use/ Land cover Statistics of the Study Area

Sr. No.	Land use	Percentage
1	Built-Up Land - Urban and Rural	11
2	Agricultural – Crop Land	82
3	Agricultural – Plantation	4
4	Agricultural – Fallow Land	2
5	Barren Land	1
	Total	**100**

	
Plantation	**Barren Land**
	
Fallow Land	**Built up Land**
	
Crop Land	**Crop Land**

Photographs of Land use Pattern

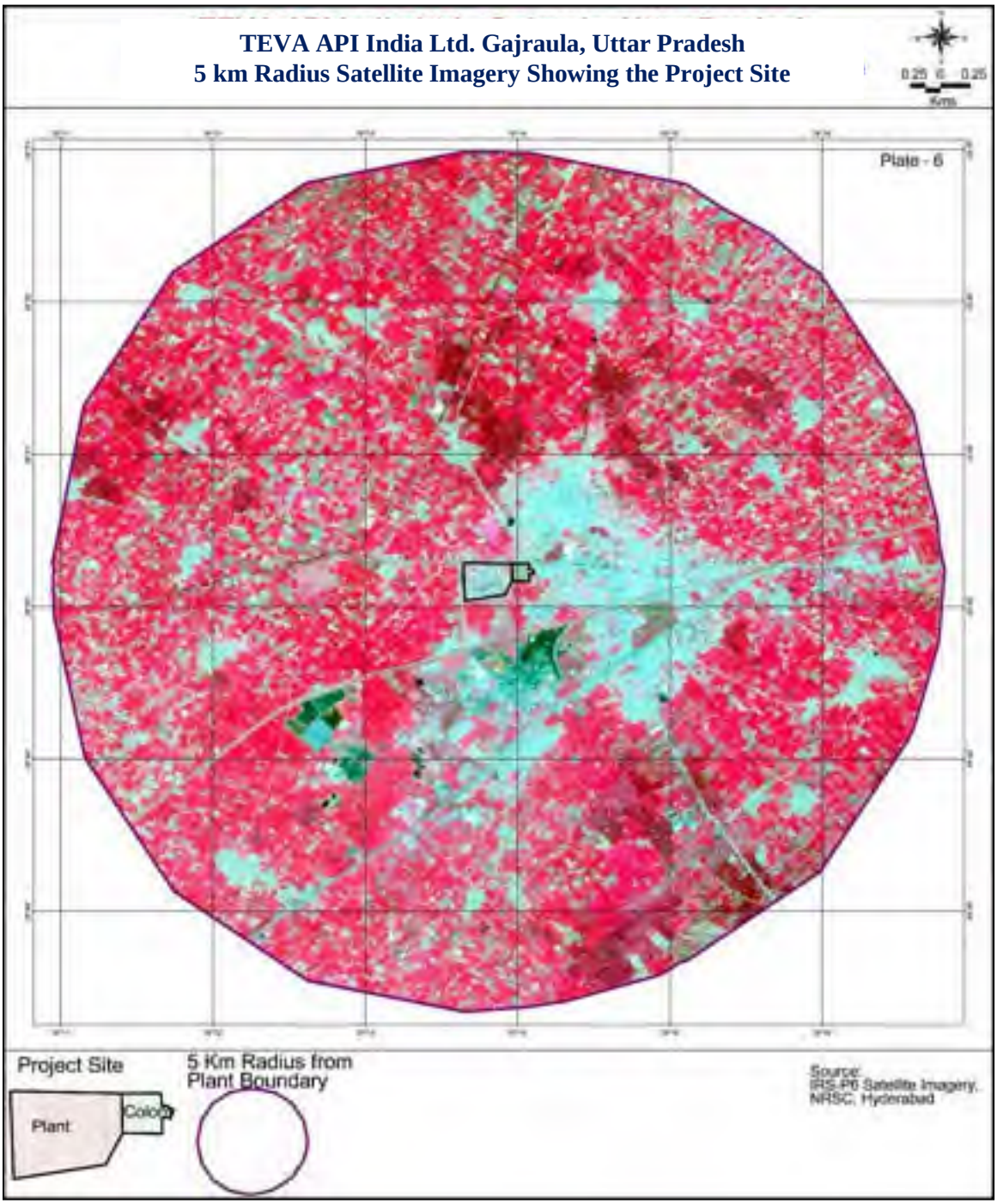


Figure 10: Satellite Imagery Map (5 km Radius Area)

IRS P-6 LISS IV MX Satellite imagery clearly exhibits the land use pattern of the study area. The cropland with crop is noticed in the entire study area. The False colour composite (FCC) red colour indicated the crop land and the dark red colour indicates plantation.

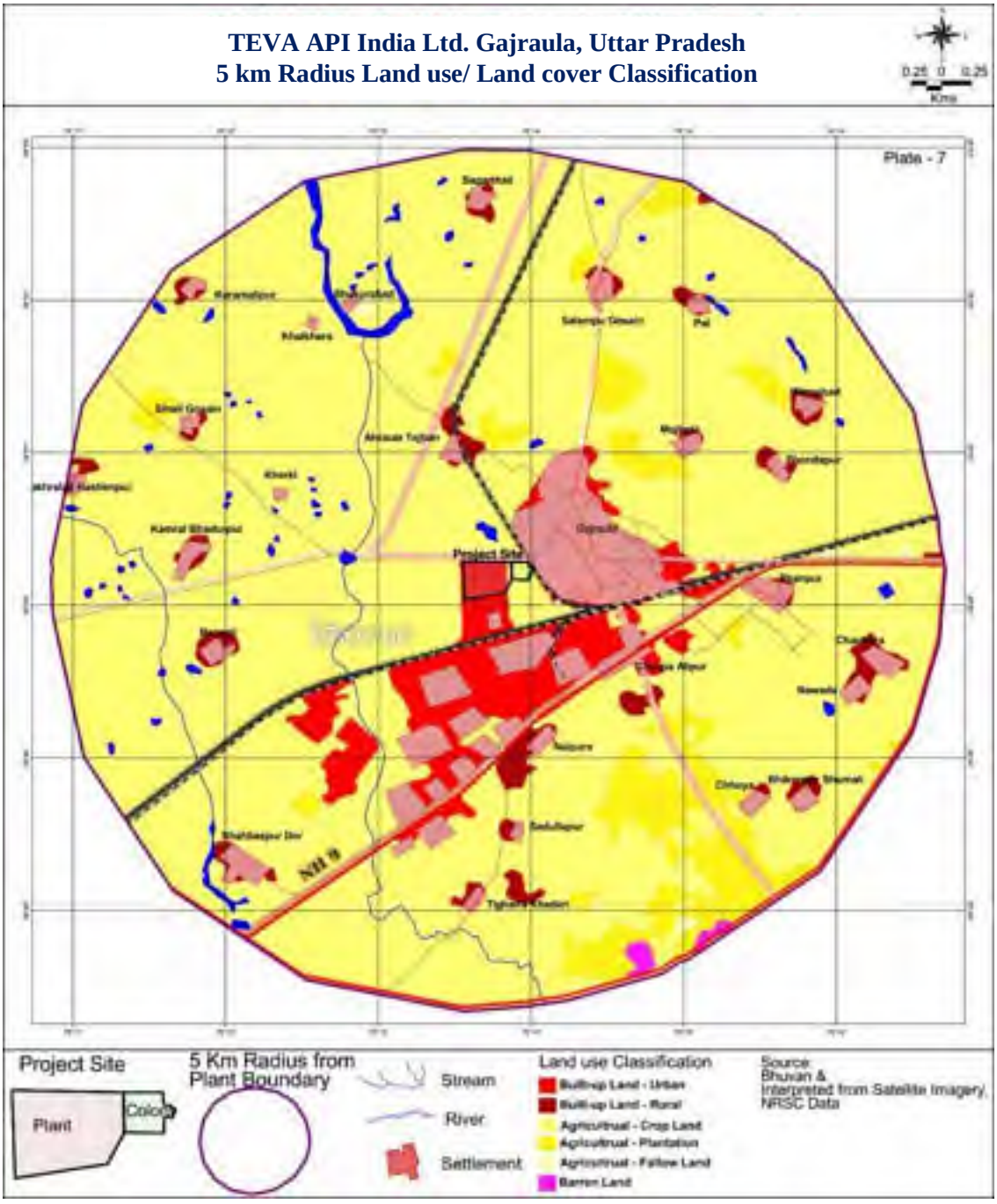


Figure 11: Land use/Land cover Map (5 km Radius Area)

This region is being close to the Himalaya has appreciable water resources to be utilized for its agricultural needs. Based on field studies and current land use/ land cover it is assured, availability of ground water is most dependable source for irrigation but over-exploitation affects adversely its regime. Among the land use type, agricultural land use is major type therefore irrigation using ground water has greatest influence on groundwater significantly increasing recharge and changing water

quality as excess irrigation water infiltrates into shallow aquifers. As need of water conservation practices has been utilised and avoid the degradation of water quality this methods like drip irrigation, furrow irrigation, sprinkling and ditches irrigation CGWB has encouraged and provided in over exploitation area.

Land Use of Plant area –

The Land use of the Plant area is as follows:

Sr. No.	Facility
1	Roof area of the buildings and sheds
2	Road, asphalt and parking area
3	Open land / Vacant Area
4	Green belt area

Figure 12: Layout Plan of Plant

4 GROUND WATER SITUATION IN AND AROUND PROJECT AREA

4.1 Regional Geology

The District form a part of the Gangetic plain which is the originated accordingly to geological chronology and it reveals an ordinary Gangetic alluvium. It is being a part of the alluvial plain and the same geological sequence as the plain itself. The district is also noted for the deposits of red and brick earth. These areas are intersected by Rivers, Streams & Ravines and contain some shallow ponds & natural reservoirs, which overflow during the rainy season however, dry in the summer season.

Table 5: Stratigraphy of Project Area

Age	**Stratigraphic unit**			**Morphological features**
Late Holocene to Present	Ganga Plain	Flood Plain (Khadar)	Active Flood Plain	Oscillating / Migratory active channel defined by banks with point bar, channel bar sand and overbank silt.
			Old Flood Plain	Characterized by levees, meander scrolls, ox-bow lakes and abandoned channel.

4.1.1 Geology of the Study Area

The study area including the plant comprises of Grey micaceous fine-medium grained Sand & Grey Slit-Clay (Newer Alluvium) and Silt-Clay with Kankar with micaceous sand (Older Alluvium). The plant is located in Silt-Clay with Kankar with micaceous sand (Older Alluvium)

The geological formation of the study area as per Geological Survey of India (GSI) is as follows:

Geological Notation as per GSI	Geological Formation
Q2nar1	Grey micaceous fine-medium grained sand & grey slit – clay (Newer Alluvium)
Q1oahz	Silt-Clay with Kankar with micaceous sand (Older Alluvium)

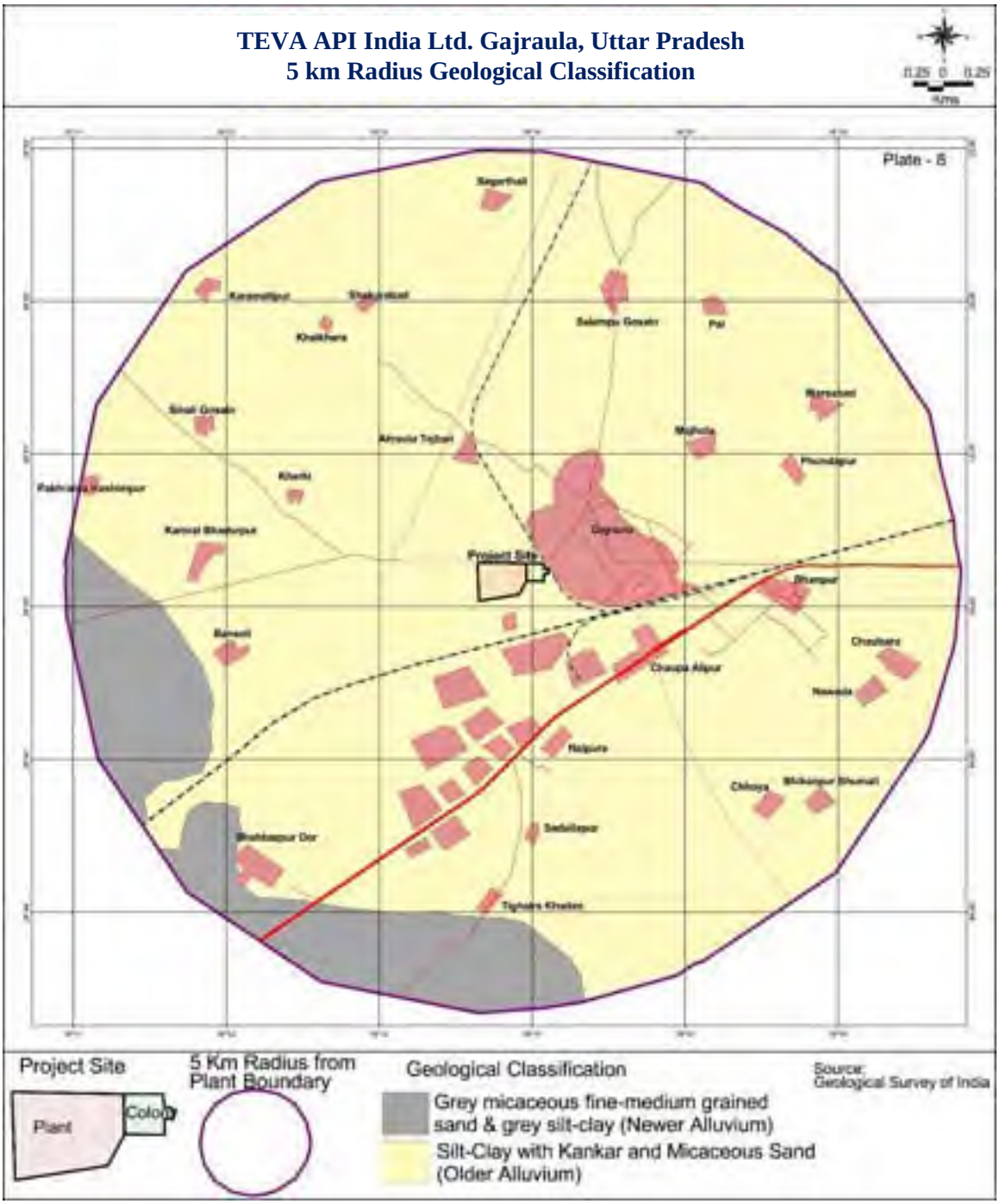


Figure 13: Geological Classification Map

The geology map of the district have been obtained from Geological Survey India (GSI), that study area are depicts here. It is mostly composed of Silt-Clay with Kankar with micaceous sand (Older Alluvium). The Plant is located in the above geological formation. The ground water availability in the geological formation is good.

4.2 Hydrogeology

4.1.2 Aquifer Properties and Characteristics

Ground water occurs in the pore spaces of the unconsolidated alluvial sediments in the zone of saturation. The near surface sediments are dominantly sandy clays and clays, which grade into sediments having varied proportions of sand and clays.

The ground water occurs in the granular sediments within the zone of saturation under water table conditions in the shallow aquifer and in deeper aquifer below 150 m depth, occurs under semi confined to confined conditions.

Single aquifer, it is extending down to 180 m bgl. The exploratory drilling done by CGWB in the district down to a depth of 450 m bgl indicate that the first aquifer group may extend down to 215 m bgl, below 215 m a thick clay bed is identify. The change in the sediment facies occur in depth of range is 388-400 m bgl and sediments may belong to one system. The sediments below 400 m may be belonging to different depositional environment. The aquifer system behaves as unconfined to semi confined depending upon the presence of clay beds. The aquifer materials are fine to medium grained & get coarser with depth. Gravel is also encountered at some places.

The study area forms part of Sedimentary formation of older alluvium. Granules of the sediments control the occurrence and movement of ground water in this area.

Hydrogeological, the system at the district area is separated or divided into a number of aquifers by the intercalation clays. The water table of the state tubewells varies from 5 to 12 m bgl. General depth of tubewell ranges from 50 to 110 m bgl. The average yield varies from 1445 to 3000 lpm for drawdown ranging from 1.85 to 8.70 m within the entire district. The specific capacity of the tubewell varies from 183 to 1129 lit/min.

In general, for unconsolidated porous media, the hydraulic conductivity varies with particle size, in that coarse sand and medium sands are giving more values around 45 m/day and 12 m/day.

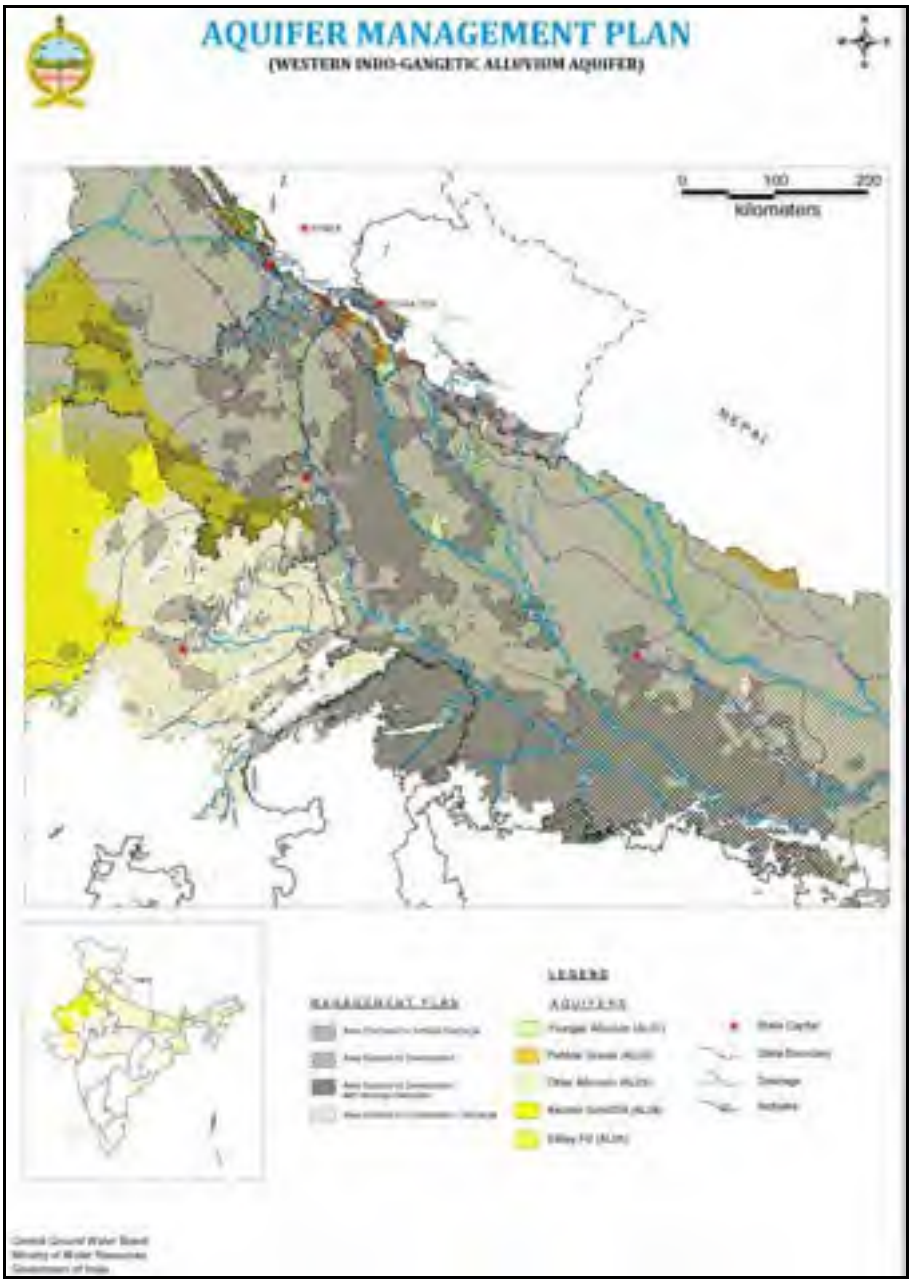


Figure 14: Regional Aquifer Map

The more ground water resources are occurring in the alluvium aquifers in which younger and older alluvium has been divided. The younger alluvium is occurred along the flood plains of Ganga. The flood plain also divided into two geomorphic units like newer and older flood plain.

The newer flood plain occurs along the river channel and its adjacent area. It consists of sand, silt and silty sand with minor clay. Due to narrow zone, flood gets regularly during rainy season.

The older flood plain is spread over few kilometres in eastern side as compare to western side. The sediments are fine grained sand and silt with thin clay horizon.

4.1.3 Ground water prospects of the Study Area

Ground water prospects of the study area have been assessed. Based on the NRSA ground water prospects mapping in 5 km radius, the details have been collected and presented in **Figure 14**. The 5 Km radius ground water prospects depict the following:

Depth range	Yield range
> 80 m Deep Well	> 800 LPM Yield
30 to 80 m Deep Well	> 800 LPM Yield

Source: Ground water prospects map, NRSA, Hyderabad.

The plant falls in > 80 m Deep Well – more than 800 LPM Yield.

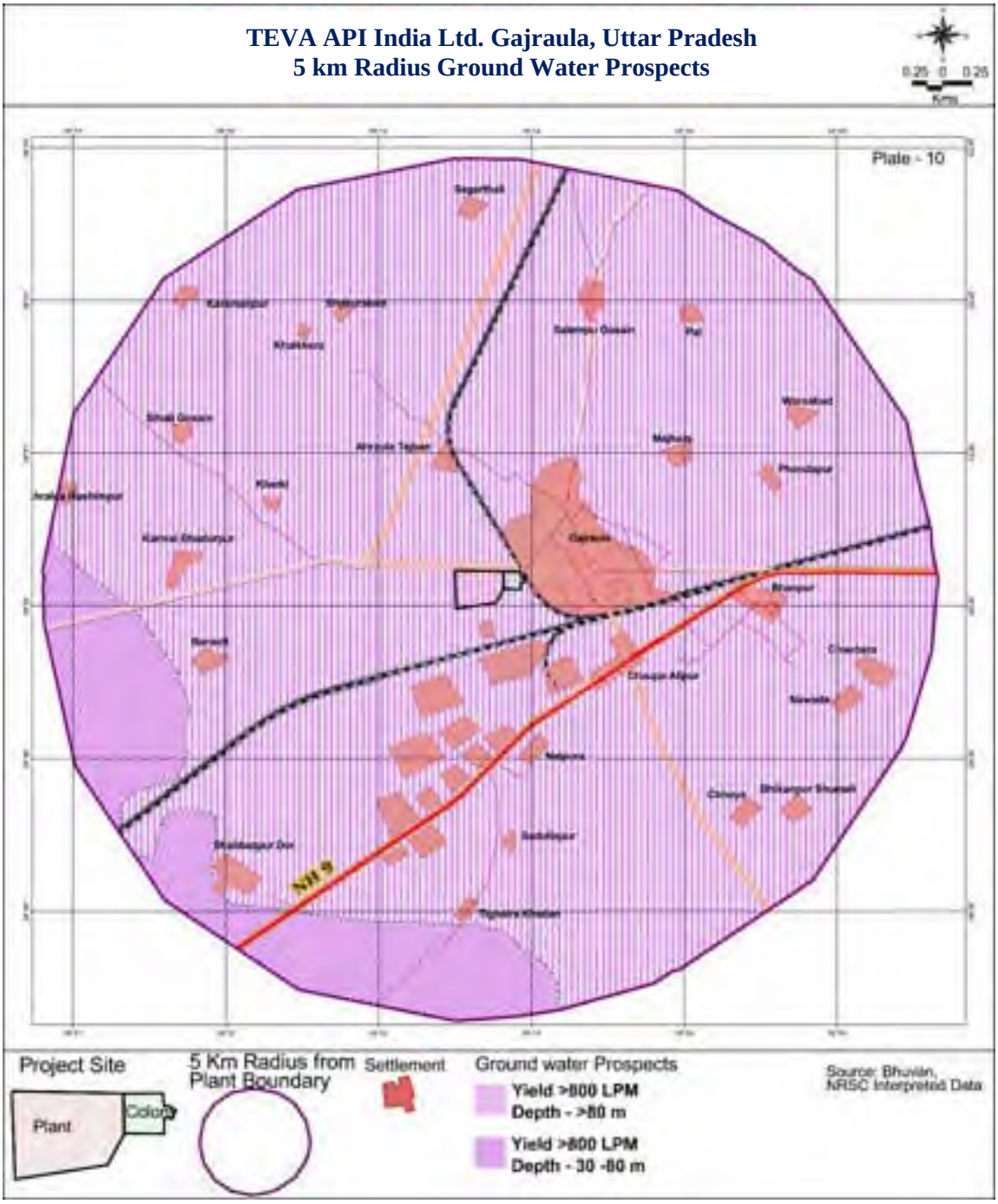


Figure 15: Ground Water Prospects Map

The ground water prospects map generated by National Remote Sensing Agency, Hyderabad indicates that plant site falls in > 80 m tube well depth range and the expected yield is around more than 800 lpm.

4.1.4 Water level of the Study Area

Ground water level data from six observation wells which are spreading across 12 km radius of the district for a period of 10 years have been collected from Central Ground Water Board (CGWB). The average pre- and post-monsoon ground water level have been derived from the collected data. Based on the average ground water level, ground water level zones and ground water table (Ground water table = Mean Sea Level – Ground water level below ground surface) have been developed for pre- and post-monsoon period. From the ground water level zone map the following points are observed.

Pre Monsoon:

The average pre-monsoon ground water level zones depict that the deepest of ground water level zone of 13-15 m falls in the eastern side of the study area. The shallowest ground water level zone of 5-7 m occupies in the western part of the study area. The plant site falls in the range of 11-13 m. The comparatively shallow average pre monsoon ground water level in the western side indicates the recharge from the Ganga river. Pre-monsoon ground water level zone is presented in **Figure -16**.

The ground water table generated using the average pre monsoon data indicates that the ground water flow is towards east, which indicates that there is surface and ground water interaction. In the Study area the ground water table is gentle. The Ganga River contributing to the ground water recharge and the flow pattern is towards east. Pre monsoon ground water level zone is presented in **Figure -16.**

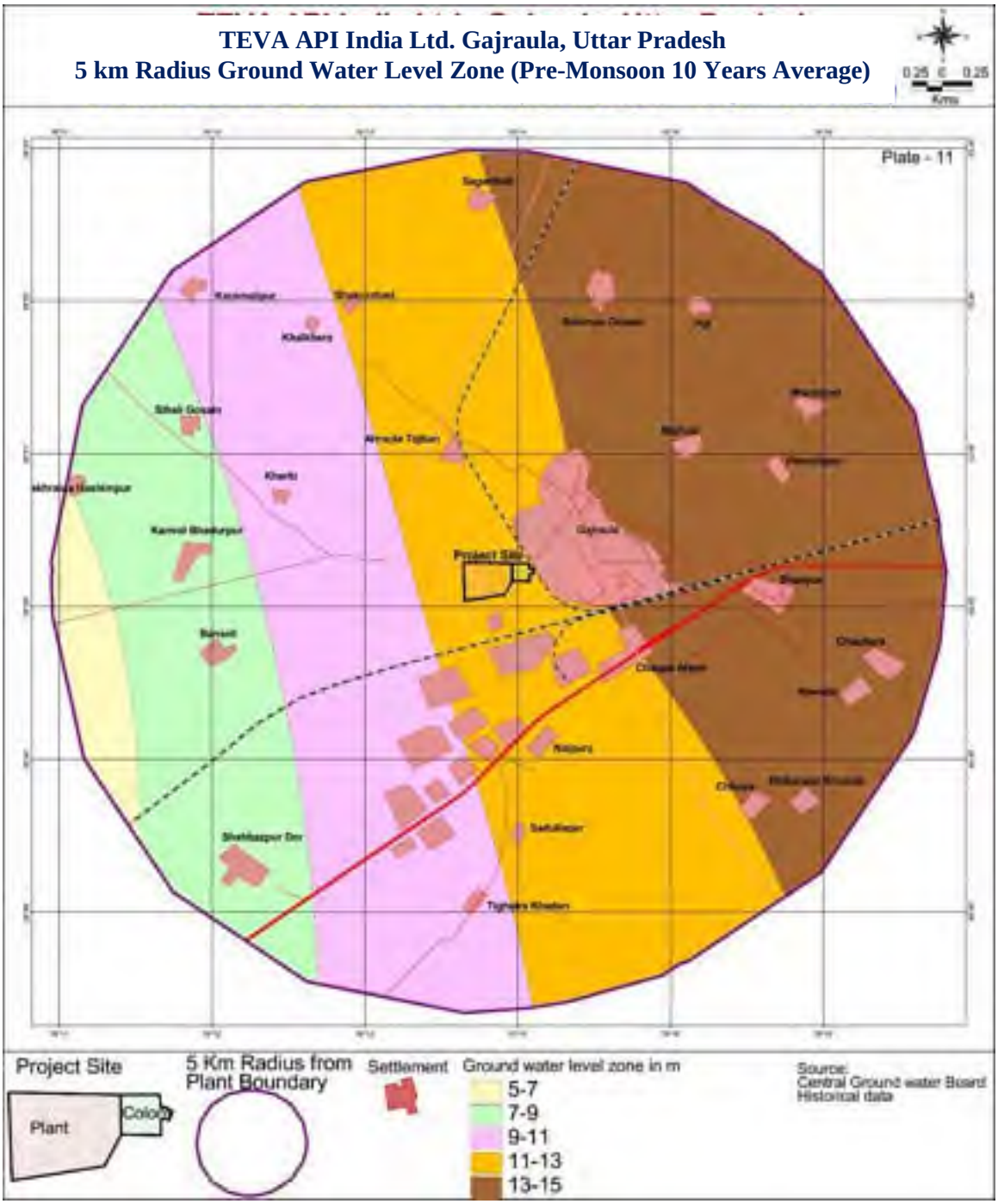


Figure 16: Ground Water Level Zone (Pre-Monsoon)

The average pre-monsoon ground water level zones depicts that the deepest of ground water level zone of 13-15 m falls in the eastern side of the study area. The shallowest ground water level zone of 5-7 m occupies in the western part of the study area. The plant site falls in the range of 11-13 m.

Post Monsoon:

The average post-monsoon ground water level zones depict that the deepest of ground water level zone of 13-15 m falls in the eastern side of the study area. The shallowest ground water level zone of 5-7 m occupies in the western part of the study area. Majority of the plant falls in 9-11 m. During the post monsoon period there is considerable rise in the ground water level has increased the 5-7 m zone increased. Post-monsoon ground water level zone is presented in **Figure 17.**

The ground water table generated using the average post monsoon data indicates that the ground water flow is towards west south west from the central part of the study area and part of ground water flows towards east which indicates that there is ground water divide in the study area. During the post monsoon period, the ground water is contributing to the surface water (Ganga River). Post monsoon ground water level zone map is presented in **Figure 17.**

From the above legacy data analysis, it is clear that ground water in the plant varies between 9-13 m. The pre- and post-monsoon ground water level fluctuation indicates that the plant site is suitable for rainwater harvesting.

Field study was performed within 5 km radius of the plant boundary. During the field study well inventory has been undertaken. The details includes such as location of the tube well, depth, static water level, aquifer thickness (slot position – sedimentary area) horsepower of the pump set, the tentative yield based on the public enquiry has been recorded.

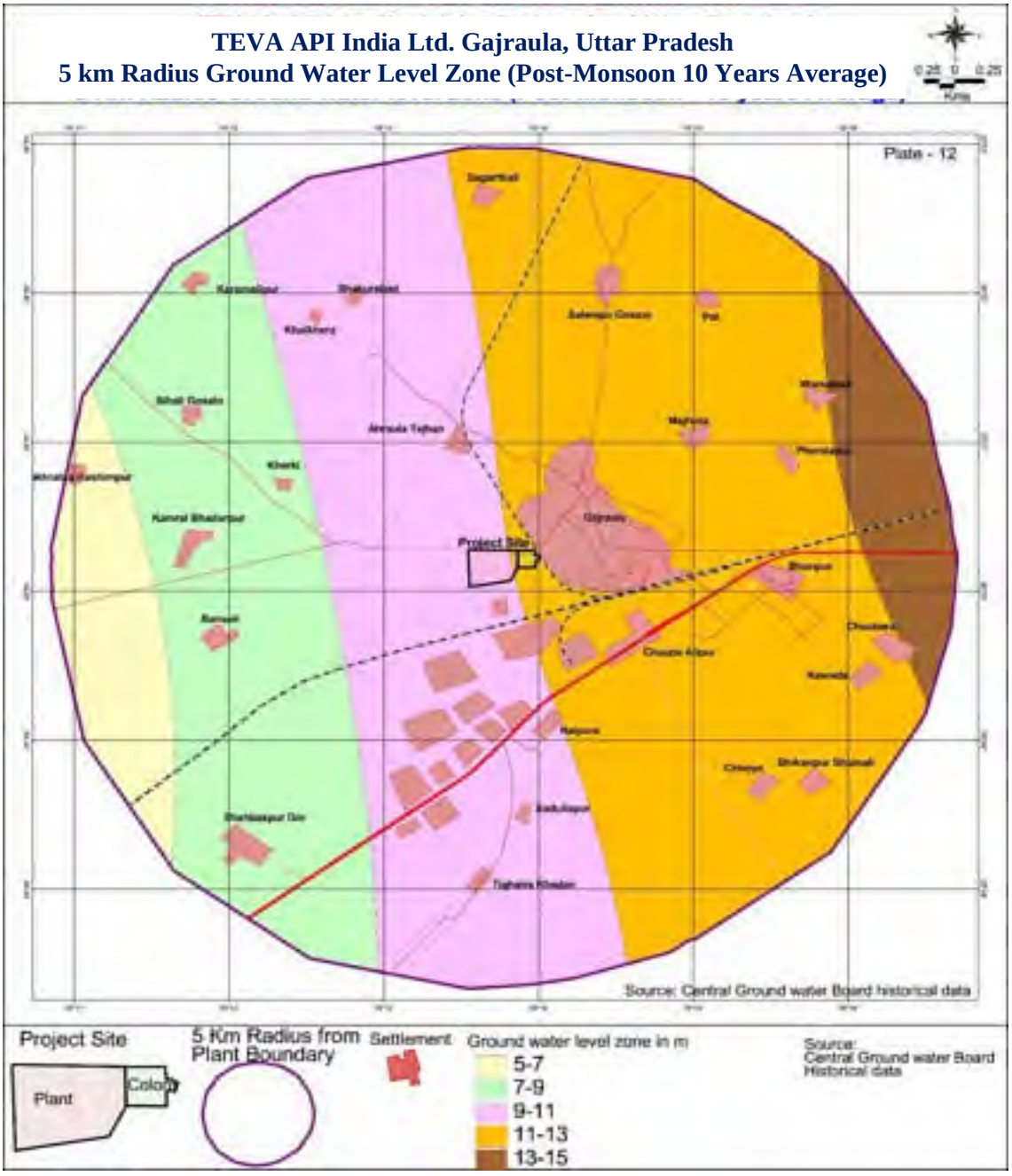


Figure 17: Ground Water Level Zone (Post-Monsoon)

The average post-monsoon ground water level zones depict that the deepest of ground water level zone of 13-15 m falls in the eastern side of the study area. The shallowest ground water level zone of 5-7 m occupies in the western part of the study area. Major part of the plant site falls in the range of 9-11 m. During the post monsoon period there is a considerable rise in the ground water level up to 5-7 m.

Regional Water Levels:

The CGWB has recorded water levels of the entire district and depicted in the map. The pre-monsoon water level is in ranging between 10 to 12 m bgl are observed in the NE area and central region of the district. Less than 5 m bgl water level occurred in the South side of the district because Ganga River is very closed to the West side and South side of the district. Along the Western side water level is occurred in the range of 5 to 10 m bgl.

The water levels scenario of the entire district during post-monsoon has almost same as per pre-monsoon.

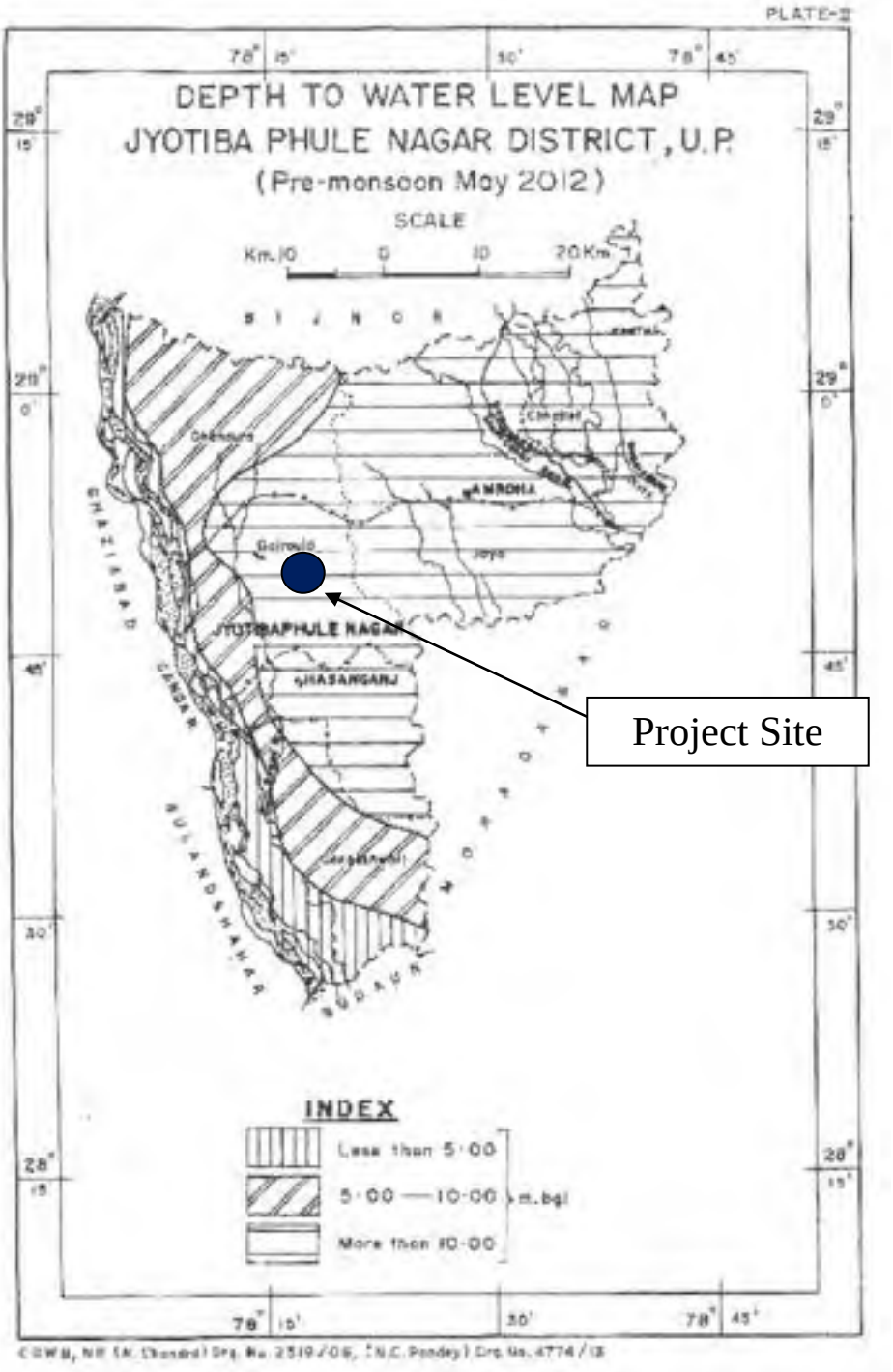


Figure 18: Ground Water Level –District (Pre-Monsoon)

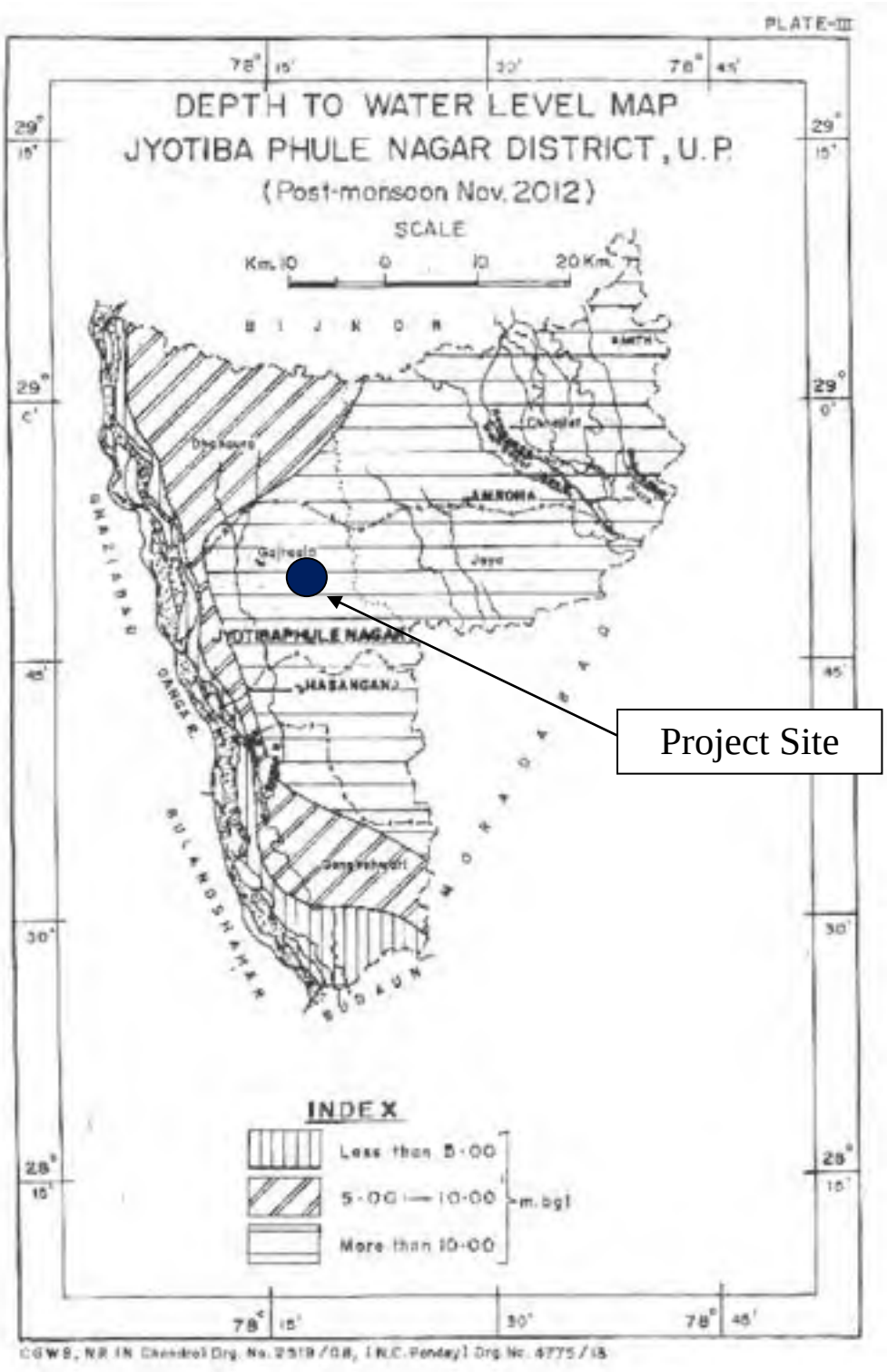


Figure 19: Ground Water Level –District (Post-Monsoon)

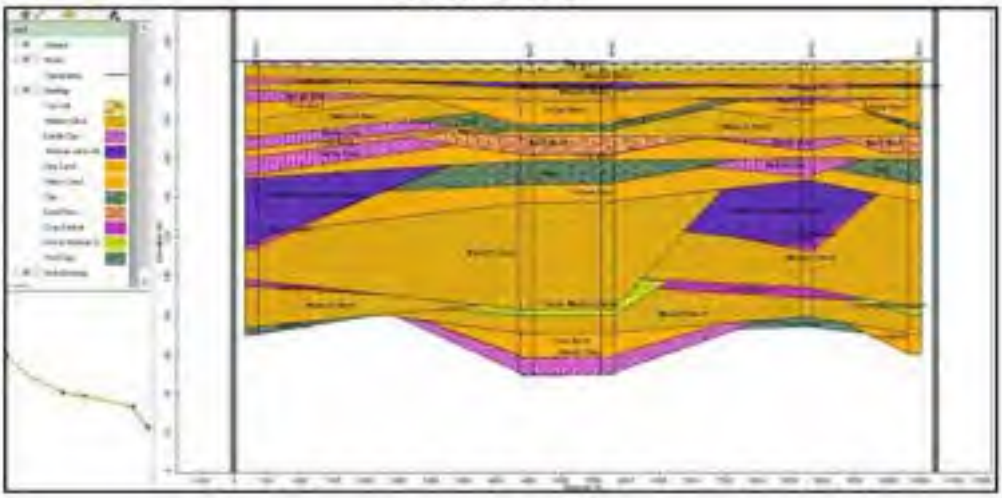
Table 6: Ground Water Levels of Observed Location

No	Location	Longitude	Latitude	Depth in m	Static water level in m	(Potential aquifer Depth in m)	Yield in liters /minutes
BW1	Sundpura Kalan	78° 11' 21.66"	28° 51' 30.456"	136	9.2	30-39	250
BW2	West of Plant site	78° 13' 25.176"	28° 50' 10.5"	150	12.1	71-126	350
BW3	Shakurabad	78° 13' 21.842"	28° 52' 4.184"	115	11.3	90-112	860
BW4	East of Plant site	78° 14' 9.935"	28° 50' 3.437"	150	11.4	129-138	830
BW5	Salapur	78° 16' 53.256"	28° 50' 13.916"	130	10.5	98-112	810
BW6	Nawada	78° 15' 59.321"	28° 49' 39.385"	135	11.6	96-115	570
BW7	Bhikanpur	78° 16' 31.955"	28° 48' 54.544"	150	11.4	129-140	520
BW8	Basi Sainsoli	78° 14' 47.249"	28° 47' 14.161"	130	6.7	115-130	510
BW9	Khangawali	78° 12' 16.164"	28° 47' 16.915"	125	6.8	115-120	460

The above tube well details indicate that the potential aquifer is found at deeper depth. Based on the drilling results (based on the tube well owner's enquiry) the cross section along profile AA' covering 5 tube wells and profile along BB' covering one tube well is presented below:

Photograph showing the ground water sampling during site visit

Profile AA'



Profile BB'

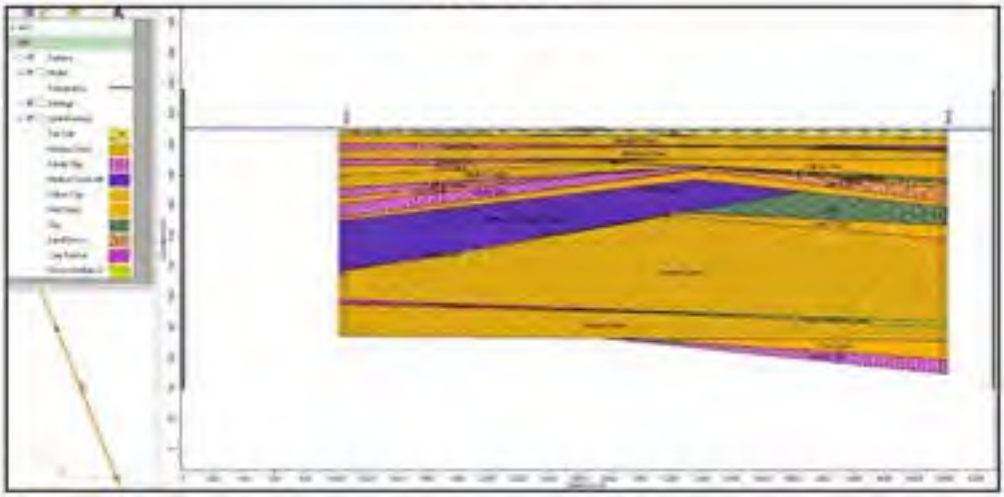


Figure 20: Profile AA and BB

Figure 21: Google Map Showing Well location within 5 km Study Area

4.1.5 Ground Water Flow and Aquifer Interaction

The pre monsoon ground water flow is towards east, which indicates that there is surface and ground water interaction. In the study area, the ground water table is gentle. The Ganga River contributing to ground water recharge and the flow pattern is towards east.

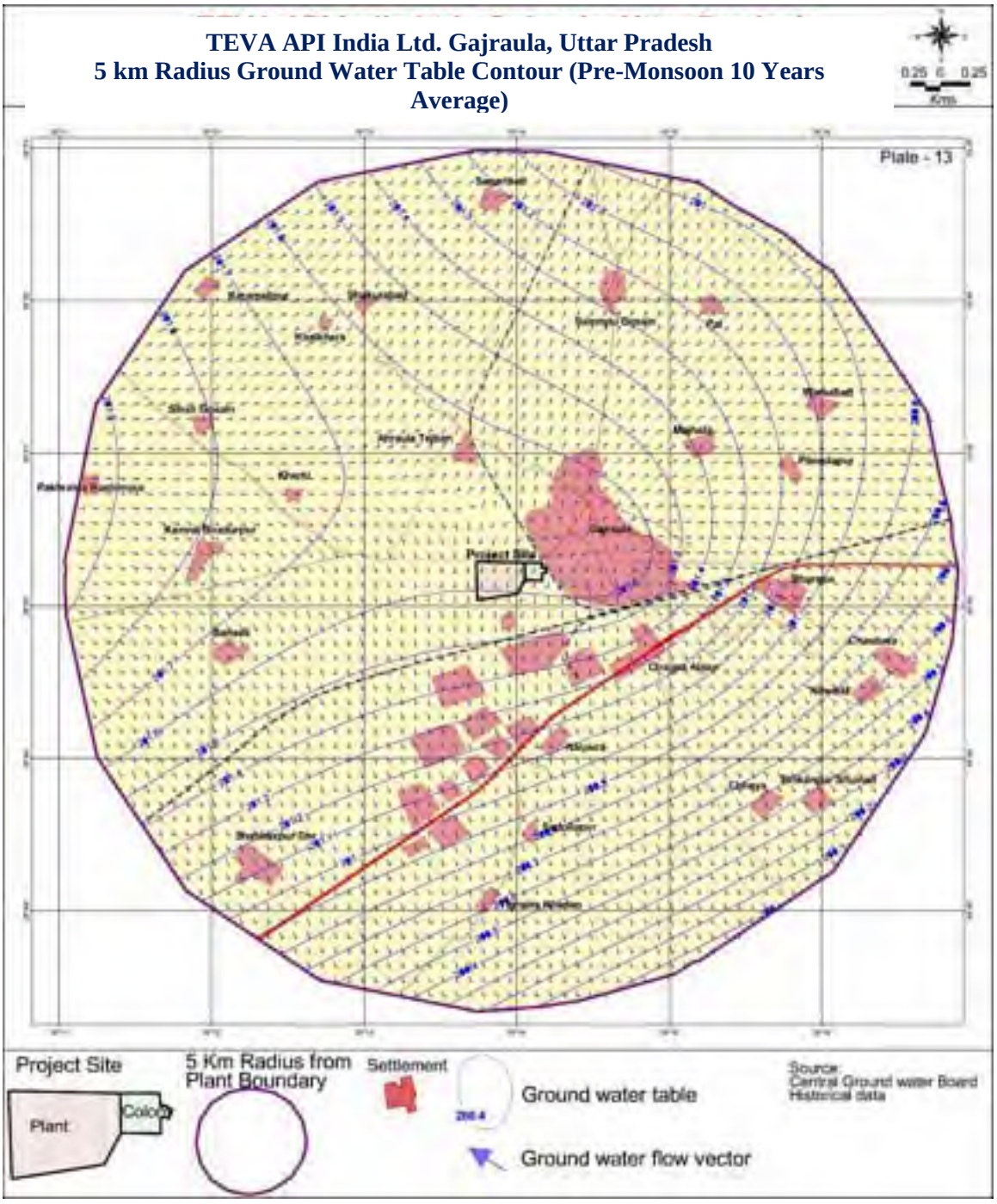


Figure 22: Flow Direction of Ground Water (Pre –Monsoon – 10 years Average)

The ground water flow is towards west south west from the central part of the study area and part of ground water flows towards east, which indicates that there is ground water divide in the study area. During the post monsoon period, the ground water is contributing to the surface water (Ganga River).

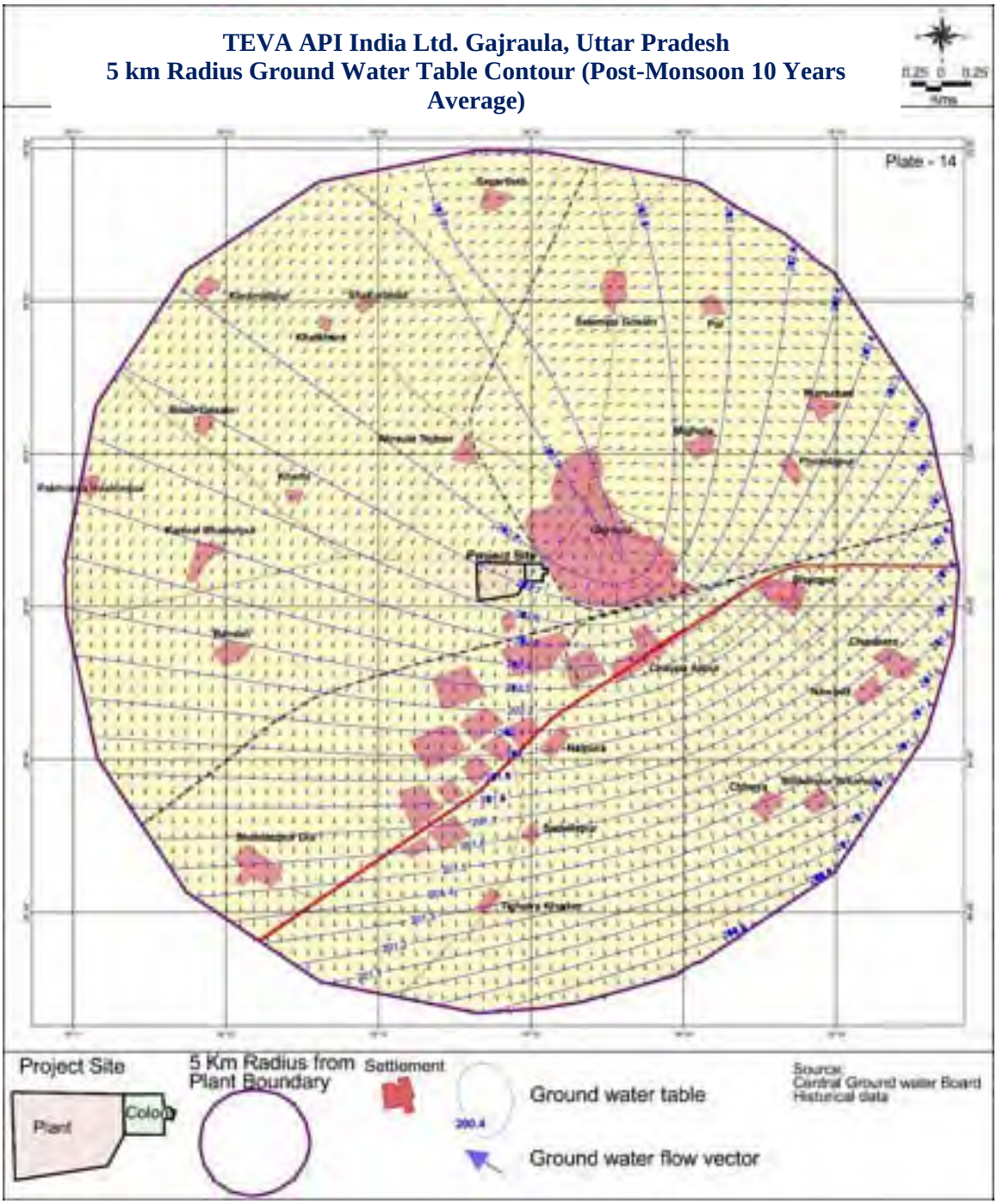


Figure 23: Flow Direction of Ground Water (Post –Monsoon – 10 years Average)

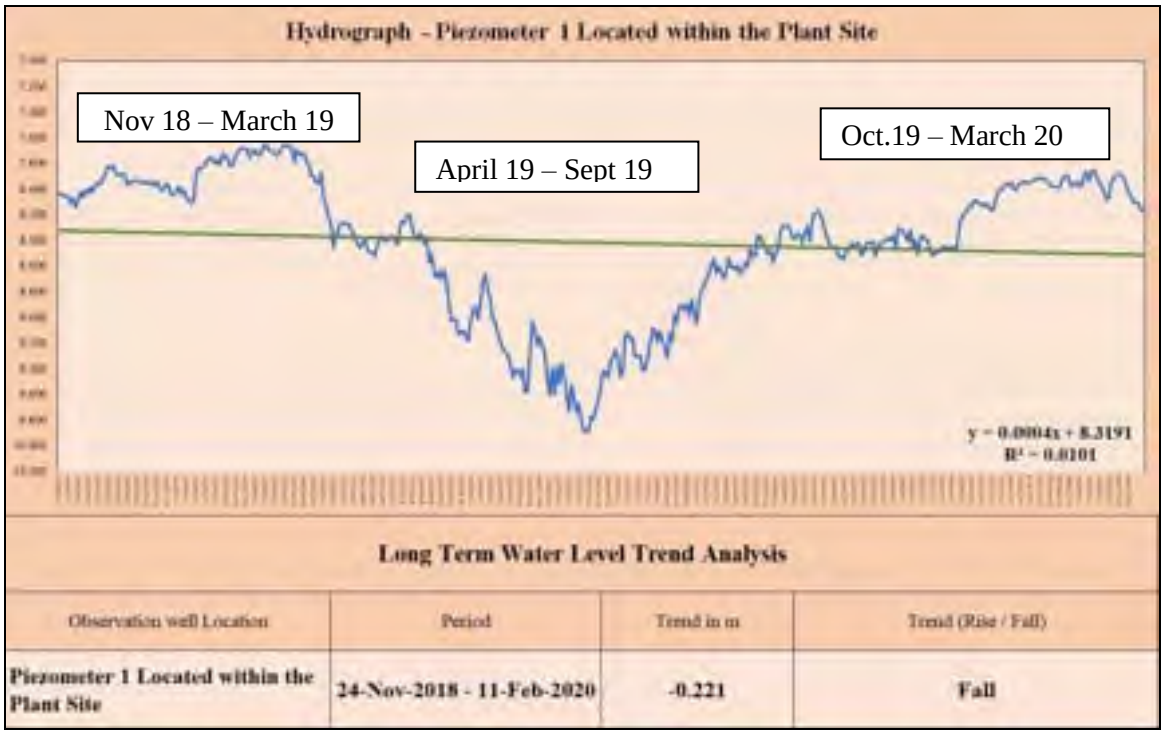
4.1.6 Ground Water Level Trend Analysis – Piezometer Observation

CGWA while according permission for withdrawal of ground water stipulated a condition for installation of Piezometers within the plant and its monitoring report has to be sent to CGWA. Accordingly, two piezometers are installed within the plant. The dedicated tube wells are drilled for installing DWLRs. The piezometers are drilled up to the depth at which the aquifer is being tapped for industrial water requirement. The DWLRs are installed in the piezometers during November 2018 and the monitoring period was fixed as 1-day frequency. The Piezometers monitoring data from 24th Nov.2018 to 08th Feb. 2020 was obtained. The location of the piezometers, water levels records and photographs are presented below.

Piezometer	Latitude	Longitude	Shallowest Ground water level recorded (m bgl)	Deepest Ground water level recorded (m bgl)
Piezometer - 1	28°50'16.33"N	78°13'55.02"E	8.304	8.526
Piezometer - 2	28°50'13.53"N	78°13'59.41"E	10.529	10.794

Photograph of the piezometer installed in the dedicated Tube well

The hydrograph has been generated for the Piezometers; observed data from the two piezometers are presented below. The water level trends are observed in the past 2 years and it is found that the water level is declining, however it is very less.



Long Term Water Level Trend Analysis

Observation well Location	Period	Trend in m	Trend (Rise / Fall)
Piezometer 1 Located within the Plant Site	24-Nov-2018 - 11-Feb-2020	-0.221	Fall

Figure 24: Water Level Trend Analysis for Piezometer -1

Long Term Water Level Trend Analysis – Piezometer 2

Observation well Location	Period	Trend in m	Trend (Rise / Fall)
Piezometer 2 Located within the Plant Site	24-Nov-2018 - 08-Feb-2020	-0.265	Fall

Figure 25: Water Level Trend Analysis for Piezometer -2

The frequency of DWLR recording was set to 1 day (24 hours). The above graphs clearly indicate the pumping and non-pumping periods of the surrounding irrigation and other tube wells. Once the pumping of the tube wells in the plant is stopped, the DWLRs show that the reoperation in the piezometers is rapid and attain to original ground water level. It also reflects the rainy and non-rainy periods of the study area.

4.1.7 Hydrographs of the Water Level

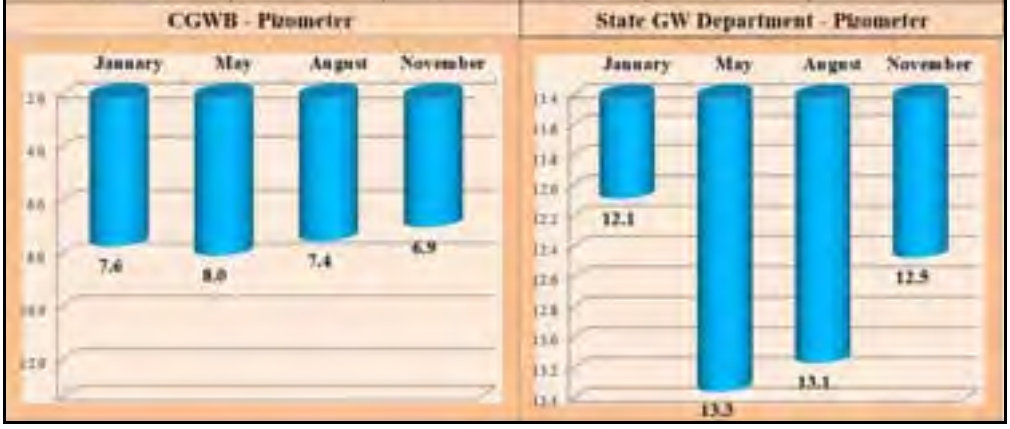
Ground water observation well data for a period of 10 years have been collected from CGWB and State Ground Water Department. The observation wells are located in Gajraula. The geographic coordinate of the observation wells are as follows:

Sr. No.	Location	Monitoring Agency	Latitude	Longitude
1	Gajraula Piezometer	CGWB	28°50'24.00"N	78°14'45.00"E
2	Gajraula Piezometer	State GW Department	28°50'17.00"N	78°14'37.00"E

The CGWB Piezometer was monitored up to 2014. Subsequently, the State Government Department fixed another piezometer nearer to CGWB Piezometer. The CGWB Piezometer was shallow depth (100 m) and the newly installed piezometer depth is around 200 m. The ground water level observation was made at different aquifer. The ground water level data collected from the departments are presented below.

Table 7: Observation Well (CGWB & State GW Dept.)

Gajraula Deep Bore well - Observation well (CGWB and State Ground Water Department), Amorha District - Ground water level					
Location Latitude and Longitude : 28°50'24.00"N - 78°14'45.00"E					
Year	January	May	August	November	Department
2010			7.3	7.7	CGWB Pizometer
2011	7.6		7.0	5.4	
2012	7.5				
2013	7.9	8.0	7.9	6.9	
2014	7.4	7.9		7.5	
Average	7.6	8.0	7.4	6.9	
Location Latitude and Longitude : 28°50'17.00"N - 78°14'37.00"E					
2015	12.1	12.5		12.7	State GW Dept Pizometer
2016		13.1	13.0	10.7	
2017	11.0	13.3	12.2	11.9	
2018	12.0	14.0	13.8	13.3	
2019	13.2	13.8	13.7	13.7	
Average	12.1	13.3	13.1	12.5	



The above graph clearly indicates that up to 2014 the average ground water level ranges between 6.9 m and 8.0 m below ground level (Shallow bore well monitoring). After 2014, ground water levels are down that is recorded from the Piezometer (State GW Dept.).

In order to study the deeper aquifer behavior, Dhanaura Piezometer monitoring by CGWB, which is located in the same hydrogeological environment, has been collected and analyzed. The ground water level data from 2009 to 2018 has been collected. The season wise ground water level data collected for Patas village monitoring well is given below.

Dhanaura Piezometer Ground water level - CGWB Observation well, Dhanaura Taluk, Amroha District, Uttar Pradesh State				
Location: Latitude and Longitude : 28° 57' 24.001"N - 78° 15' 56.002"E				
Year	January	May	August	November
2009			9.1	9.1
2010	9.2	10.1	9.2	9.7
2011	9.2		9.1	8.8
2012		10.2	10.0	
2013	9.8	10.8	9.9	9.8
2014	9.7	10.5		10.3
2015	10.4	11.2	10.5	
2016		11.6	10.1	10.3
2017	9.7	11.6		11.7
2018	9.2	11.3	10.6	10.5
Average	9.8	11.2	10.4	10.7

The above graph clearly indicates that the average ground level ranges between 9.8 and 11.2 m below ground level. The above data also clearly indicates that the ground water level is shallow

Decadal trend of water levels of last ten years (2009 – 2018) for pre-monsoon and post-monsoon periods have been computed for Ground Water Monitoring Well. The season wise hydrograph was constructed and presented below.

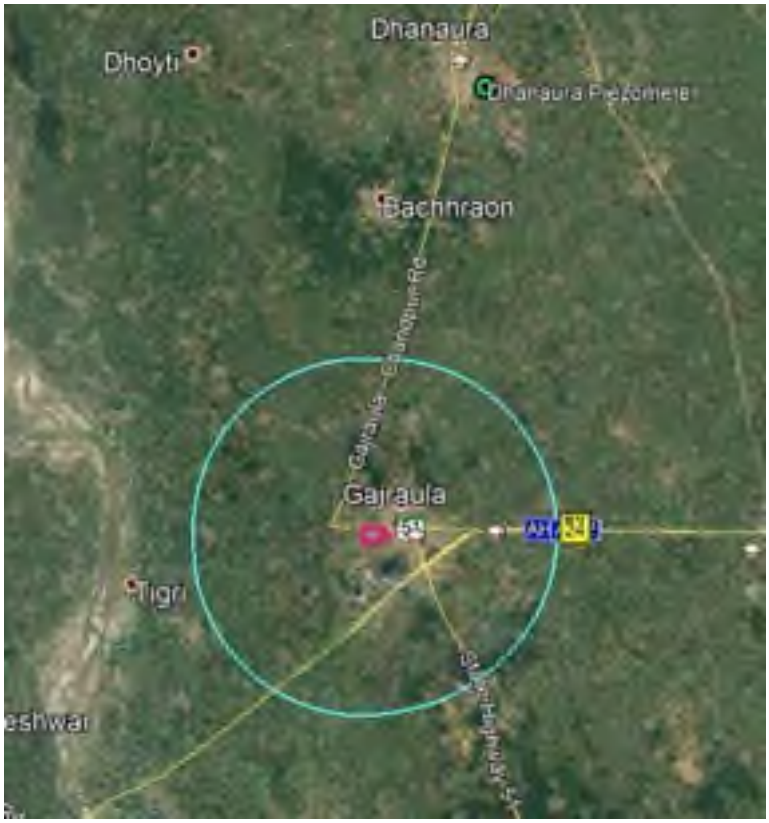


Figure 26: Google Map showing Dhanaura Piezometer

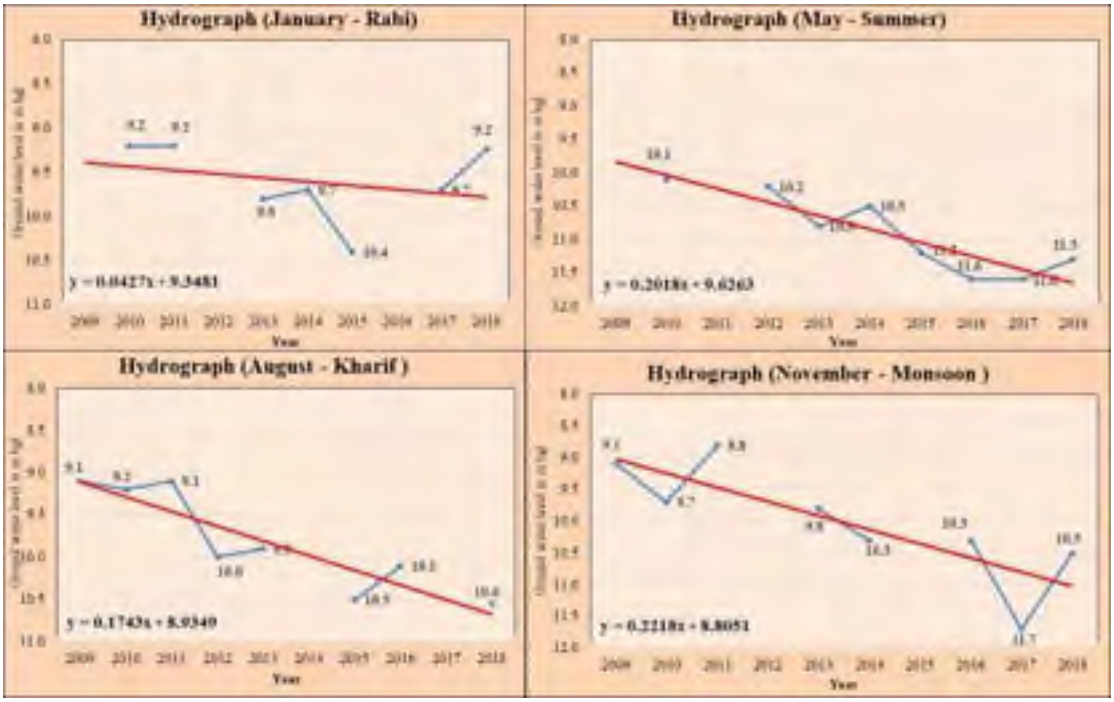


Figure 27: Hydrographs of the Water Level

The above hydrographs indicates that the ground water level is in declining trend in all the 4 seasons viz., Rabi, Summer, Kharif and Post Monsoon Seasons. The declining trend in the ground water level is due to irrigation pumping in the study area.

The overall (all seasons) ground water level trend is presented below. The overall ground water level is also in declining trend.

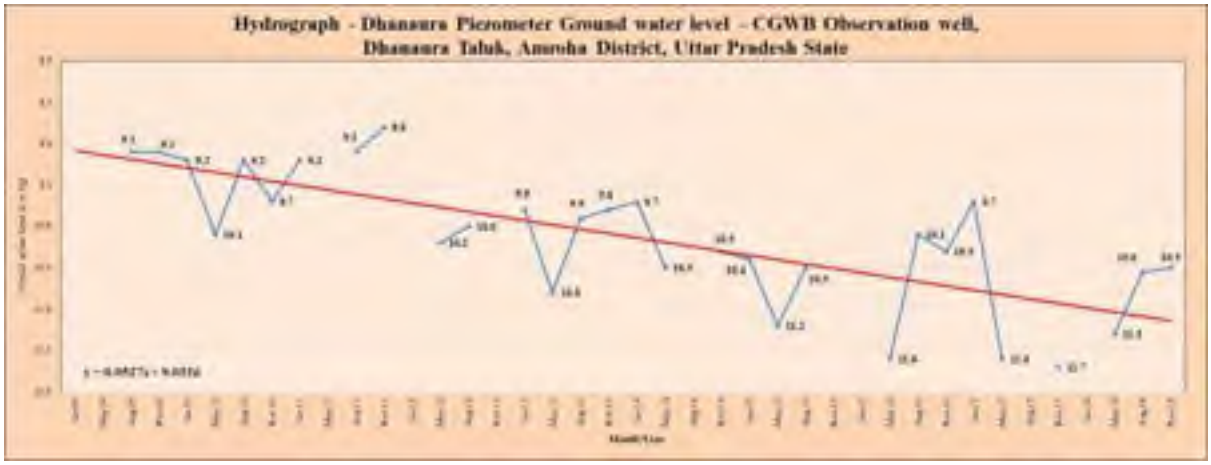


Figure 28: Hydrograph of Ground Water Level

Long Term Water Level Trend Analysis

Observation well Location	Period	10 Yrs Trend in m	Trend (Rise / Fall)
Dhanaura Piezometer Ground water level – CGWB Observation well, Dhanaura Taluk, Amroha District, Uttar Pradesh State	January (Rabi)	-0.384	Fall
	May - Summer	-1.816	Fall
	August - Kharif	-1.569	Fall
	November - Monsoon	-1.996	Fall
	All Season (2009-2018)	-0.474	Fall

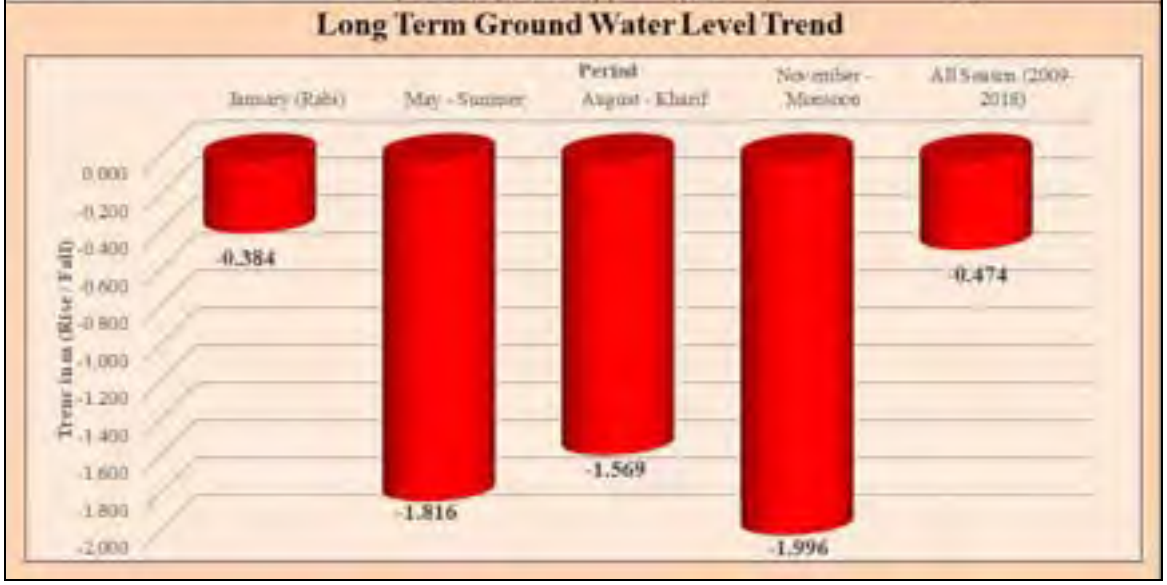


Figure 29: Long Term Ground Water Level Trend

The long-term trend analysis reveals that in all the 4 seasons the ground water is declining trend. During November – Post Monsoon period, the fall of -1.996 m. The lowest fall of -0.384 m observed during January (Rabi) Season. The overall (all seasons) fall is -0.474 m. The lowest declining of ground water level during Rabi season indicates that the pumping of ground water for irrigation is comparatively less.

Since the occurrence of the aquifer is at deeper depth, shallow aquifer-based drinking water supply / irrigation schemes are insignificant. Hence, the State Government has provided individual power pump schemes based on deeper aquifer.

The below table show that the irrigation schemes based on open well / tube well in Amroha District

No. Dug well	Tube well (Government)	Tube well (Private)
Nil	277	35837

The above data clearly indicates that the tube well based irrigation is more. Dug well based irrigation is nil in Amroha District.

4.1.8 Predicted Water Level Declines for Affected Aquifers (Ground water modeling)

The Ground water modelling study involves collection of existing data from various sources including Central and State Government agencies records, literature available for the micro watershed covering the plant area.

The generated data were used in conjunction with the earlier available data of exploration for the study area for generating the aquifer maps, the behaviour of the aquifer piezometer. Based on the visual analysis of the drill cuttings samples and electrical borehole logs; lithological sections have been prepared using **Hydro GeoAnalyst 2014** package. **Visual MODFLOW Flex 6.1** has been used for Digital Elevation Model for the micro watershed is covering the plant area.

Under the Integrated Watershed Management Programme (IWMP), Gajraula Watershed has developed with an area 5594.34 ha. Watersheds having six micro-watersheds are as Karmallipur, Ahraula Tejwan, Shahbaajpur Dor, Sagarthali, Khyalipur, Tigariya Khadar.

The project area has come under Ahraula Tejwan micro-watershed (code: 2B5A8C2e) and micro watershed covering the plant falls under the Ganga River Basin. The Ganga river basin belongs to a multiple aquifer system up to 300 m depth with thin inter-layering of sand and clay. Based on the same criteria, to understand the broad picture of the aquifer disposition, inter-relationship of granular zones, nature, geometry and extent of aquifers in the micro watershed, a three-dimensional aquifer model has been prepared. The micro watershed and the DEM (Terrain Elevation) is presented below.

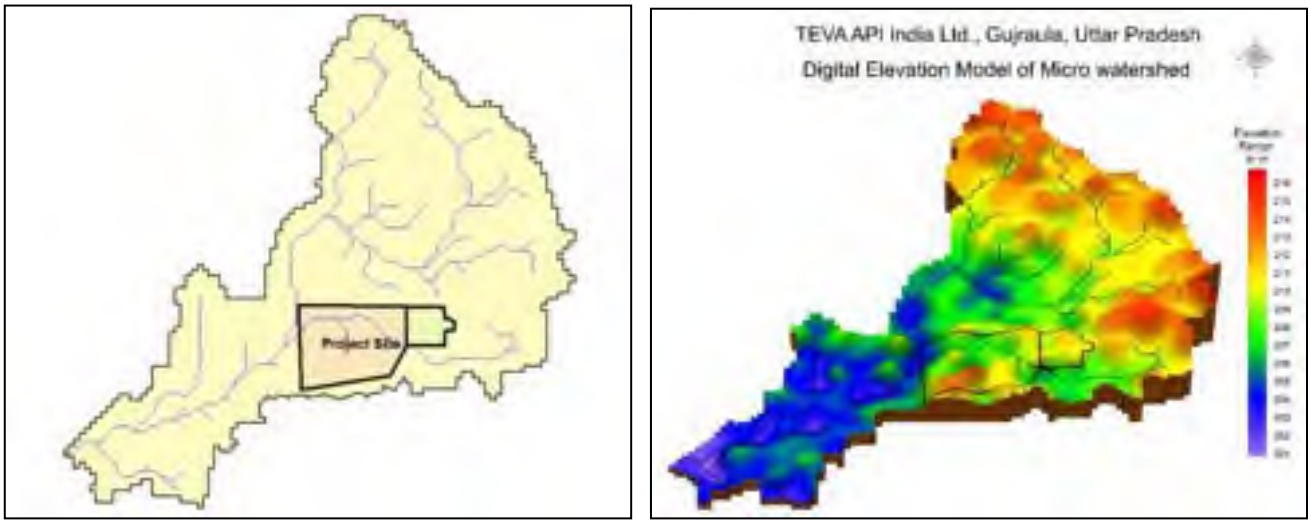


Figure 30: Digital Elevation Model for Micro-Watershed

Aquifer Disposition:

The aquifer disposition of the micro watershed covering the plant is as follows:

Geology	Type of aquifer	Aquifer Depth Range in m (within Micro watershed)
Middle – Late Pleistocene – Holocene Older and Newer Alluvium	Leaky aquifer	GL – 28
	Leaky aquifer	47-55
	Leaky aquifer	62-136

The lithological cross section of the aquifer along north south and east west is presented below.

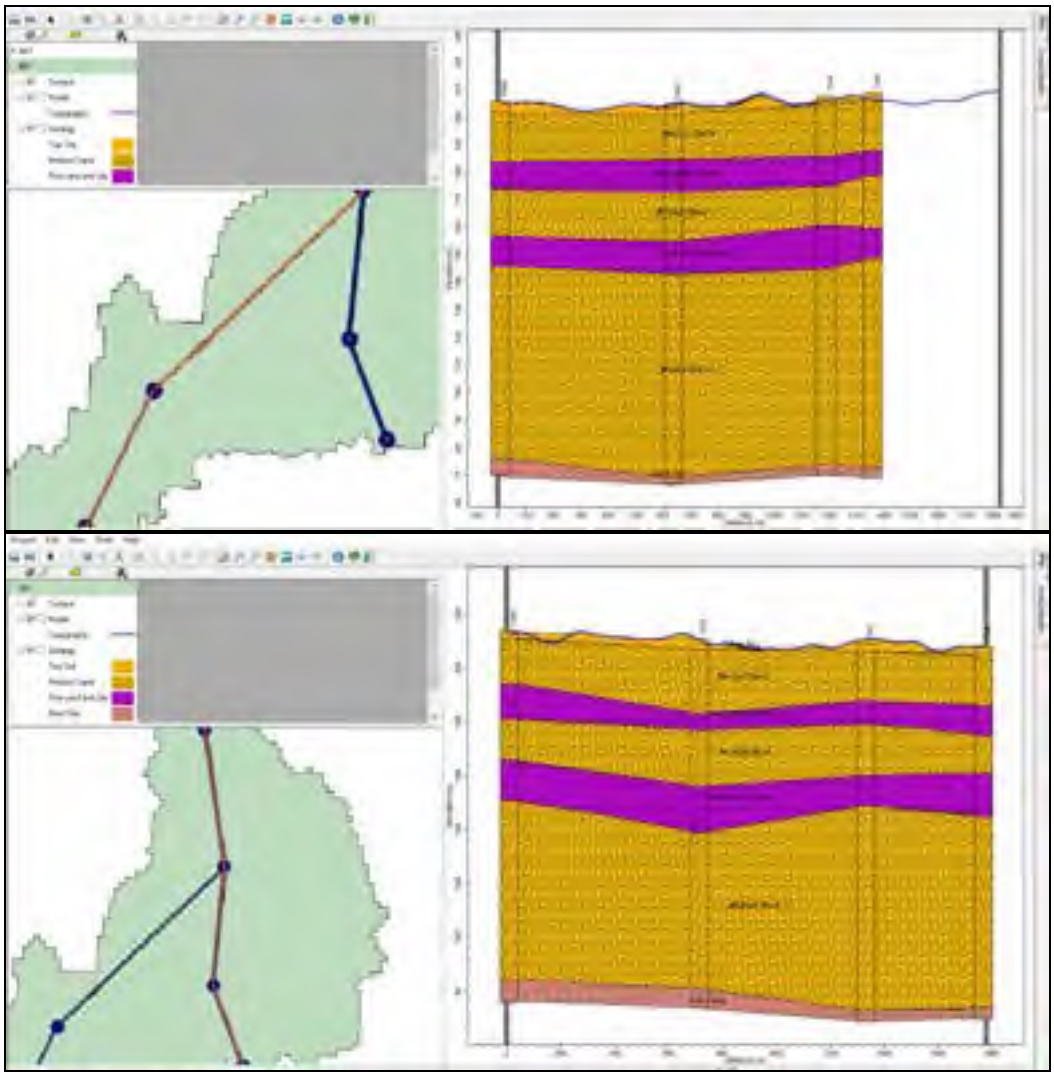


Figure 31: Lithological Cross Section of the Aquifer

2-D aquifer disposition of micro watershed covering project site (West to East)

Rainfall infiltration factor (in fraction)	**0.22**
Specific yield (in fraction)	**0.16**

Agriculture and Irrigation

The type of crop sown in the micro watershed (Gajraula Block) is as follows:

Type of Crop	**Area in Ha**
Irrigation area (ha)	112.91
Wheat SWI	3
Mango + Intercropping	4
Seed Treatment Demonstrations	3
Oil seed + Potato intercrop	1

Early vegetable	2
Paddy SRI	2
Arhar Plantation	2
Maiz + transplanted Legume	1
Millets	1.9
Green manur (Dhaincha)	1
Groundnut intercrop	0.9
Zaid oilseed	0.1
Off season zaid vegetable	0.5
Total area	22

Ground Water Resource Availability:

Ground Water Resources are available in the different group of aquifers. Aquifer I is having moderate thickness with medium geographic extent and it is tapped for drinking as well as irrigation. The Aquifer II is also having moderate thickness and tapped for irrigation. The Aquifer III has very good thickness; it tapped for irrigation and industrial usage. The micro watershed is as "Over-exploited".

Ground water Extraction:

Information regarding the groundwater abstraction from different aquifers is not available, but there are drinking water wells and most of the irrigation wells tapping shallow aquifers. The deeper aquifers areas are being tapped for irrigation and industrial usages. The extraction of ground water for the plant is from the deeper aquifer.

The lithology cross section and 3D model of the aquifer of the micro watershed covering the plant is presented below:

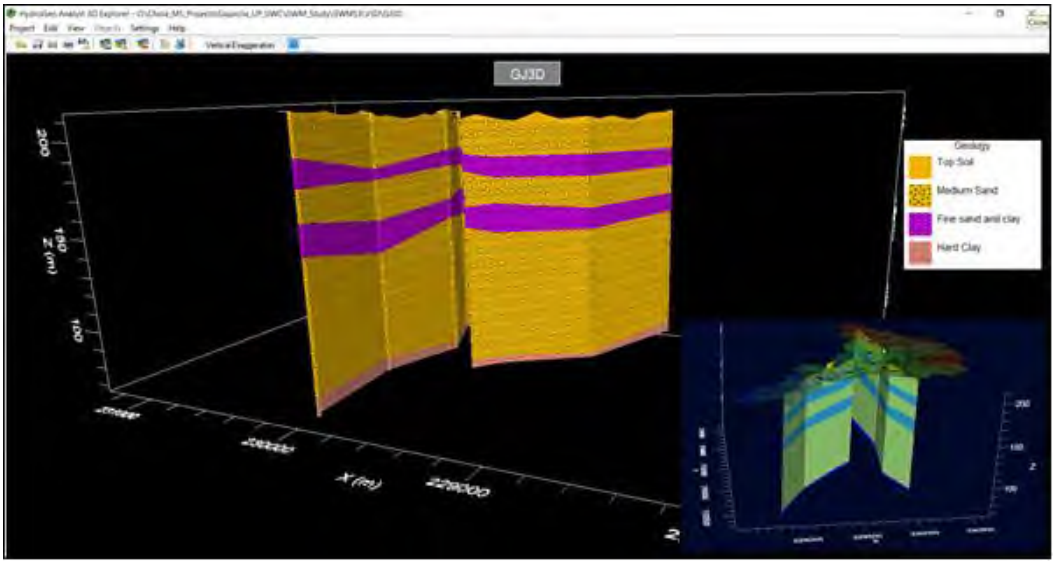


Figure 32: 3-D Aquifer Disposition and Hydrogeological Framework

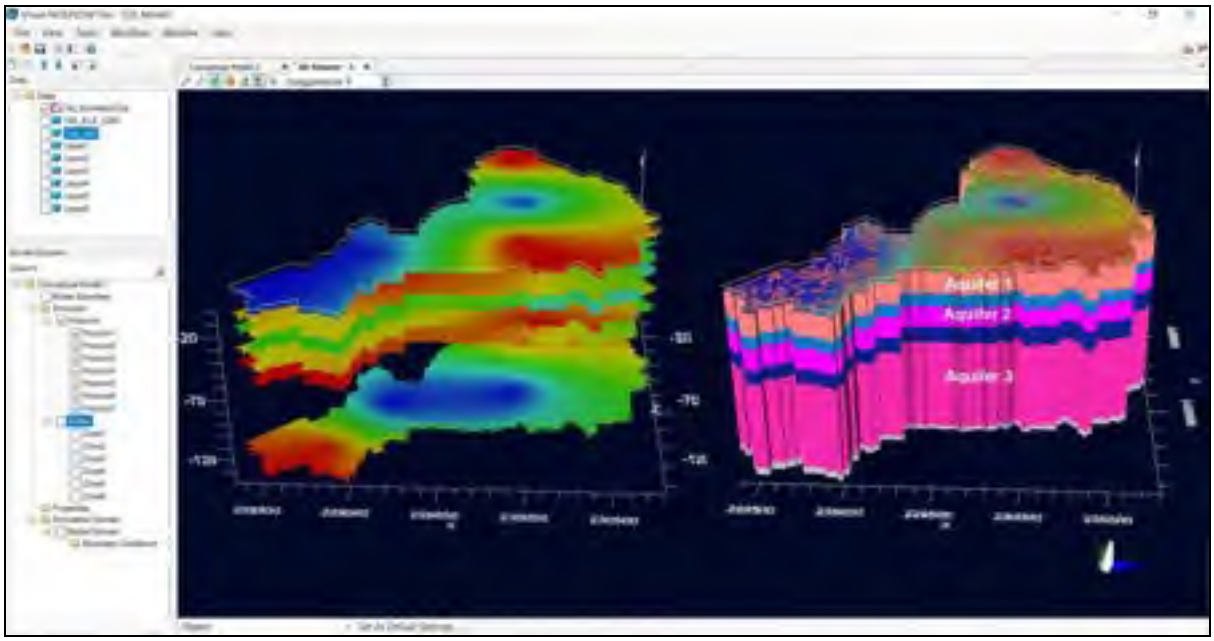


Figure 33: 3-D Aquifer Distribution of the Micro-Watershed

In-storage Ground Water Resources – Micro watershed

As per revised guidelines recommended by the Central Level Expert Group on ground water resources assessment, the resources are separately considered as dynamic and in-storage unconfined. In case of alluvial area, the in-storage resources of unconfined aquifer have been computed based on specific yield of the aquifer as detailed below.

Total Availability of Ground Water Resources = Dynamic Resources + In-storage Resource

In-storage Ground water resources (Unconfined Aquifer)	=	Thickness of the aquifer (granular /productive zone) below the zone of water level fluctuation down to the bottom layer of unconfined aquifer	X	Sp. Yield of the aquifer	X	Areal extent of the aquifer

Inference

The hydrogeological information/hydrogeological framework of the individual aquifer units generated from the modelling study are primarily used to develop conceptual model so as to develop aquifer management plan through numerical modelling. The younger and older alluvium of Gangetic plain aquifer is the most potential aquifer in the study area. The modelling study reveals that the aquifer of the study area, with withdrawal of ground water by 10% in 2028 is in "safe" status. However, Ground water recharge measures need to be taken to protect the aquifer.

4.1.9 Ground Water Quality

As part of ground water quality assessment stipulated in the CGWA Guidelines, TEVA API India Industry has tested tube well water for ground water quality of wells within in the plant site. The analysis results reveal that the ground water quality in the wells is within the permissible limits of drinking water standards (IS 10500: 2012) The Central Public Health & Environmental Engineering Organization (CPHEEO) Standard of the parameters for drinking water purpose is as follows.

The ground water quality results of particular parameters for Plant area during pre-monsoon and post-monsoon period are presented **Table 9** and details are given as **Annexure-2.**

Also, to assess the ground water quality of the study area (5 km area) three (3) ground water sampling locations were selected. All three samples collected from tube well structure as grab samples and were analysed for various parameters. The particular parameters are comparing with results of BW locations of plant area in Table 9 and details are presented in **Annexure-3.**

Sr. No.	Water Sampling	Location	Latitude	Longitude
1	Tubewell -1	Kumrala	28°50'03.7"N	78°13'18.2"E
2	Tubewell -2	Tigariya Bhood	28°50'04.8"N	78°14'10.7"E
3	Tubewell -3	Ramgad	28°49'27.7"N	78°15'32.9"E

Table 9: Results of Ground Water Analysis

Sr. No.	Parameters	Potable		Ground Water Quality within the Plant Area BW-1	Ground Water Quality within the Plant Area BW-2	Ground Water Quality within the 5 km Study Area
		Acceptable	Permission	Result in range	Result in range	Result in range
1	Total Dissolved Solids mg/l	< 500	500 - 2000	323 – 372	392 - 379	226 – 1056
2	pH	6.5	8.5	7.63 – 7.48	7.79 – 7.23	7.50 - 8.04

3	Alkalinity mg/l	< 200	200 - 600	161 - 154	184 - 173	164.0 - 308.0
4	Total Hardness (as CaCO3) mg/l	< 200	200 - 600	155 - 133	197 - 116	160.0 - 560.0
5	Chlorides (as Cl) mg/l	< 250	200 - 1000	17 – 19.57	13 - 20	10.0 - 49.98
6	Nitrate (as NO3) mg/l	45	No relaxation	3.84 – 0.98	5 – 1.5	5.90- 38.60
7	Iron (as Fe) mg/l	0.3	No relaxation	< 0.01 - < 0.01	< 0.01 - < 0.01	0.050 - 0.35

The ground water quality data for the Gajraula CGWB observation well has been collected and presented below. The quality of ground water is potable with respect to drinking water standards.

Sr. No.	**Chemical Constituents**	**Range**
1	pH	8
2	Total Hardness (mg/l)	190
3	Total Alkalinity	-
4	Residual Sodium Carbonate	-
5	Sodium Adsorption Ration as SAR	0.29
6	Sulphate as SO4 (mg/l)	64
7	Carbonate as CO3 (mg/l)	-
8	Calcium as Ca (mg/l)	28
9	Chloride as Cl (mg/l)	25
10	Electrical Conductivity	437
11	Fluoride as F (mg/l)	0.43
12	Iron as Fe (mg/l)	-
13	Alkalinity HCO3 (mg/l)	142
14	Potassium as K (mg/l)	6
15	Magnesium as Mg (mg/l)	28
16	Nitrate as NO3 (mg/l)	-
17	Sodium as Na (mg/l)	9

Observation:

- The results of ground water quality analysis were compared with drinking water standards as per IS: 10500:2012. As per the analysis results, it can be observed that pH of the ground water collected from the study area varied from 7.5 to 8.04 whereas results of onsite borewell water is 7.63 – 7.48 (for BW-1) and 7.79 – 7.23 (BW-2) which is within the permissible range of 6.5-8.5 as per IS:10500:2012.

- The TDS levels in the ground water ranged from a 226 mg/l to 1056 mg/l in the study area however, in the project site water samples is showing 323 – 372 mg/l for BW-1 and 392 – 379 mg/l for BW-2 within the permissible limit of 500 - 2000 mg/l. It indicates some contamination has been observed in the study area.

- The chloride concentration is very less in the plant area samples as well as study area. Nitrate and Iron also were resulted in very less amount.

- Alkalinities were observed in the range of 161 – 154 mg/l for BW-1, 184 – 173 mg/l for BW-2. The study area showing in this range 164.0 - 308.0 mg/l. All those figures are within permissible limits 200 – 600mg/l.

- The hardness of plant area samples is in the range of 155 – 133 mg/l for BW-1 and 197 – 116 mg/l for BW-2. The study area water samples are showing in the range of 160.0 - 560.0 mg/l.

5 DETAILS OF THE TUBEWELLS/BOREWELLS (Existing)

In order to meet the water requirement of the industrial uses, two bore wells were drilled within the plant. The depth of the bore wells are 140 m (Tube well -1) and 160 (Tube well 2). The tube wells are 112 m apart. The lithology of the tube wells is collected at the time of drilling. The lithology and the well construction details of the two tube wells are prepared using **Hydro GeoAnalyst 2014 Software** and the same is presented below:

Based on the borelog the following are observed.

1. The aquifer encountered in the tube wells are fine sand, medium sand, medium sand with Kankar and hard clay.
2. The medium sand occurs at the depth of 98 to 132 is the potential aquifer in tube well 1.
3. The medium sand occurs at the depth of 72 to 123 is the potential aquifer in tube well 2.
4. The slot positions are 112 to 132 in Tube well 1 and 90 to 123 in tube well 2
5. The above clearly indicates that the deeper aquifers (> 90 m depth).
6. The Static water level of the tube wells 1 and 2 are 8.5 m and 7.3 m respectively.

Table 10: Details of Tubewell/Borewells at the Project Site

Type of structure (Tubewell/ Borewell)	Date	Drilling Depth (m)	Diameter (mm)	Details of Pump	H.P. of Pumped	Operational hours/day	Discharge (cum/hour)	Whether fitted with water meter or not
Tube well-1	18.7.2009	133.4	150	Lifted	30	7.5	110	Yes
Tube well-2	9.4.2012	144.0	150	Lifted	30	8.5	110	Yes

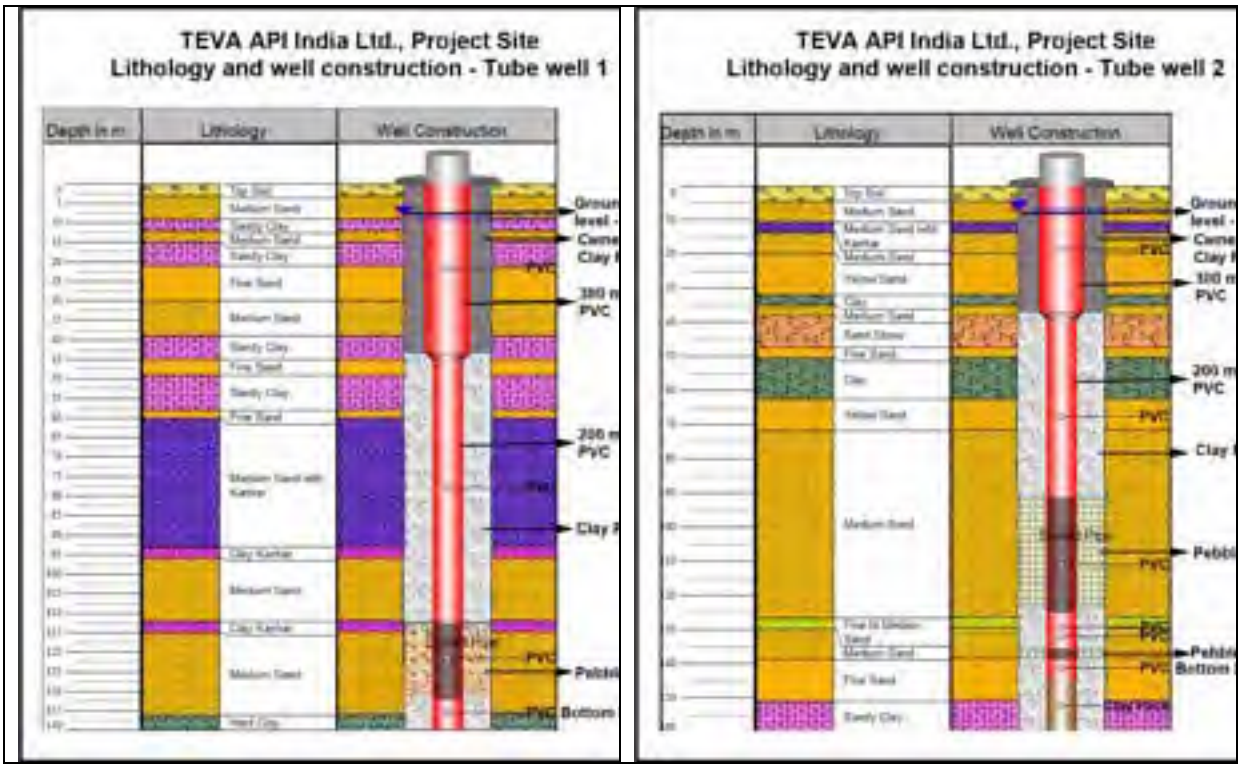


Figure 34: Lithological Log of Tube wells 1 & 2

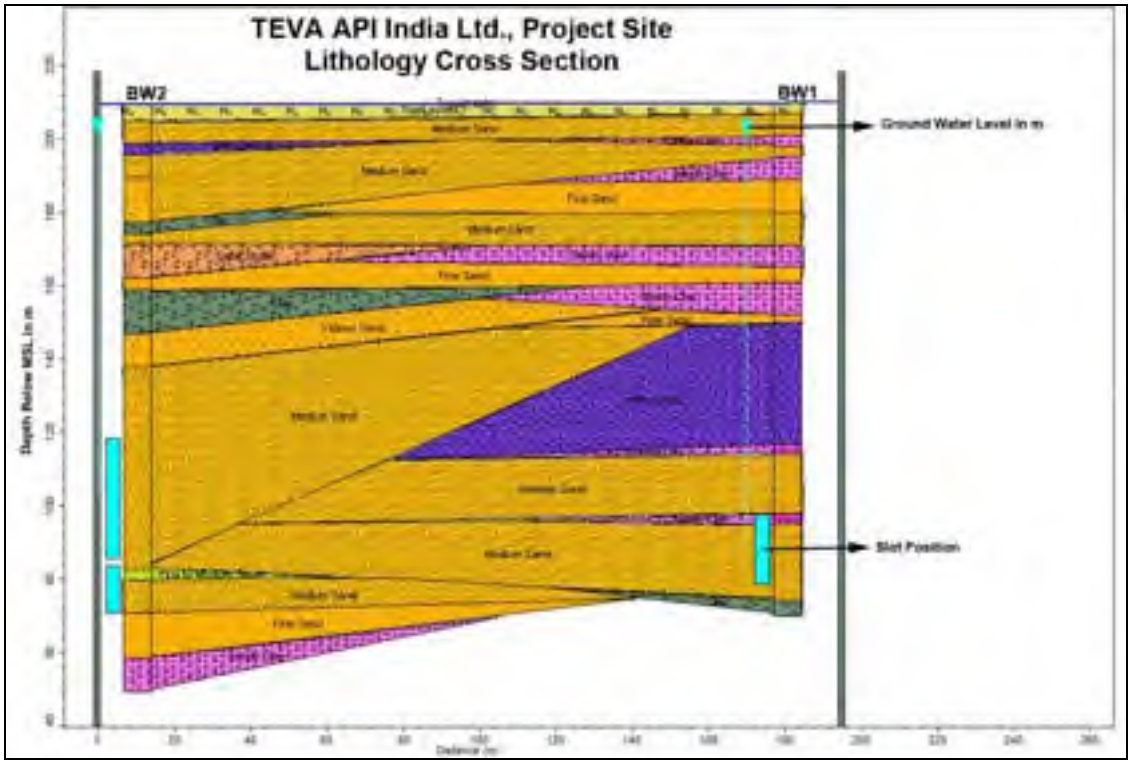


Figure 35: Lithological Cross Section of Tube wells

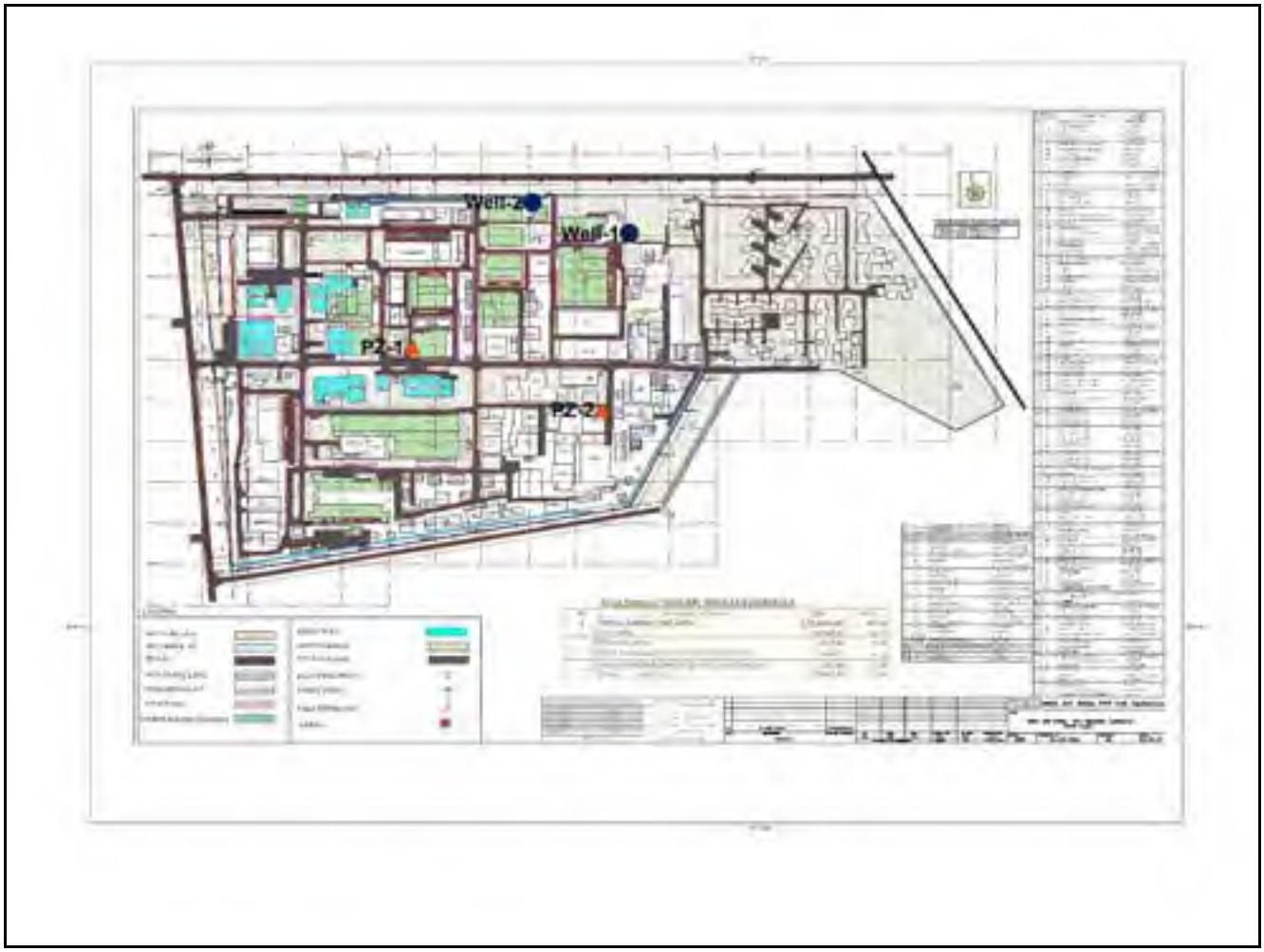


Figure 36: Site Plan Showing Location of Tube well & Piezometers

Figure 37: Google Map Showing Location of Tube wells & Piezometers

Photograph of the Tube well fitted with flow meter within the plant site

The total requirement of the plant is 1455 m^3/day. The designed hours of pumping and the yield of the tube wells are given below:

Yield of Tube well 1	
Yield of tube well in m^3 per hour	110
Designed hours of pumping per day	7.5
Yield of the tube well m^3 per day (KLD)	825
Yield of Tube well 2	
Yield of tube well in m^3 per hour	110
Designed hours of pumping per day	8.5
Yield of the tube well m^3 per day (KLD)	935
Total yield of the Tube wells m^3 per day (KLD)	**1760**

The yield of the both tube wells is 1760 KLD and the estimated drawdown at the pumping wells is around 0.72 m. The required quantity is 1455 KLD.

The pumping of 1455 m^3/day (KLD) of water from the deeper aquifer may not create cone of influence in the drinking water sources located in the nearby village.

6 EVALUATION OF AQUIFER PARAMETERS AND SAFE YIELD

Pumping test is the most accurate reliable and commonly used method to evaluate the hydraulic parameters of an aquifer, efficiency of a tube well / bore well, safer operational rates of pumping and selection of suitable pump. The methods of a pumping test are highly varying in its application. The main objective of pumping test is to determine the aquifer parameters such as Transmissivity (T), Storage co-efficient (S) Hydraulic Conductivity (K), well performance and safe yield for execution of water supply.

In order to evaluate the aquifer characteristics and safe yield to match the ground water requirement, constant discharge test has been conducted in the existing Tube well, which has similar hydrogeological environment for the pumping test purpose (Collected from State Ground water department). The draw down and recovery have been observed in the pumping well and it's data has been measured.

6.1 Pumping Test Methodology

- The constant discharge test has been carried out with the help of the motors fitted in the tube wells electronic water level indicator etc.
- During the pumping test, discharge has been measured by volumetric methods and ground water level has been measured using electronic indicator.
- Draw down and recovery have been measured from the pumping wells.

The most important part of the pumping test is measuring the depth of water level at different stages. This could be achieved using the electronic water level indicator. During the initial stage of pumping the frequency of water level measurement should be at closer time intervals and in the later part of the pumping the frequency may be at larger intervals. The following is the time duration adopted for measuring the water level.

Constant Discharge Test		**Recovery Test**	
Time since Pumping started in minutes	Time intervals in minutes	Time since Pumping stopped in minutes	Time interval in minutes
0-10	1	0-20	1
10-20	2	20-30	5
20-60	5	30 Min	99 % Recovery achieved.
60-120	10		
120-180	20		
180-360	30		

Measurement of Discharge:

Variations in discharge rate results errors in draw down that are difficult to analyses the pumping test data. To avoid the above, the discharge rate should be kept constant throughout the pumping period. The error of draw down measurement should not more than 5 percent. Volumetric methods have been adopted to measure the discharge.

Volumetric Method:

A very simple and accurate method is to measure the time required to fill a container of known capacity. During the test, three per hour discharge has been measured by volumetric method.

Recovery Test:

Recovery test involves measuring the water level rise after pumping is stopped. Recovery test is used to calculate the Transmissivity value of the aquifer as well as to check the results of the draw down data. The duration of recovery test conducted is 30 minutes.

6.2 Result of Pumping Test

The drawdown and recovery data have fed in to **AqiferTest-2016 Software** and the same is presented below,

Table 11: Pumping Test Report

Evaluation of Aquifer Parameters - Gajraula Tube well	
PUMPING TEST REPORT	
TUBE WELL DEPTH in m	160
Q in lpm	1800
t, in minutes	360
s, drawdown in metres	1.540
Q/s, specific capacity in lpm / m drawdown	**1169**
delta s, in metres	0.13
T, transmissivity in m^2 / day	3648.74
s_{theo}, theoretical drawdown in metres	1.08
Well Efficiency Coefficient	0.70
Assigned / Desired drawdown in m	3
Designed hours of pumping per day	5
Diameter of the borewell in m	0.2
Safe yield: - x lpm / y m d / z hrs of pumping	**3825**
Safe Yield 3825 lpm/ 3 m Draw Down 5 Hours of Pumping	
Safe Yield of the tube well-Cum/ day (KLD)	**1148**

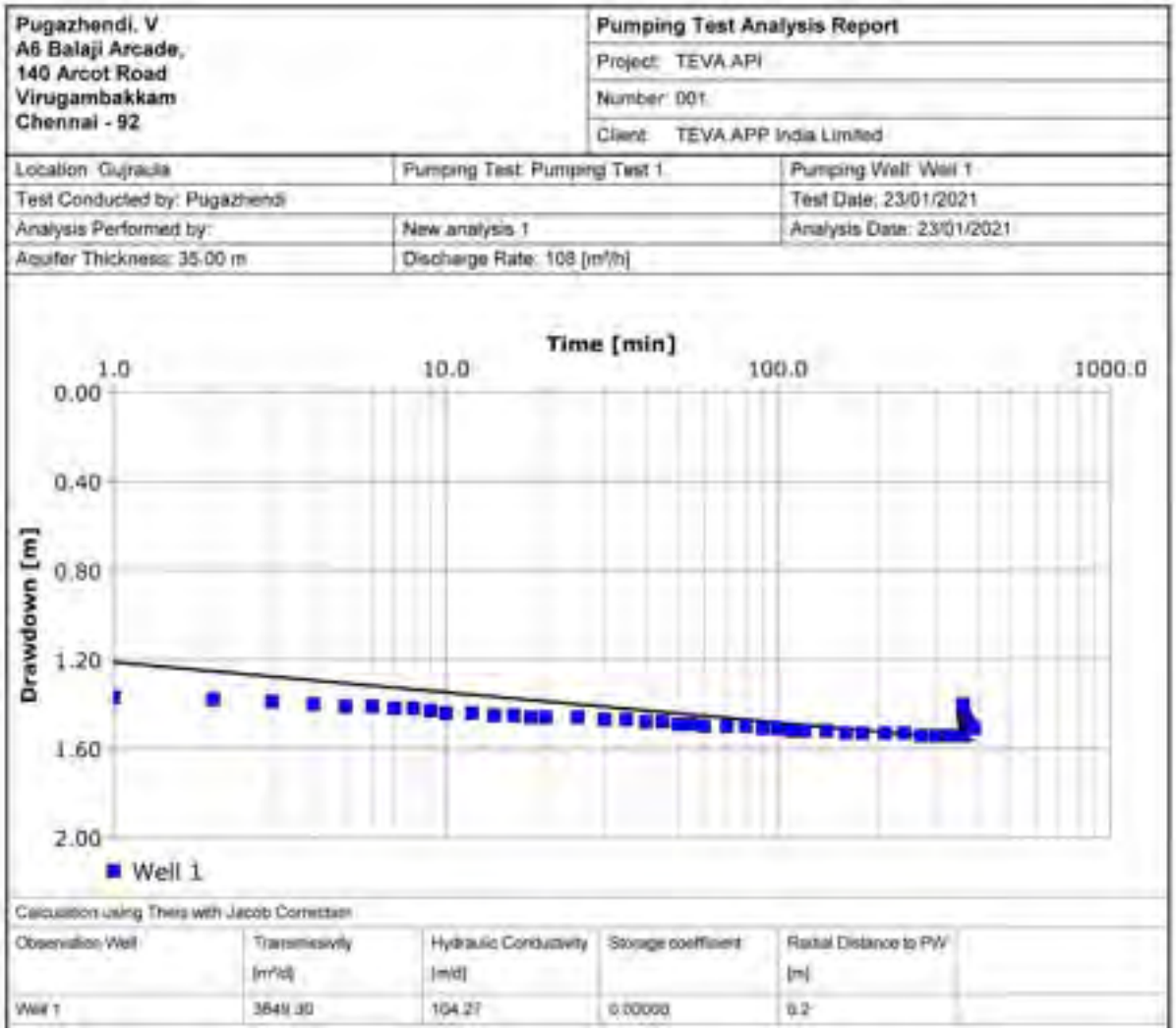


Figure 38: Pumping Test Analysis Graph

The above result is calculated using the Cooper –Jacob Method, graph indicates the specific line and actual drawdown against the time of pumping of water from well. The blue square is showing actual drawdown and black line is indicates the specific drawdown.

6.3 Safe Yield

Optimum yield of the tube well is 1148 cum/day. If the pump runs for 5 hours, with a discharge capacity of 3825 lpm / 3 m drawdown, the tube well can yield 1148 cum/day. The current yield of tube well 1 and tube well 2 are 825 cum/day and 935 cum/day, which are under the safe yield of 1148 cum/day of the study area.

6.4 Water Requirement of the Project Site

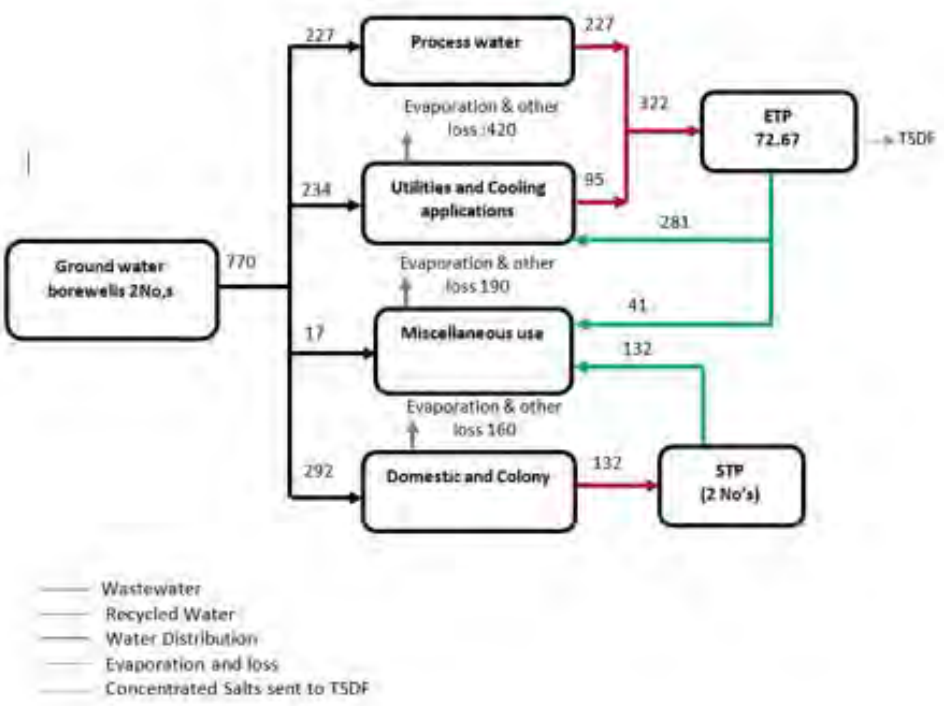
The raw water for the facility is sourced from the two tube wells, which are located within the plant area. For that, ground water withdrawal permission from CGWB has already obtained and it is permitted up to 1455 m^3/day. (The Quantity of water requirement for the plant is 1455 m^3/day (**CGWA Approval NOC No.: CGWA/ NOC / IND / ORIG / 2017 / 2872 dated 04 Dec 2017).**

The raw water is subjected to pre-treatment system, which involves MGF, ACF, Sand filters, and followed by DI treatment system, the water is majorly distributed to (i) Process water, (ii) Utilities & Cooling tower, (iii) Miscellaneous use (iv) Colony and Domestic usage. At present, the facility is manufacturing 48% (303 TPA) (for period 2019 – 2020) of production capacity as against the 100% (620 TPA) (for future) consented production capacity. Hence, the water balance has been prepared based on available long-term data, flow meter data and material balances.

The average total water demand for the facility is about 1224 m^3/day in which about 770 m^3/day of fresh water is being sourced from ground water borewells, and about 454 m^3/day of recycled water is used for utilities and miscellaneous use. Fresh water and recycled water is about 742 m3/day is used for industrial usage such as process water, utilities and cooling applications. Hence, the overall specific water consumption in the existing facility is 48% production capacity is estimated to be in the order of 883 m^3/T of product. A typical water distribution and balance is shown below.

Table 13: Breakup of Water Requirement and Usage (Water Balance – at 48 % Production Capacity 303 TPA)

Sr. No.	Particulars	Fresh water Consumption (m^3/day)	Recycled Water (m^3/day)	Evaporation and other loss (m^3/day)	Wastewater Generation (m^3/day)
1	Process water	227	-	-	227
2	Utilities and cooling applications	234	281	420	95
3	Miscellaneous use (firefighting system, gardening etc)	17	173	190	-
4	Colony and Domestic usage	292	-	160	132
Sub-total		**770**	**454**	**770**	**454**
Total		**1224**		**1224**	



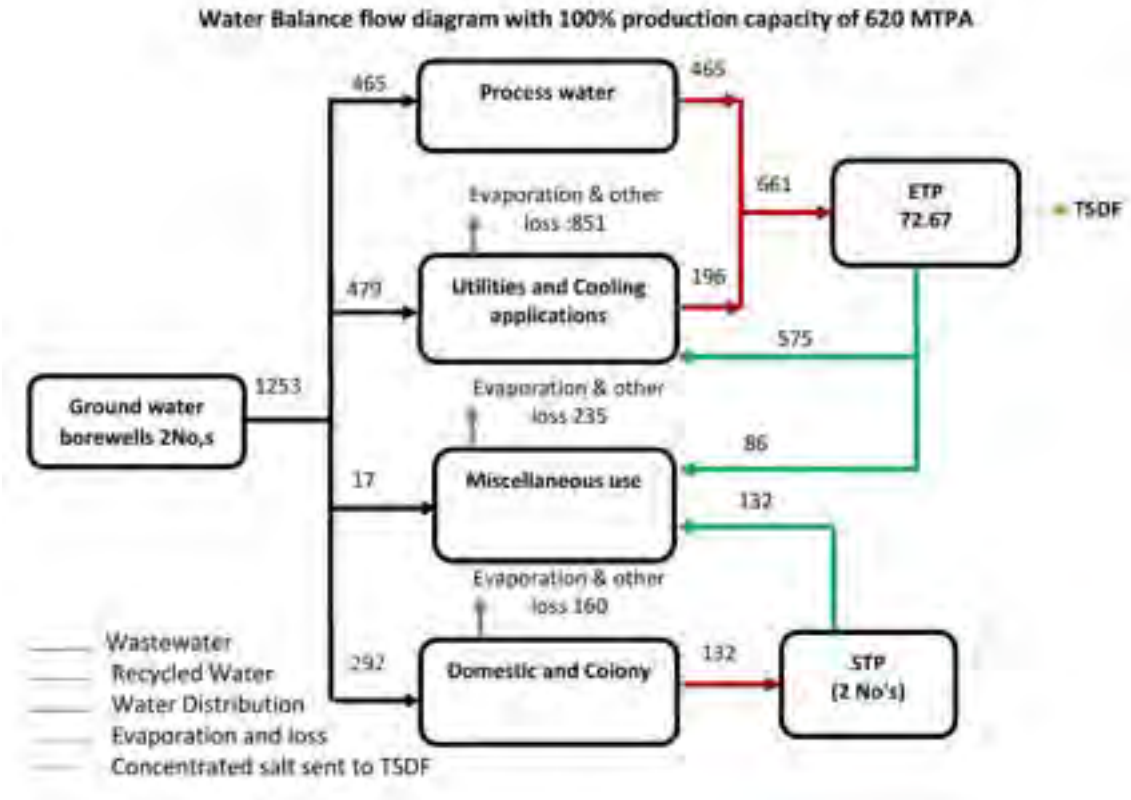
Ideal Case Scenario of Plant Operating at 100% Production Capacity

Generally, for pharmaceutical industries at any point of time the full production capacity cannot be achieved due to the market demands. As per the past three-year's data, the existing facility has never achieved their full production capacity. However, the ideal case scenario of water balance for the existing facility at full production capacity of 620 MTPA has been prepared based on the extrapolation of long-term plant data, scientific calculations and material balances.

The total water demand for the facility will be about 2046 m^3/day in which about 1253 m^3/day of fresh water and about 793 m^3/day of recycled water will be used for utilities and miscellaneous use. About 1519 m^3/day of fresh water and recycled will be utilized for industrial usage such as process water, utilities and cooling applications. Hence, the overall specific water consumption in the existing facility for ideal case scenario is estimated to be in the order of 883 m^3/T of product, which will remain same. A typical water distribution and balance is shown below:

Table 14: Breakup of Water Requirement and Usage (Water Balance – at 100 % Production Capacity 620 MTPA)

Sr. No.	Particulars	Fresh water Consumption (m^3/day)	Recycled Water (m^3/day)	Evaporation and other loss (m^3/day)	Wastewater Generation (m^3/day)
1	Process water	465	-	-	465
2	Utilities and cooling applications	479	575	858	196
3	Miscellaneous use (firefighting system, gardening etc)	17	218	235	-
4	Colony and Domestic usage	292	-	160	132
Sub-total		**1253**	**793**	**1253**	**793**
Total		**2046**		**2046**	



The pumping test data reveals that the drawdown was very low. The above clearly indicates that the withdrawal of 1455 m^3/day (CGWA Approval NOC No: CGWA/ NOC / IND / ORIG / 2017 / 2872 dated 04 Dec 2017) would not create advance impact on the ground water regime. Ground water impact assessment has been attempted in order to study the pumping of tube wells.

7 COMPREHENSIVE ASSESSMENT OF THE IMPACT ON THE GROUND WATER REGIME ALONG WITH MODELING STUDY

A per the new guidelines notified on 24.09.2020 and subsequent amendment, all industries extracting /proposing to extract. Therefore impact assessment report with study area of 5 km radius needs to be submitted by the industries.

The NOC for the industry was issued on 04th December, 2017 and valid until 14.11.2019. Based on the aquifer characteristics and the withdrawal of water for the plant, the impact model of pumping in the surrounding areas has been attempted using **Visual MODFLOW Flex Software**. Apart from the above, Pre and post monsoon ground water level data from 2010 to 2019 have been collected for ground water level and ground water flow models to prepared the study on impact in and around 5 km radius of the plant site.

Two model scenarios have been attempted viz.

1) Radius of Influence and draw down for single well pumping
2) Radius of Influence and draw down for two wells pumping

Scenario 1 - Single well pumping Scenario:

Single well pumping scenario indicates that the radius of influence is 0.80 km and the drawdown is 0.51 m (in the tube well). Though the radius of influence extends to the nearby areas, it would not affect the irrigation wells.

Scenario 2 - Two wells pumping Scenario:

Two well pumping scenario indicates that the radius of influence is 1.21 km and the drawdown is 0.72 m (in the tube well). Though the radius of influence extends to the nearby areas, it would not affect the irrigation wells.

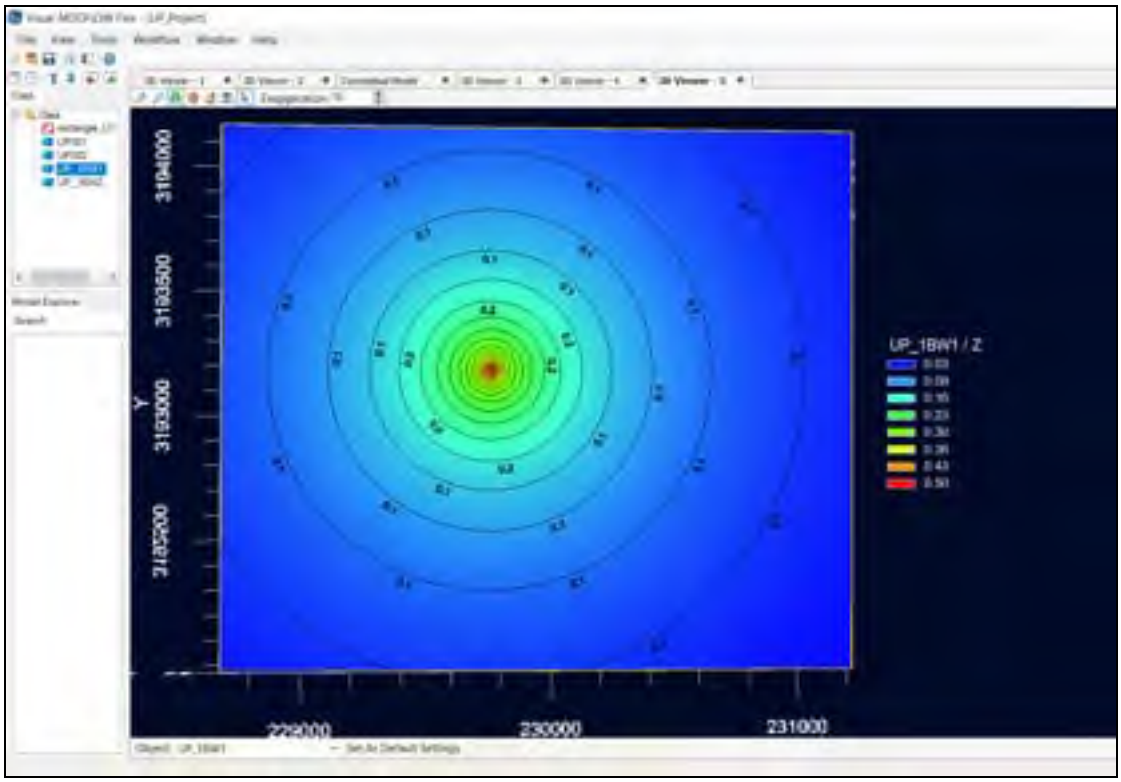


Figure 39: Impact of Pumping – Radius of Influence due to Single Well (Tube Well-1) Pumping (0.80 km)

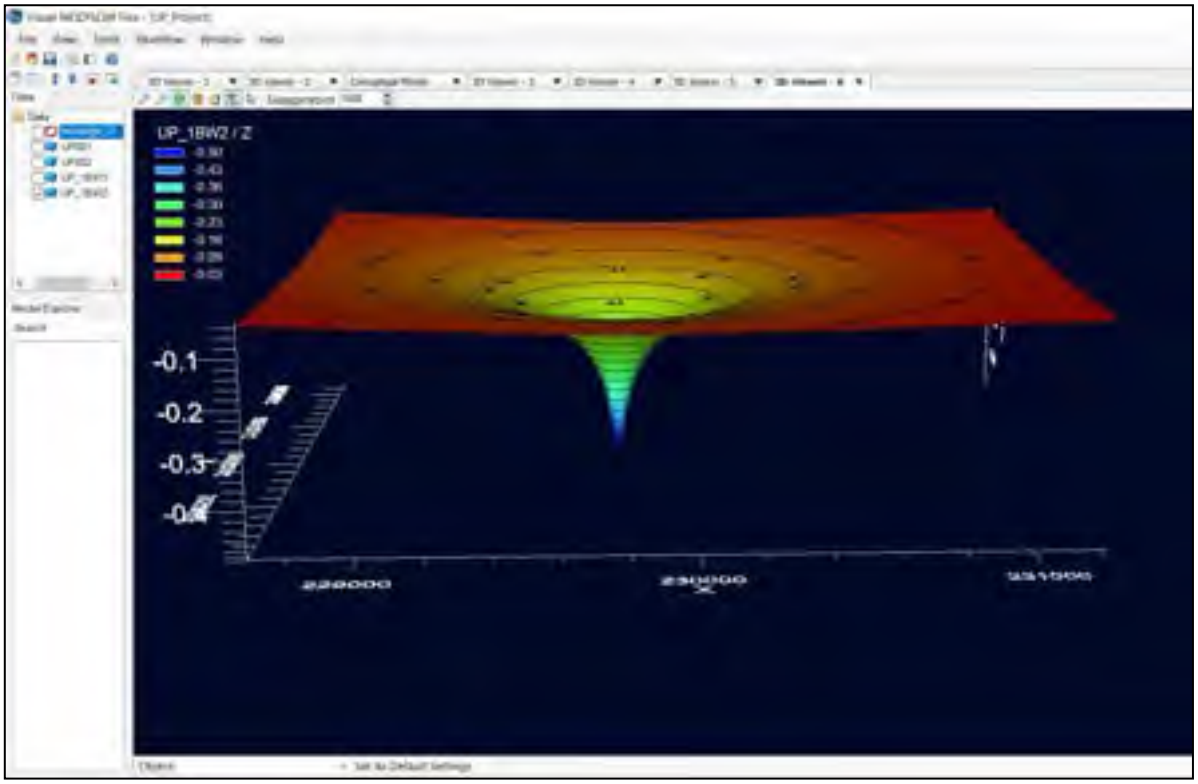


Figure 40: Impact of Pumping – Draw down due to Tube Well-1 pumping (0.51 m)

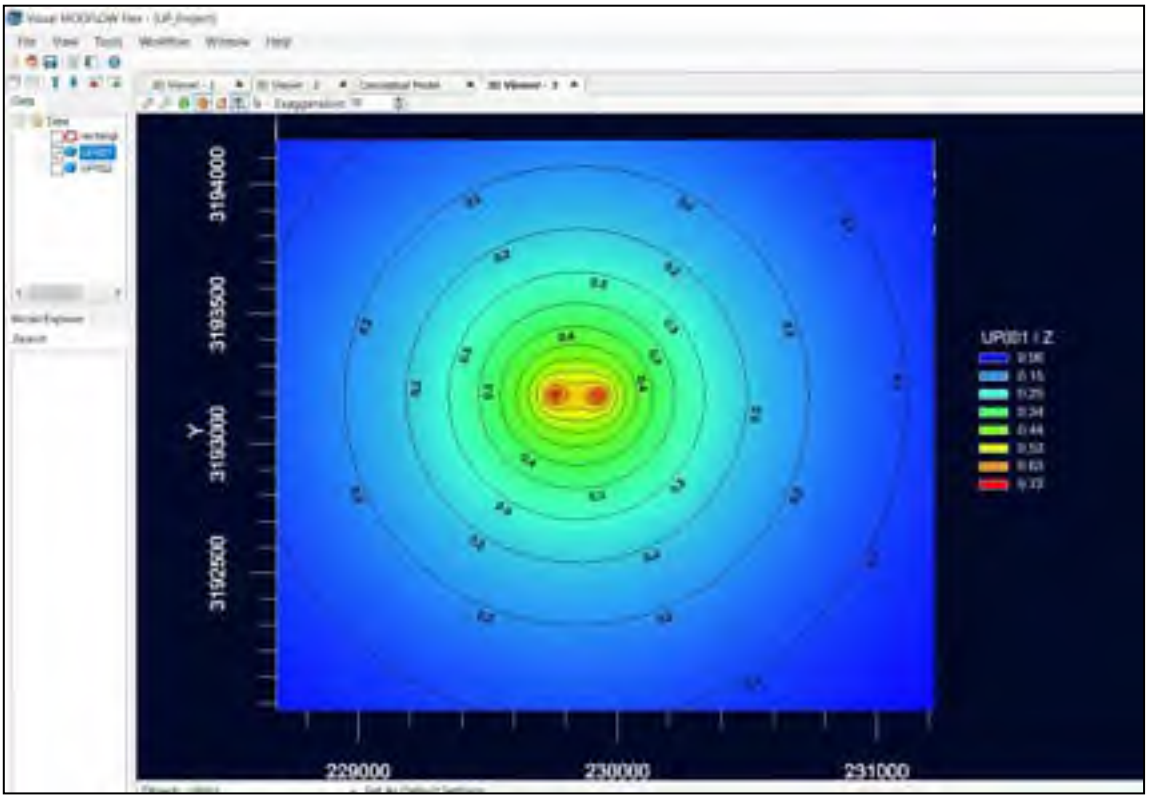


Figure 41: Impact of Pumping – Radius of Influence due to Both Well Pumping (1.21 km)

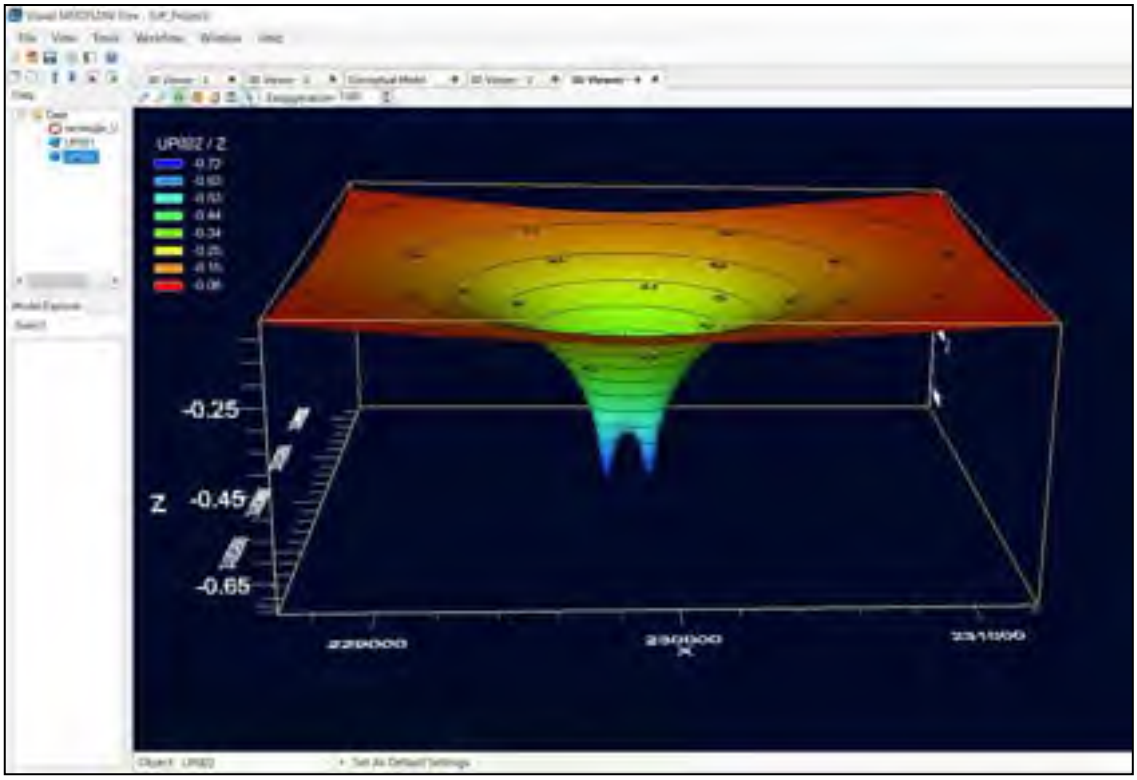


Figure 42: Impact of Pumping – Draw down due to Bore Well-2 pumping (0.72 m)

7.1 Impact on Groundwater Sources

From the above model, it is clear that the pumping of two tube wells creates the drawdown of 0.72 m at the tube wells. The predicted draw down in the wells 0.72 m and radius of influence 1.21 km means the drawdown of 0.10 m observed outside the plant site when both the tube wells are pumped at the rate of 825 cum/day and 935 cum/day respectively. Test data of Aquifer performance reveals that the 98 % recovery attained within 30 minutes after pumping stopped. It is clear that the aquifer replenishes quickly. Since the plant site is located in the Gangetic Older alluvial plain. As per CGWB report, the Gangetic plain has very good ground water potential and the transmissivity value varies in the range of 500 to 3000 sq.m./day. Considering all the above, there would not be any adverse impact on ground water system.

It is recommended that the alternate pumping of the tube well would not make any adverse impact in and around the plant site.

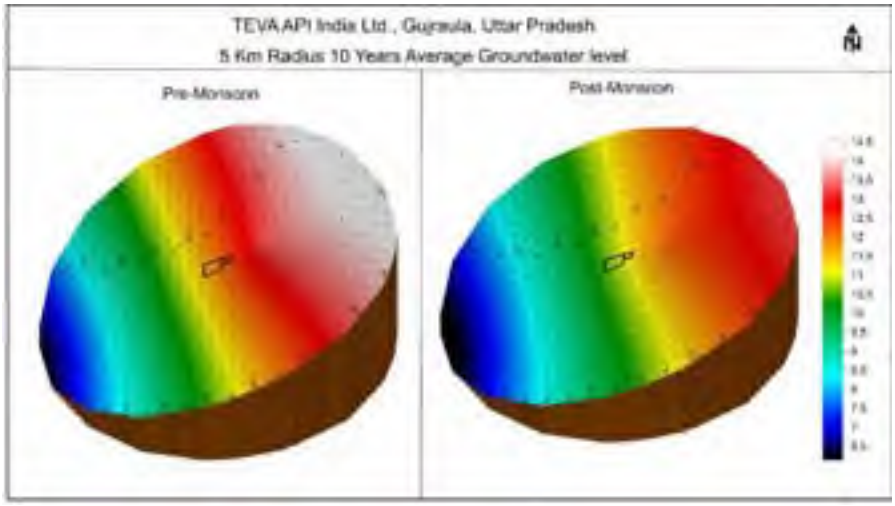


Figure 43: 3-D Model of Average Ground Water Level

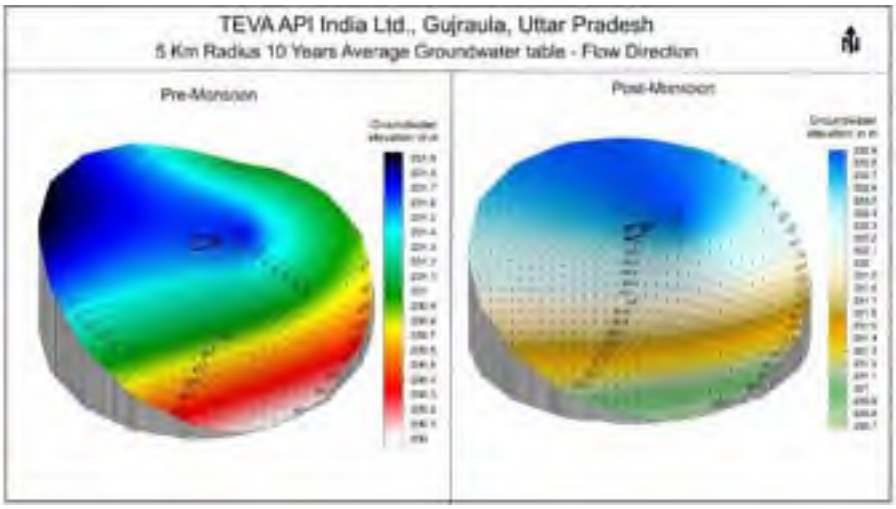


Figure 44: 3-D Model of Ground Water Table Flow Direction

The 10 years average ground water level model indicates that the lowest ground water level is observed in the western side. The influence of Ganga River in the western side of plant area ameliorates the ground water level in the area.

The 10 years average ground water elevation model indicates that the ground water flow pattern is different. During the pre- monsoon period, steep flow is observed. The steep ground water flow indicates that the ground water pumping is more in study area (5 km radius).

In the plant, ground water table is moderate which indicates the ground water withdrawal is moderate. The pumping within the plant is not making adverse impact.

7.2 Ground Water Potential – As Per CGWA Assessment

As per the ground water resource estimation (CGWB Report) the Gajraula Block has been categorized as "Over Exploited Taluk" where the stage of ground water development more than 100%.

Table 15: Groundwater Resource (2017) (Ha m)

Block	Net Annual GW availability HAM	Existing Gross Ground Water Draft for irrigation	Existing Gross Ground Water Draft for domestic and industrial water supply	Existing Gross Ground Water Draft for All uses	Provision for domestic, and industrial requirement supply to 2025	Net Ground Water Availability for future irrigation development	Stage of Ground Water Development (%)
Gajraula	6017.68	6029.65	614.89	6644.54	734.09	-746.05	110.42

7.3 Socio-Economic Aspects

The Socio-Economic aspect for the current study was assessed within a study area of 5 km from the facility of Teva API India Limited, which is located within the jurisdiction of Nagar Palika Parishad, Gajraula, District Amroha (Jyotiba Phule Nagar), State Uttar Pradesh. The project site is located in an industrial area and is surrounded by few settlements and agricultural land is there. The data on the socioeconomics within the defined study area was obtained from the Census of India 2011 of District Amroha of State Uttar Pradesh. Three Tehsils administer about 23 villages within the study area. The administrative setup of the study area is as found in Table below.

Table 16: Administrative Setup of Study Area

S. No.	District	Tehsil	Village
1	Jyotiba Phule Nagar	Amroha	Majhola
2			Tarapur
3		Dhanaura	Ahraula Tejvan
4			Barsabad
5			Chaki Khera
6			Faundapur
7			Gajraula
8			Khedki Khader
9			Kirpa Nathpur
10			Kumrala Bhadurpur
11			Salempur Gosain
12			Sihali Gosain
13			Baseli
14		Hasanpur	Bhekanpur Shomali
15			Chhoya
16			Chobara
17			Daudpur Buzurg
18			Firozpur Gandawali
19			Khanpur
20			Sadullapur
21			Shahbazpur Dor
22			Sultanpur Mollvi
23			Tigriya Khadar

Source: Census of India 2011

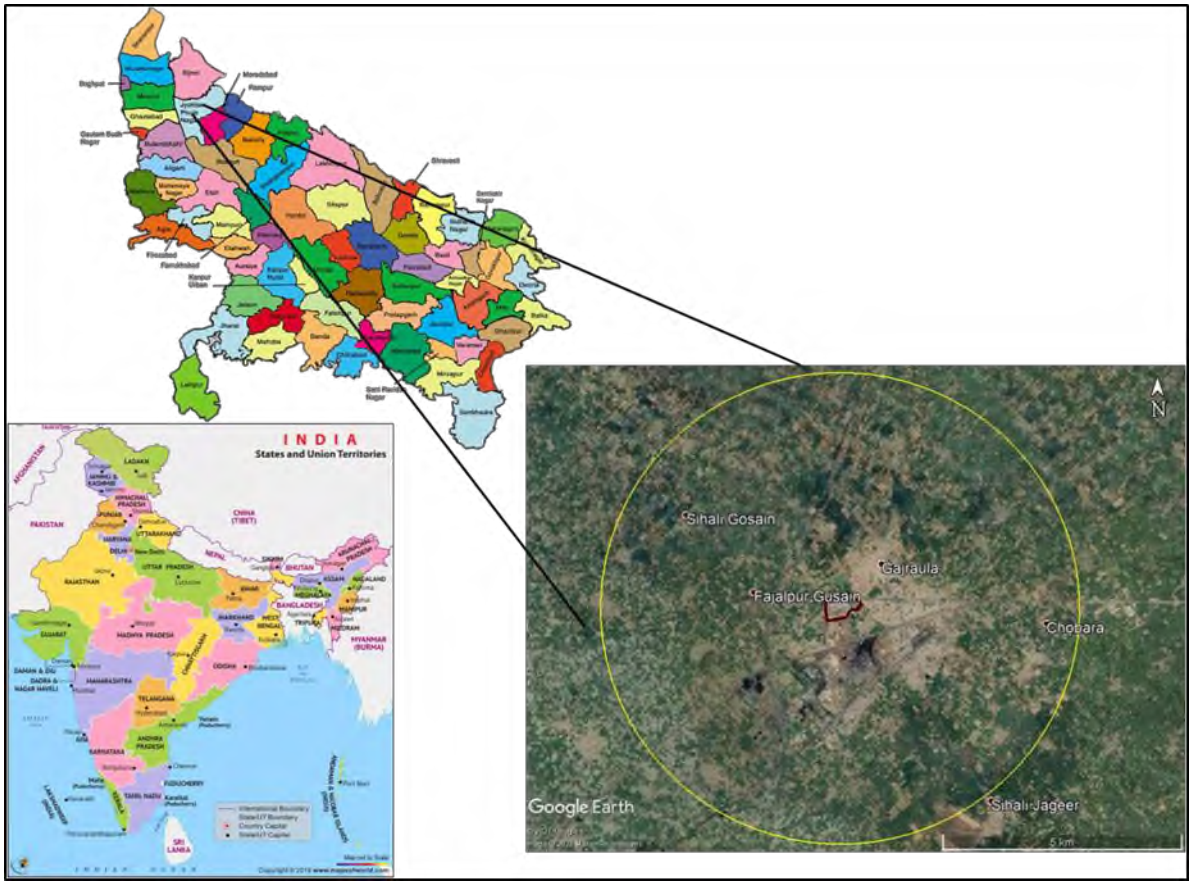


Figure 45: Study Area (5 km Radius)

7.3.1 Settlements and Population Dynamics around Project Area

The Cumulative population in the study area is 92,381 with 48,549 males and 43,832 females. The children population below 6 years old was found to be 14,214, which was 15.38% of the total population. The total households within the study area are 17,009.The major source of livelihood in the study area is agriculture and allied activities. Hinduism is the majority religion professed by the study area population, followed by Islam and Christianity.

The literacy percentage within the study area amounted to 69.06%, where national literacy rate was at 64.8% and state's literacy rate of 67.68%, which exemplifies that the study area upholds higher literacy rate than the national literacy rate.

The major crops that are grown in the region are Rice, Wheat, Maize, Jawar, Bajara, Sugarcane, Pigeon Pea, Urad Dal, and other vegetable such as potato and onion. Besides crops, horticultural plantations are also practices in the region for Mango, Guava, and Lemon. The above mentioned crops and horticultural plantation, it can be inferred that the water demand would increase further causing depletion of groundwater source. For this reason, options shall be explored to practice integrated agriculture irrigation.

The Socio-economic condition of the people is not very encouraging as most of the families of the study area are involved in agricultural profession. As the major livelihood within the study area is agriculture, there is a major dependence on groundwater for irrigation purpose, which has put immense stress on the groundwater, eventually affecting the agriculture practices. Milk & dairy products are attracting the attention of the peoples for employment in villages and Cooperative Societies are associating them with it.

7.3.2 Dependency on Sources of Water (surface or sub-surface)

The Study Area falls within the Gajraula Watershed and it is found that the watershed has about 45 defunct well. In addition, the area has experienced excessive groundwater abstraction, which has resulted in depletion of groundwater, which has resulted in the defunct wells. Besides the defunct wells, there are 50 wells and few lakes.

The project is located in an area which is already over-exploited, means stress on water. Due to industrial growth, local population is also growing and increased community water needs for drinking and sanitation purposes.

The people in this region depend on surface water and groundwater, which are served via tube wells to villages. During site visit, few ground water abstraction wells such as the tube wells are observed. People use the water for both potable and non-potable purposes. Besides the residence in the region, the industries and commercial businesses also depend on groundwater. Drip irrigation, furrow irrigation, sprinkling and ditches irrigation were observed within the study area for irrigating the close row crops. Farmers are using tube well in downside from surface level. The Ganga River is flowing along the western side of study area, at distance of around 6 km, therefore during flooding; surface water contributes to recharge the sub-surface strata.

7.3.3 Groundwater uses

The major ground water uses in the Gajraula block area are industrial, domestic and irrigation. All these requirements are depends on groundwater due to non-availability of canal network system. During fieldwork, it was observed that the vast area is under sugar cane cultivation, wheat, rice, sunflower, mango and mentha. Out of this sugarcane and rice has required more water therefore this requirement is fulfilled by through drip irrigation methods. In study area, also observed some drip irrigation, furrow irrigation, sprinkling and ditches irrigation along the close row crops. Farmers are using tube wells for irrigation.

7.3.4 Improvement/Decline in Agricultural Yield in last 5 years & likely impact after NOC

Improvement in agricultural is due to underlying facts – change in land use pattern and availability of water. Upon consultation with farmers & other peoples as well as visual interpretation, it can be inferred that the study area is 80 % covered by agricultural land. The study area has shown considerable improvement in the agricultural yield in the past 5 years. The industries in the area continuously withdraw groundwater for their operational and domestic usage. However, the quantity

capacity of 10 KL/day is installed at the TEVA site for the drying of MEE concentrate. MEE concentrate is converted into powder form by ATFD plant. Condensate from ATFD is used in the cooling tower after polished R.O and the powder from ATFD plant is packed in double-lined poly-bags and shifted to the Hazardous room for disposal to TSDF.

Mechanical Vapor Re-compressor Evaporator

Multiple Effect Evaporator

Agitated Thin Film Dryer

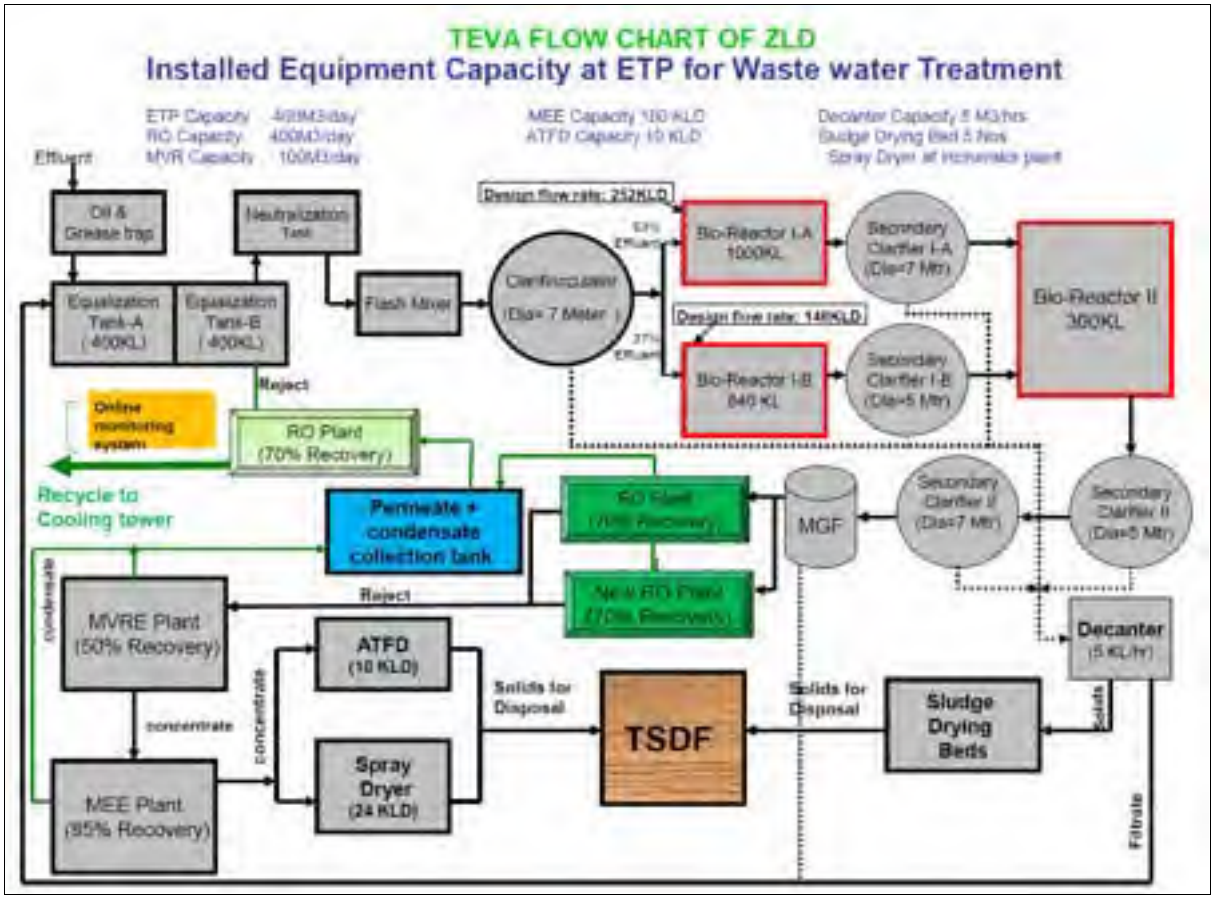
Sewage Treatment Plant –

Primary treatment: STP consists of Oil Skimmer and Equalization tank. The heavy solids settle to the bottom of the tank and the oil, grease and lighter solids float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to secondary treatment.

Secondary treatment: After primary treatment, the sewage water goes into the biological tank. The secondary treatment removes the dissolved and suspended biological matter. It is typically performed by indigenous, water-borne micro-organisms in a managed habitat. Secondary treatment may require a separation process called secondary clarifier or tube settler to remove the micro-organisms from the treated water prior to discharge or tertiary treatment.

Tertiary Treatment: STP consists of multi-grade filter and activated carbon after the secondary treatment. Tertiary Treatment removes the suspended particle, odour and color prior to discharge the final water. In a multi-grade filter or pressure sand filter, water is passed through multi layers of filter media, consisting graded sand, pebbles and gravels layers. The wastes in the water are captured in the media bed and filtered water passes into the discharge manifold at the bottom of the tanks. STP water

is further treated using the polisher RO plant and this recycled water is used in the cooling towers and gardening purpose in house.



8.2 Feasibility of Rain Water Harvesting (Details of Water Conservation Measures)

Rainwater harvesting is the deliberate collection of storage of rainwater that runs off on natural or manmade catchment areas. Catchment includes rooftops, paved areas, vegetative areas, rocky surface or hill slopes or artificially prepared impervious / semi-pervious land surface. The amount of water harvested depends on the frequency and intensity of rainfall, catchment characteristics, water demands and how much runoff occurs and how quickly the water infiltrate through the subsoil and percolate down to recharge the aquifers. Moreover, in urban areas, adequate space for surface storage is not available, water levels are deep enough to accommodate additional rainwater to recharge the aquifers, rooftop and runoff rainwater harvesting is ideal solution to solve the water supply problems.

Advantages of Rainwater Harvesting:

- To meet the ever-increasing demand for water. Water harvesting to recharge the ground water enhances the availability of ground water at specific place and time.

- To reduce the runoff which chokes storm drains and to avoid flooding of roads and streams
- To improve the ground water level
- To reduce ground water pollution and improve the quality of ground water through dilution.
- Reduce the power consumption for pumping of ground water.
- Reduce soil erosion in rural and urban areas
- Rooftop harvesting is less expensive, easy to construct, operate and maintain.

Design Considerations:

There are three most important components, which need to be evaluated for designing the rainwater harvesting structures are;

1) Hydrogeology of the area including nature and extent of aquifer, soil cover, topography, depth to water levels
2) Area contributing for rainfall, which includes land use pattern such as, roof area, paved and asphalt area, green belt area and open / vacant area.
3) Hydro-meteorological characters like rainfall duration, general pattern and intensity of rainfall.

8.2.1 Rainwater Harvesting

Many surface and subsurface recharging measures are possible depending upon the site conditions. The specific recharge measures are to be selected depending on the soil characteristics, lithology and nature of the aquifer material, pre- and post-monsoon rainfall and ground water level. The average ground water level in the plant site clearly indicates that the ground water level in the study area is moderately deep. **As per the CGWB Guidelines, no ground water recharge measures have to be under taken in the highly polluting industries**. Since the plant is pharmaceutical industry, which is polluting industry, ground water recharge measures have not been suggested. Hence, surface storage techniques such as roof water harvesting (sump collection) and Lined Storage pond with draw well have been suggested. Existing recharge pits should be converting into the sump tank. However, the industry has installed ground water recharge structures within the plant site. That structure should be converted into surface water harvesting structures (storage pond).

The estimation of run-off from the plant has been assessed. Based on vacant, roof top area and the monthly rainfall, the storage structures and percolation pond have been contemplated.

8.2.2 Rainfall Frequency Analysis

Rainfall of varying intensities and varying duration occurs from time to time. In order to understand this, it is necessary to determine the probability of occurrence of a particular rainfall event. This is achieved through frequency analysis of rainfall data

Monthly Rainfall Data for the past 25 years in respect of the plant site was analyzed and the

probability of rainfall occurrence for 50%, 75% and 90% dependability were analyzed using **Weibull's method**. The results of rainfall frequency analysis are given below.

1.	50 % dependable rainfall	816.1 mm, 2017
2.	75 % dependable rainfall	722.5 mm, 2009
3.	90 % dependable rainfall	623.6 mm, 2014

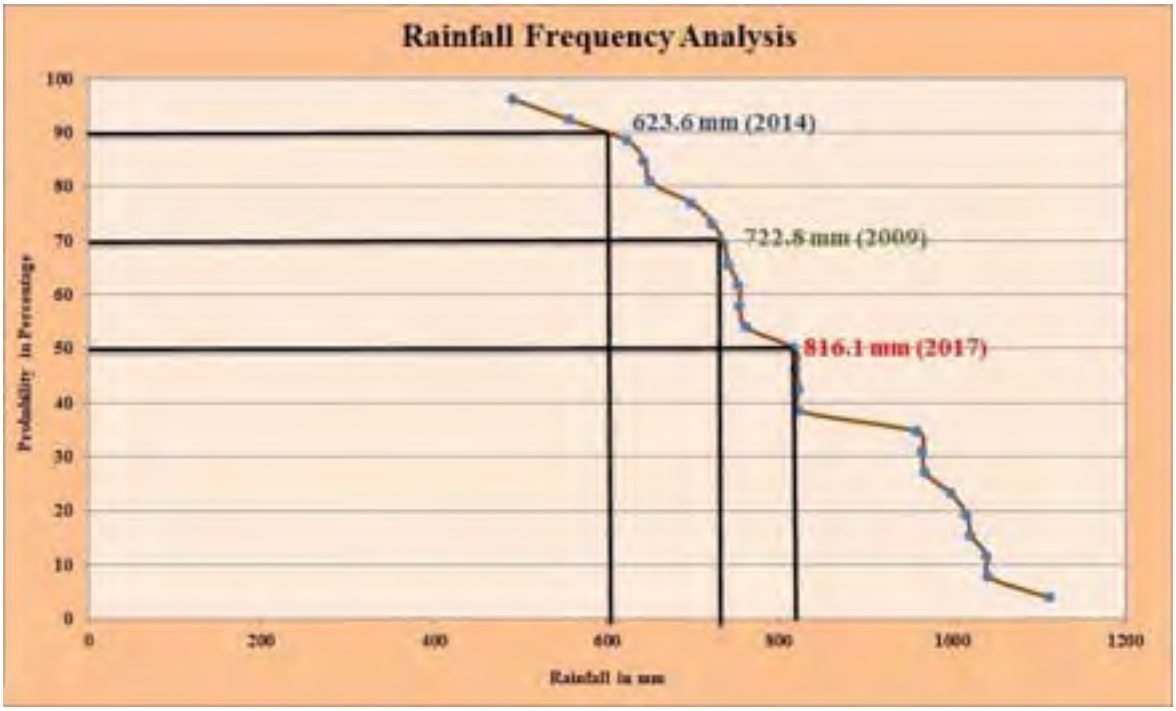


Figure 46: Rainfall Frequency Analysis

The 70% rainfall dependability is considered for runoff calculation from the plant site the 70% dependable monthly rainfall of the year 2009 has been taken up for the runoff estimation. Monthly rainfall for the year 2009 (70% rainfall dependable year) is as follows

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total mm
4.4	5.5	6.5	5.6	61.2	17.7	145.5	191.3	227.3	41.6	14.3	1.9	722.8

8.2.3 Estimation of Monthly Run-Off from the Plant Site

For the estimation, 25 years monthly normal rainfall has been considered. The run-off from the plant site has been estimated based on Rational method. The Co-efficient used to estimate the Run-Off from the different surfaces is as follows. The co-efficient are considered are as per the CGWA Guidelines.

Catchment Area	**Co-efficient**
Roof Area	0.85
Asphalted and Paved Area	0.65
Green Belt Area	0.15
Open and Vacant Area	0.20

- Volume of rainwater that can be collected from the plant site has been estimated from the monthly normal rainfall.
- Vacant, Green belt area, Roof top area and paved area of the plant site have been considered for the run off estimation and conservation measures.

Table 17: Area Details for Catchments

Sr. No.	**Catchments**	**Area in Sq.m**
1	Roof area of the buildings and sheds	15737.74
2	Road, asphalt and parking area	10895.05
3	Green belt area	87109.81
4	Open land / Vacant Area	138707.07
	Total Area	**252449.67**

Pre-Plant Run-Off –

- Rational method has been used to estimate the Run-Off for the plant site.
- Run-Off after commissioning of the plant has been estimated
- The volume of water that is being generated after natural recharge before commissioning has been estimated as 35287 CUM/Year.

Table 18: Predicted Pre Plant Run – Off

Type of Area	Area in Sq.m		Runoff co-efficient	Runoff from Different Land surface in CUM
Total area (m^2)	252450		0.20	35287
Total Runoff	In Million litres / Year	**35.29**	In CUM	**35287**
Month	Monthly rainfall (mm)	Number of Rainy days	Pre- Plant Runoff in CUM	
January	4.4	1	0	
February	5.5	1	0	
March	6.5	2	0	
April	5.6	2	0	
May	61.2	6	3090	
June	17.7	4	894	
July	145.5	8	7346	
August	191.3	9	9659	
September	227.3	12	11476	
October	41.6	7	2100	
November	14.3	2	722	
December	1.9	2	0	
Total	**722.8**	**56**	**35287**	
In ML/YR			**35**	
Note: More than 10 mm of Rainfall is considered for runoff estimation due to initial interception				
Runoff Co-efficient: Manual of Artificial Recharge of Ground Water, (CGWB,2007)				

Post-Construction Run-Off –

The same rainfall and the land area have been taken up for the estimation of Run-Off for the prediction from the plant site after construction. As the vacant exposed land would be converted into built up land, the natural recharge that had taken place during the pre-construction period would not occur and hence there would be meagre infiltration. The losses such as percolation, evaporation and other unforeseen lose have been considered. Predicted Post Plant Run-Off from different surfaces:

Table 19: Predicted Post – Construction Run – Off

Type of Area	Area in Sq.m		Runoff co-efficient		Runoff from Different Land surface in CUM	
Roof Area (m²)	15738		0.85		9349	
Asphalt area and Paved area (m²)	10895		0.65		4949	
Green Belt area (m²)	87110		0.15		9133	
Vacant area (m²)	138707		0.20		19389	
Total Runoff	In Million liters / Year		**42.82**	In CUM	**42820**	
Month	Monthly rainfall (mm)	Number of Rainy days	Runoff from Runoff area in CUM	Runoff from Runoff Asphalt and paved area CUM	Runoff from Green Belt area in CUM	Runoff from Vacant area in CUM
January	4.4	1	0	0	0	0
February	5.5	1	0	0	0	0
March	6.5	2	0	0	0	0
April	5.6	2	0	0	0	0
May	61.2	6	819	433	800	1698
June	17.7	4	237	125	231	491
July	145.5	8	1946	1030	1901	4036
August	191.3	9	2559	1355	2500	5307
September	227.3	12	3041	1610	2970	6306
October	41.6	7	556	295	544	1154
November	14.3	2	191	101	187	397
December	1.9	2	0	0	0	0
Total	**722.8**	**56**	**9349**	**4949**	**9133**	**19389**
In ML/YR			**9.35**	**4.95**	**9.13**	**19.39**
Note: More than 10 mm of Rainfall is considered for runoff estimation due to initial interception						
Runoff Co-efficient: Manual of Artificial Recharge of Ground Water, (CGWB,2007)						

The estimated pre- and post-plant Run-Off is as follows:

Estimated Pre Plant-Runoff from the Plant Site	35287	Cum/Year
Estimated Post Plant Runoff from the Plant Site	42820	Cum/Year
Difference in Pre and Post Plant Runoff	7533	Cum/Year

Excess Run-Off of 7533 cum/year is being generated in the plant site during post plant. The excess Run-Off that is being generated can be harvested within the Plant site to maintain the hydrological balance.

8.2.4 Conservation Measures

Roof top collection:

- The roof water collection is estimated as **2678 CUM/Year.**

Harvesting measures in Plant Site

- Five nos. sumps (Size 3m depth x 5m length x 6 m width) with a total capacity of **450 CUM** have been suggested to capture the roof water.

The rainwater that is being collected from the roof is proposed to be passed through a filter media. The proposed filter media is multilayer vertical filters. The size of the filter media is as follows:

- The size of the multilayer vertical filter is 2m x 2m x 1.2m
- The outlet pipes from the roof area will be connected with 115 mm diameter PVC pipe allowing the water to pass through the filter media before storing in the sump.

Table 20: Calculation of Rainwater Harvesting – Sump Collection

Description	Depth in m	Length in m	Width in m	Number of Sump	Total Capacity of Sump in CUM	Estimated Roof Water Harvesting in CUM/Year
Roof Top collection Sump Details	3.0	5.0	6.0	5	450	**2678**
Total Estimated Roof Water Harvesting in CUM/Year						**2678**

Total Roof Area in Sq.m	15738		Runoff co-efficient	0.85	
Month	Monthly rainfall (mm)	Number of Rainy days	Runoff from the Site in CUM	Estimated Roof Water Harvesting (Sump) in CUM/Month	Surplus runoff after Sump collection in CUM
January	4.4	1	0	0	0
February	5.5	1	0	0	0
March	6.5	2	0	0	0
April	5.6	2	0	0	0
May	61.2	6	819	450	369

June	17.7	4	237	237	0
July	145.5	8	1946	450	1496
August	191.3	9	2559	450	2109
September	227.3	12	3041	450	2591
October	41.6	7	556	450	106
November	14.3	2	191	191	0
December	1.9	2	0	0	0
Total	**722.8**	**56**	**9349**	**2678**	**6671**
In ML/YR			**9.35**	**2.68**	**6.67**
Note: More than 10 mm of Rainfall is considered for runoff estimation due to initial interception					

Storage Pond and Percolation Pond:

The surplus Run-Off after roof top collection and from the green belt, asphalt area has been estimated.

Sr. No.	**Run –off from**	**Units - cum/year**
1	Roof top collection	6671
2	Asphalt paved area	4949
3	Green belt and vacant area	28552
	Total	**40142**

Two lined storage ponds with following size are to be created in the Plant Area to capture the Run-Off

Description	**Depth in m**	**Length in m**	**Width in m**	**Capacity of Pond in CUM**	**Total Capacity in CUM**
Storage Pond 1	2	15	20	600	1200
Storage Pond 2	2	15	20	600	

- The total capacity of the pond is **1200 CUM/Year**
- The rainwater from the above area is proposed to be taken to the lined storage pond with draw well is proposed in the outfall location of the storm water drain.
- The storage pond collection (including the surplus from the roof top collection) is estimated as **7833 CUM / Year**
- Evaporation losses (monthly evaporation has been considered – 10%) are estimated as **783 CUM/Year.**
- Quantity of water added to the ground water reservoir from the lined storage pond is estimated, as nil the pond is lined no infiltration.

- The calculation of the above is given below:
- The surplus flow from the plant site and the storage pond is proposed to let out through open channel to the streamlet and nearby tanks for recharge the ground water.
- The schematic diagram of lined storage pond with draw well is presented in **Annexure 4.**

Table 21: Lined Storage Pond with Draw Well

Lined Storage pond with Draw well

Description	Depth in m	Dia in m	Circumference in m	Transmissivity Sq.m / Day (Up to 5 m Depth)	Estimated Recharge Volume in CUM / Day
Recharge Capacity of Draw well cum Recharge Well			0		0

Storage Pond details (Bottom Plugged)

Description	Depth in m	Length in m	Width in m		Capacity of Pond in CUM	Total Capacity in CUM	
Storage Pond 1	2	15	20		600	1200	
Storage Pond 2	2	15	20		600		
Total Recharge Capacity of Draw well							0

Total Green belt area in Sq.m	87,110	Total vacant area in Sq.m	1,38,707	Asphalt and Paved area in Sq.m	10,895	Runoff co-efficient	0.65	Roof Area in Sq.m	15,738	Runoff co-efficient	0.85		Number of Draw well	2

Month	Monthly rainfall (mm)	Number of Rainy Days	Runoff from the Green belt vacant area in CUM	Runoff from Roof area in Cum.	Runoff from Paved and Asphalt area in CUM	Opening Water Volume in the Pond - Beginning of the Month (CUM)	Water available to the Pond Storage (CUM)	Water Stored in the Pond in CUM	Evaporation Losses in CUM (10 %)	Estimated Recharge Volume in Cum	Water available in the Pond after Evap. and recharge	Estimated Draw well usage in CUM (50%)	Water available in the Pond During the Month	Surplus runoff after recharge in CUM
January	4.4	1.0	0	0	0	11	11	12	1	0	12	11	1	0
February	5.5	1.0	0	0	0	1	1	1	0	0	1	1	0	0
March	6.5	2.0	0	0	0	0	0	0	0	0	0	0	0	0
April	5.6	2.0	0	0	0	0	0	0	0	0	0	0	0	0
May	61.2	6.0	2496	389	433	0	2889	1299	129	0	1560	672	108	2109
June	77.7	4.0	722	0	125	108	955	903	90	0	859	773	86	0
July	145.5	8.0	5837	1496	1030	86	8549	1200	120	0	1080	672	108	7349
August	191.3	8.0	7807	2109	1350	108	11373	1200	120	0	1080	672	108	10179
September	227.3	12.0	9275	2591	1610	108	13585	1200	120	0	1080	672	108	12385
October	41.6	7.0	1698	730	295	108	2207	1200	120	0	1080	672	108	1007
November	14.3	2.0	584	0	101	108	793	793	79	0	714	643	71	0
December	1.9	2.0	0	0	0	71	71	71	7	0	64	51	13	0
Total	**722.6**	**56**	**28522**	**6671**	**4949**	**711**	**40853**	**7833**	**783**	**0**	**7050**	**6339**		**33020**
In ML/YR			**28.52**	**6.67**	**4.95**		**40.85**	**7.83**	**0.78**	**0.00**	**7.05**	**6.34**		**33.02**

Note: More than 10 mm of Rainfall is considered for runoff estimation due to initial interception

Rain water harvesting imitative taken in the plant:

Strom water drainage within the plant site has been created to drain the storm water. After the ground water clearance, the plant proponent has installed ground water recharge structures (Recharge pit) within the plant site.

It is proposed to convert the recharge pits in the sump as no ground water recharge structures should be created in the highly polluting industrial areas.

Photograph showing the recharge pit and SWD within the Plant site.

8.3 Total Water Balance Chart (usage of water for various processes)

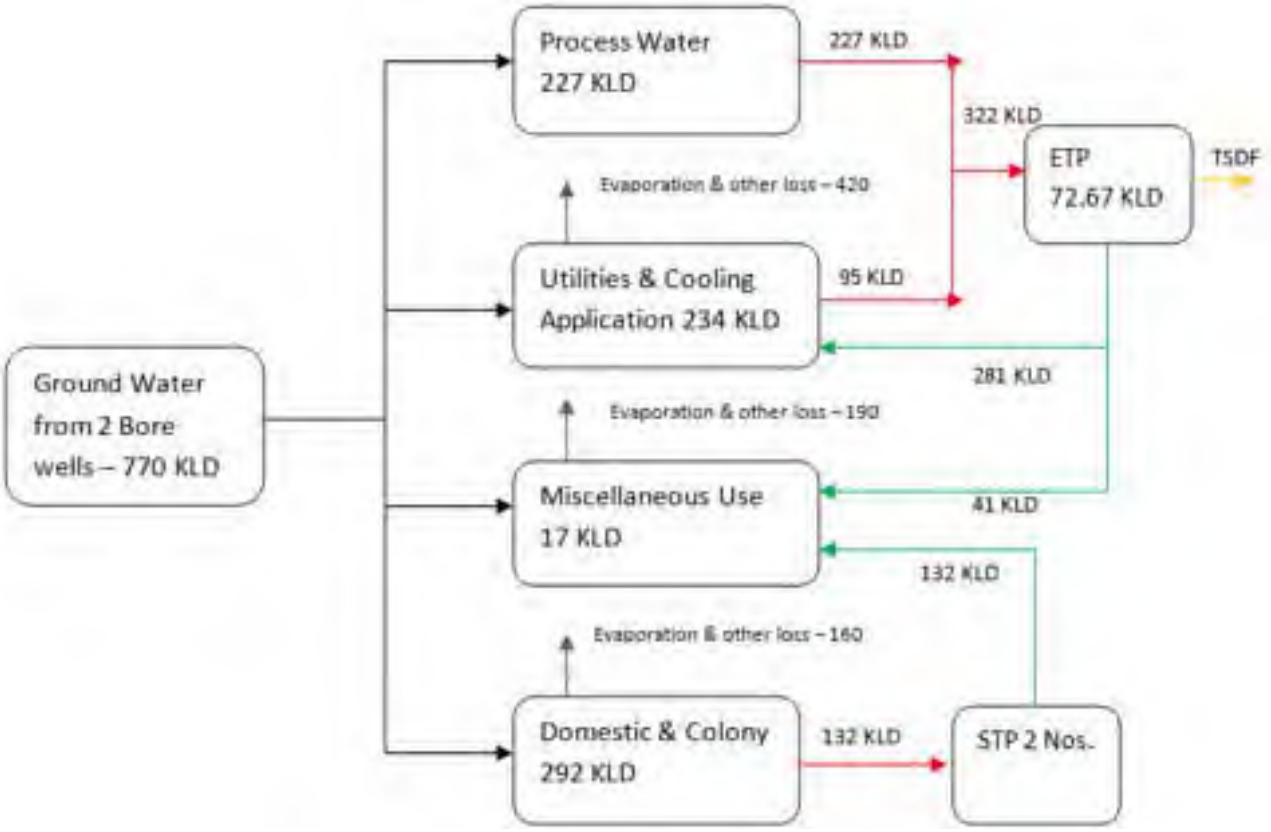


Figure 47: Total Water Balance Chart

Waste Water

Recycled Water

Water Distribution

Evaporation & Loss

Concentrated salt sent to TSDF

9 CONCLUSION AND RECOMMENDATION

This study was undertaken for hydrogeology and ground water impact assessment as per the Jal Shakti Notification 24th Sept. 2020 for regulating ground water development and management by way of NOC.

This report provides the project background, hydrology & hydrogeology of the study area, comprehensive hydrogeological assessment, ground water development, impact assessment, rainwater harvesting programme, water conservation and water quality.

- The project site is located in Gajraula block of Amroha district of Uttar Pradesh and site fall on 53L/1 toposheet.
- The project site and surrounding area come under gangetic plain with flat topography.
- The project site is elevated on 212 m and 207 m, as maximum and minimum respectively.
- Study area is not consisting of major drainage network but Bagar nadi at distance 2.9 km and Chhoya nalla is far away. Ganga River is flowing on western side at distance 7.5 km.
- The surface water flow indicates that the study area is plain and there is no definite flow direction.
- The 25 years rainfall considers for project site is 821.5 mm (1994 – 2018) and it is clear that the south west monsoon is effective in the study area.
- The satellite imagery show the most significantly land use of the study area is crop land then follow the built up and few fallow land. From the land use study, it show irrigation is based on deeper aquifer.
- Site geology consists of Grey micaceous fine-medium grained sand & grey slit – clay (Newer Alluvium) and Silt-Clay with Kankar with micaceous sand (Older Alluvium) but older alluvium is more prominent at project site.
- The alluvial plain of older deep aquifer is the main groundwater flow system at site.
- Ground water occurs in the pore spaces of the unconsolidated alluvial sediments in the zone of saturation. The near surface sediments are dominantly sandy clays and clays, which grade into sediments having varied proportions of sand and clays.
- To prepare the hydrograph from the water levels of Piezometer 1 & 2, it shows that trend is fall in both piezometers are as -0.221 m and -0.265 m. The decline trend of ground water level observed in the past 2 years in decline. The decline is very less.
- Also consider the two observation wells of State & CGWB, it shows that trend is fall -0.474 m. The least fall of ground water level in overall season, indicates that the pumping of ground water for irrigation is comparatively less.
- The groundwater level in the project site falls in 11-13 m. during pre-monsoon whereas in post-monsoon water level up in the range of 9-11 m.
- The flow of ground water is perpendicular to contours therefore it show flow direction towards East. It is clear no any impacts on nearby irrigation well. After the rainy season, the flow direction turned to the south west direction.

- As based on average pre-monsoon ground water table, flow towards east therefore it indicates that there is surface and ground water interaction. Also it shows ground water table is gentle.
- Average post monsoon ground water table, flow towards south west and part of ground water flow towards east which indicates that there is ground water divide in the study area.
- As per the CGWB report Gajraula block has been characterised as "Over Exploited Taluka" where the stage of ground water development more than 100%.
- Based on the pumping well data, it reveals that the drawdown was very low. Therefore would not create any adverse impact on the ground water regime.
- The drilling depths of borewells are 133 m of tube well-1 and 144 m of tube well-2, its distance are 112m apart. The hydraulic gradient is 0.011 m.
- As per logging data, potential aquifer is in the depth of 98 – 132 m in tube well-1 (SWL – 8.5 m) and 72 – 123 m in tube well-2 (SWL -7.3 m). It clearly indicates deeper aquifer more than 90 m depths. The aquifer is encountered as fine sand, medium sand, medium sand with Kankar.
- The yield of the 2 tube wells is 1760 m3/day and the estimated drawdown for the pumping is around 0.72 m in a radius of influence of 1.21 km. means the drawdown of 0.10 m observed outside the plant site when both the tube wells are pumped The required quantity is 1455 m3/day.
- The pumping of 1455 m3/day of water from the deeper aquifer may not create cone of influence in the drinking water sources located in the nearby village. Once the pumping of the tube wells in the plant is stopped, the DWLRs show that the reoperation in the piezometers is rapid and attain to original ground water level.
- Optimum yield of the tube well is 1148 cum/day. If the pump runs for 5 hours, with a discharge capacity of 3825 lpm / 3 m drawdown, the tube well can yield 1148 cum/day. The current yield of tube well 1 and tube well 2 are 825 cum/day and 935 cum/day, which are under the safe yield of 1148 cum/day of the study area.
- To check drawdown and radius of influence impact at the project site and surrounding area use two scenarios, first scenario indicates radius of influence is 0.80 km and its drawdown 0.51 m and second scenario indicates radius of influence is 1.21 km and its drawdown 0.72 m.
- The aquifer performance test data reveals that the 98 % recovery attained within 30 m after pumping stopped. It is clear that the aquifer replenishes quickly. Since the plant site is located in the Gangetic Older alluvial plain.
- As per CGWB report the Gangetic plain has very good ground water potential and the transmissivity values varies in the range of 500 to 3000 sq.m./day
- The ground water elevation model has indicate flow pattern is different, during pre-monsoon period flow is observed steep means ground water pumping is more in 5 km radius area.
- The digital elevation model of micro-watershed is showing multiple aquifer system of 300 m including three aquifers with inter layering of sand and clay. It indicates Ist aquifer with moderate thickness tapped for drinking as well as irrigation, IInd aquifer with moderate

thickness tapped for irrigation and III[rd] with very good thickness and tapped for irrigation and industrial usage.

- The estimated in-storage in the aquifer of micro-watershed is around 50.443 MCM at present. Predicted pre monsoon ground water level during 2023 year will be 12.65 m and storage of ground water will be 49.993 MCM. The difference of storage volume will be -0.450 MCM for the 5-year period. Also, during 2028 year ground water level will be 13.66 m and the storage volume will be 49.542 MCM. The difference in the storage volume will be -0.901 MCM for the 10-year period. Considering the above the aquifer of the micro watershed is "safe".
- The modeling study reveals that the aquifer of the study area, with 10% increase of groundwater withdrawal by 2028 as compared to present situation will still remain in "safe" status. However, Ground water recharge measures need to be taken to protect the aquifer.
- Calculated the pre and post plant site runoff were analysed by Weibull's method using 70% rainfall dependability. In this calculation, it considers monthly rainfall of 25 years. Estimated pre runoff is 35287 cum/year and post runoff is 42820 cum/year difference is getting 7533 cum/year. The excess runoff that is being generated can be harvested within the Plant site to maintain the hydrological balance.
- The roof water collection is estimated at 2678 cum/year and it will collects in five sumps of 450 cum has been suggested.
- The collection of water from surplus roof top water, asphalt paved areas, green belt & vacant land is estimated at 40142 cum/year and all these water will collect in two storage ponds of 1200 cum.
- The extraction of ground water at plant site is from deeper aquifer.
- The ground water table is moderate in the plant area which indicates ground water withdrawal is moderate therefore pumping is not making any adverse impact.

9.1 Recommendations

- The pumping test data reveals that the drawdown was very low. That clearly indicates that the drawal of 1455 cum/day. Therefore would not create advance impact on the ground water regime.
- The safe yield of the 2 tube wells is 1760 cum/day and the estimated drawdown for the pumping wells is around 0.72 m.
- Due to pumping of 1455 cum/day water from the deeper aquifer may not create cone of influence in the drinking water sources located in the nearby village.
- It is recommended that the alternate pumping of the tube well would not make any adverse impact in and around the plant site.
- The modelling study reveals that the aquifer of the study area the drawal of ground water with the present status and 10 % increase by 2028 is safe.
- The predicted post project runoff is around 42820 cum/year.

- The estimated rainwater harvesting with the project site is 9017 cum/year (Since the area availability within the project site the RWH could not be increased).
- The estimated water harvested in the outside pond and other RWH is around 33020 cum/year.
- The RWH volume is 42037 cum/year.
- As the runoff estimated is only 42820 cum/year, the entire quantity of harvesting within the project site is not possible.
- Hence, industry is proposed to take up the ponds / water bodies available within 2 km radius of the plant and provide RWH measures.

Photographs of two-level gates at storm water outfall

Storm water outfall is provided with two-level gates and valves to avoid any accidental release if any, entering into the environment

Photographs showing provision of storm water drain back to ETP

Rain water collection tanks (Two tanks)

Rainwater collection tanks

Provision of submersible pump for transferring rain water to ETP

Pr

Transferring line to ETP

TAPI
Teva Active Pharmaceutical Ingredients

TAIL/GAJ/E&S/UPPCB/2020/107 **Date: - 03/12/2020**

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor-246701 (U.P)

Subject:-Regarding follow-up on amendment in Water consent No. - 68215/UPPCB/Bijnore (UPPCBRO) / CTO/Water/JYOTIBA PHULE NAGAR/2019.

Reference Letter No. :- Teva's earlier letter no. TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020

Dear Sir,

We are thankful to you & your good office for the renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 and letter to your good office TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 where we have mentioned the discrepancies that needs correction in the renewed consent order.

Further to this, we would like to inform you that based on our earlier letters, we request you to kindly issue the amended consent letter at the earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1	We are having two nos. of STP, having approved discharge of 100 KLD and 70 KLD for irrigation, as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017.

TEVA

TAPI

Teva Active Pharmaceutical Ingredients

	Kind of Effluent : Domestic Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	In the current renewed Consent order, by mistake we have been issued consent for discharge of 80 KLD against 170 KLD of domestic effluent from STPs. you are hereby requested to please amend the domestic effluent quantity as 170 KLD and use of the same in irrigation.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	As per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, under others category, we are separately treating the Cooling Tower blow down water and Boiler blow down water of 70 KLD in a dedicated WWTP plant and the treated water is used for irrigation. And as per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, we are treating 370 KLD of industrial effluent in the ETP /ZLD and the treated water is recycled back in the Utilities. You are hereby requested to kindly amend the current consent order in line with the previous consent order as follows: - 70 KLD WWTP treated water to be used in irrigation. - 370 KLD of industrial effluent in the ETP /ZLD and treated water to be recycled back in the Utilities.

Your good self is requested to please consider our request mentioned above and grant us the amended Water consent.
We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

For **Teva API India Pvt. Ltd,**

Authorized Signatory

CC:- CEO – 7

teva | api

TAIL/GAJ/E&S/UPPCB/2020/66 Date: -09/07/2020

To
The Chief Environment Officer
U.P Pollution Control Board
Pickup Bhawan, Gomti Nagar
Vibhuti khand, 3rd floor, B-Block
Lucknow--226010

Sub: - Regarding Compliance of Water and Air consent Ref No. - 68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA PHULE NAGAR/2019 and 68214/UPPCB/Bijnore(UPPCBRO)/CTO/Air/JYOTIBA PHULE NAGAR/2019.

Dear Sir,

We are thankful to you & your good office for issuing us renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 where we have mentioned the discrepancies needs to be corrected.

Further to this, we would like to inform you that based on our earlier letter we request you to kindly issue the amended consent letter as earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1 Kind of Effluent : Domestic	We are having two nos of STP, having approved capacity of 100 KLD and 70 KLD as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017,

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

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	Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	you are hereby requested to please amend the domestic effluent quantity for 170 KLD . We have been issued consent of 80 KLD against 170 KLD.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	We are treating the Cooling Tower blow down water and Boiler blow down water separately as per the previous order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017. Cooling Tower (C.T) blowdown water and Cooling Tower blow down water is treated in separate WWTP plant. You are hereby requested to please add 70 KLD WWTP in the present consent order which was missed out in consent order for the current consent order..

Your good self is requested to please consider our request mentioned above and grant us amended Water consent.

We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

For **Teva API India Pvt. Ltd**,

Authorized Signatory 09/07/2020

CC: - R.O UPPCB , Bijnore

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha (Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

teva | api

TAIL/GAJ/E&S/UPPCB/2020/121 **Date: - 24/12/2020**

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor-246701 (U.P)

Subject:-Regarding follow-up on amendment in Water consent No. - 68215/UPPCB/Bijnore (UPPCBRO) / CTO/Water/JYOTIBA PHULE NAGAR/2019.

Reference Letter No. :- Teva's earlier letter no. TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 and letter No. TAIL/GAJ/E&S/UPPCB/2020/107 , 3.12.2020 .

Dear Sir,

We are thankful to you & your good office for the renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 and letter to your good office TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 where we have mentioned the discrepancies that needs correction in the renewed consent order.

Further to this, we would like to inform you that based on our earlier letters, we request you to kindly issue the amended consent letter at the earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1	We are having two nos. of STP, having approved discharge of 100 KLD and 70 KLD for irrigation, as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017.

	Kind of Effluent : Domestic Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	In the current renewed Consent order, by mistake we have been issued consent for discharge of 80 KLD against 170 KLD of domestic effluent from STPs. you are hereby requested to please amend the domestic effluent quantity as 170 KLD and use of the same in irrigation.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	As per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, under others category, we are separately treating the Cooling Tower blow down water and Boiler blow down water of 70 KLD in a dedicated WWTP plant and the treated water is used for irrigation. And as per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, we are treating 370 KLD of industrial effluent in the ETP /ZLD and the treated water is recycled back in the Utilities. You are hereby requested to kindly amend the current consent order in line with the previous consent order as follows: - 70 KLD WWTP treated water to be used in irrigation. - 370 KLD of industrial effluent in the ETP /ZLD and treated water to be recycled back in the Utilities.

Your good self is requested to please consider our request mentioned above and grant us the amended Water consent.
We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

24/12/2020

For **Teva API India Pvt. Ltd,**

Authorized Signatory

CC:- CEO – 7 , UPPCB , Lucknow .

Calibration Certificate of Dust Monitor

Customer Details- Teva API India Pvt.Ltd. Gajraula

Type of Instrument- DCEM 2100 Dust Monitor

Sr. No of Instrument- 15473

Make- Forbes Marshall Pvt. Ltd.

Calibrated on- 03/03/2021 **Validity-** 3 Month

Calibration Due Date -02/06/2021

This Is to certify that Instrument has been calibrated at site by the undersigned ,with the reference to Isokenetic Sampling Result.

Iso kenetic Sampling Result	SPM Analyzer result
116 Mg/Nm3	118 Mg/Nm3

SPM Analyzer Calibrated and all the reading found ok with respect to Iso kenetic result.

NOTE-

- The calibration results reported in this certificate are valid at this time and condition of measurement.
- This report should not be reproduced except in full without our prior permission
- Deviations are permissible to +/- 5 % of full range.

Vivek Srivastava

Calibrated By- Vivek Srivastava

Annexure R-20

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TAIL/GAJ/E&S/UPPCB/2020/54 Date: - 25/06/2020

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor.

Subject: - Submission of form-4 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016,for the financial year 2019-2020.

Dear Sir,

We are enclosing herewith form-4 with required information and annexures, under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for the purpose of annual return for the period of April-2019 to March-2020.

This is for your information & records please.

Thanking you,

Yours's faithfully,

For **Teva API India Pvt. Ltd**,

Authorized Signatory

Encl:-

- **Form-4.**
- **Annexure-I, II, III & IV**
- **Copy of Manifest :- E-waste , Used Oil**
- **Copy of Hazardous waste authorization**
- Hazardous waste manifest

CC:- The chief Environmental officer(circle-7) ,UPPCB, Lucknow

Production details April 2019 to March 2020 - Annexure -I

Product Name	1-Apr-19	1-May-19	1-Jun-19	1-Jul-19	1-Aug-19	1-Sep-19	1-Oct-19	1-Nov-19	1-Dec-19	1-Jan-20	1-Feb-20	1-Mar-20	Total
Famciclovir	0	0	0	597.3	401.5	1184.2	0	0	0	0	1009.73	1295.01	4487.74
Pioglitazone HCl	0	0	0	0	102.3	307.6	0	0	0	308.38	0	0	718.28
Pioglitazone HCl	611	716.8	1021.5	97.6	0	0	409.9	940	0	0	505.57	818.22	5120.59
Ezetimibe	947.2	900.7	1028.35	1127.3	1263.1	784.6	157.1	770.5	1122.6	296.9	0	0	8398.35
Caspofungin Acetate	0.841	4.577	21.268	7.199	0	3.362	4.364	14.113	19.986	9.24	0	1.826	86.776
Pregabalin	3790.85	0	1897.05	1977.4	0	2392.2	3117.6	897.86	0	0	3998.75	3069.15	21140.86
Pregabalin	939.6	4946.9	1178.35	0	0	0	0	0	0	0	0	0	7064.85
Pregabalin	0	0	0	0	538.85	844.4	0	0	339.94	0	0	0	1723.19
Pregabalin new	0	0	693.95	0	2030	0	0	797.05	0	0	0	0	3521
Montelukast Sodium-US	702.35	1041.1			0	0		660.5			465.65		2869.6
Montelukast Sodium	Dry Production		850.2	95.9	0	0	0		395.8	303.1		0	1645
Montelukast Sodium	0	0	0	46.5	301.2	0	0	0	0	0	0	0	347.7
Fluvastatin Sodium	330.8	454.2	0	0	0	0	232.4	1222.4	372.8	0	0	486.7	3099.3
Olanzapine	0	0	205.3	0	0	236.65	274.02	0	0	0	359.1	0	1075.07
Valsartan Azide	1267.13	906.02	1194.41	814.35	1849.2	1462.55	1130.5	737	0	0	0	0	9361.16
Valsartan Azide	0	0	0	0	0	0	0	0	9.48	202.2	210.9	434.5	857.08
Diltiazem HCl	16007.8	3381.6	0	0	0	0	0	5183.7	7906.1	4829.6	0	0	37308.8
Eletriptan HBr	120.5	100.93	0	0	0	0	0	61.07	77.57	0	0	0	360.07
Rosuvastatin	0	0	0	0	0	0	0	0	0	0	45.62	48.7	94.32
CLD CSA	0	0	0	0	0	0	0	0	0	0	0	7570.08	7570.08
Venlafaxine	0	0	0	0	0	0	0	2473.8	6261.3	2510.6	0	6531.9	17777.6
CLP-8	7.425	6.709	7.026	7.476	7.628	7.669	7.852	7.865	0.632	0	0	0	60.282
Pregabalin Crude	1000.51	1593	967.4	0	0			0	0	2537.4			6098.31
Trityl Losartan	0	0	583.45	2121.45	1376.39	766.05	1794.05	1394.2	316.1	959.3	0	0	9310.99
SAS	0	0	900.8	1160.7	232	0	0	0	0	0	0	0	2293.5

ZLD IAA	0	0	0	0	0	0	0	17.7	0	0	0	0	17.7
RML-12	0	0	0	0	26.7	106.45	0	0	0	0	0	0	133.15
Ven-I	1279.95	0	0	0	0	0	0	0	0	0	0	0	1279.95
C6	0	5881.05	3754.1	8139.37	1556.05	7836.15	8271.2	4277.9	1027.6	0	0	0	40743.42
Hydantoic	0	4640.5	8238.6	3385.1	838.3	0	0	0	0	0	0	0	17102.5
Montelukast	0	0	0	0	0	0	0	0	0	0	0	506.5	506.5
Migalastat	Dry Production						1.18	0	0	0	0	0	1.18
Diene-JP	Dry Production							205.5	203.8	207.8	212.1	0	829.2
	27005.956	24574.086	22541.754	19577.65	10523.218	15931.88	15400.17	19661.158	18053.708	12164.52	6807.42	20762.586	213004.1

FORM 4

[See rules 6(5), 13(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS (2019-20)

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility: -	Teva API INDIA PVT LTD, Plot no. A-2,A-2/1,A-2/2 UPSIDC Industrial Area Gajraula ,Amroha U.P 244235 (INDIA) 05924-252591,92,93
2. Authorization No. and Date of issue:-	H-10669 – C-7/HAZ –03/17 – Date of issue :- 14.10.2017
3. Name of the authorized person and full address with telephone, fax number and e-mail:-	Sh. Deepak Kushalnath Shukla, Teva API India Pvt Ltd, A-2 UPSIDC, Ind. Area, Gajraula, Amroha,U.P (INDIA) Phone No: 05924-252202, .E.mail :- DeepakKushalnath.Shukla03 @teva.co.in

4. **Production during the year (product wise), wherever applicable:- Refer the Annexure-I**

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise	**: -**	**Attached as Annexure –II**
2. Quantity dispatched **(i) to disposal facility** **(ii) to recycler or co-processors or pre-processor** **(iii) others**	**:-**	**Attached as Annexure -III**
3. Quantity utilized in-house, if any -	**:-**	NA
4. Quantity in storage at the end of the year: -	**:-**	**Attached as Annexure -IV**

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received -
2. Quantity in stock at the beginning of the year -
3. Quantity treated –
4. Quantity disposed in landfills as such and after treatment –
5. Quantity incinerated (if applicable) -
6. Quantity processed other than specified above -
7. Quantity in storage at the end of the year -

Part C. To be filled by recyclers or co-processors or other users

1. Quantity of waste received during the year –
(i) Domestic sources
(ii) imported (if applicable)
3. Quantity recycled or co-processed or used.
2. Quantity in stock at the beginning of the year –
4. Quantity of products dispatched (wherever applicable) –
5. Quantity of waste generated -
6. Quantity of waste disposed -
7. Quantity re-exported (wherever applicable)-
8. Quantity in storage at the end of the year -

Signature of the Occupier or
Operator of the disposal facility

TEVA API INDIA PVT. LTD.

Date. 26/6/2020

Authorised Signatory

Place. Gujarat

26/06/2020

Annexure-II

Total quantity of waste generated category wise from 1-April 2019 to 31 March 2020			
S.NO	**Type of Hazardous waste**	**Category of waste as per schedule I**	**Quantity Generated (MT)**
1	Process Residue and Wastes	28.1	496.5
2	Concentration or evaporation residue	37.3	846.9
3	Spent Carbon	28.3	21
4	Spent organic solvent	28.6	21.9
5	Chemical sludge from waste water treatment	35.3	436.2
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	40.0
7	Date Expired, Discarded and off specification drugs/Medicines	28.4 , 28.5	35.96
8	Any process or distillation residue	36.1	12.88
9	Oil & Grease skimming	35.4	0.125
10	paint and ink sludge/residue	19	0
Other Recyclable wastes			
11	Used oil	20	1470 kgs
12	E-waste	18	400 kgs
13	Lead Acid Battery	17	1000 Kg
14	Empty Drums,Containers etc (in numbers)	33.1	29215

Annexure-III

Total quantity of waste Dispossed off Category wise from 1-April 2019 to 31 March 2020				
S.NO	**Type of Hazardous waste**	**Category of waste as per schedule I**	**Quantity (MT) Generated**	
1	Process Residue and Wastes	28.1	497.6	Sent to secure landfill in common T.S.D.F,Kanpur , Incinerated TSDF/inhouse
2	Concentration or evaporation residue	37.3	858.2	Sent to secure landfill in common T.S.D.F,Kanpur , Incinerated TSDF/inhouse
3	Spent Carbon	28.3	22.2	Incinerated common TSDF
4	Spent organic solvent	28.6	18.5	Inhouse incinertor
5	Chemical sludge from waste water treatment	35.3	436	Sent to secure landfill in common T.S.D.F,Kanpur
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	39.6	Sent to secure landfill in common T.S.D.F,Kanpur
7	Date Expired, Discarded and off specification drugs/Medicines	28.4	35.9	Incinerated common TSDF
8	Any process or distillation residue	36.1	12.19	Sent to Common TSDF and Inhouse incinerator
9	Oil & Grease skimming	35.4	0.125	Inhouse incinertor
10	Paint and ink sludge/residue	19	0	No Generation for category No. 19 of the waste
Other Recyclable wastes				
11	Used oil	20	1540 kgs	Sent to authorized recycler
12	E-waste	18	3600 kgs	Send to authorized recycler
13	Lead Acid Battery	17	00 Kg	Send to authorized recycler
14	Empty Drums,Containers etc (in numbers)	33.1	29215	Sent to authorized recycler

Annexure-IV

Quantity in storage at the end of the year category wise (on dated 31 march -2020)

S.NO	Type of Hazardous waste	Category of waste as per schedule I	Opening Balance start of the year (MT)	Generation during the year(MT)	Disposed off / Incinerated during the year (MT)	Closing Balance end of the year (MT)
1	Process Residue and Wastes	28.1	2.2	496.5	497.6	1.1
2	Concentration or evaporation residue	37.3	20	846.9	858.2	8.7
3	Spent Carbon	28.3	1.671	21	22.2	0.471
4	Spent organic solvent	28.6	9.21	21.9	18.5	12.61
5	Chemical sludge from waste water treatment	35.3	7.3	436.2	436.05	7.45
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	2.529	40	39.6	2.929
7	Date Expired, Discarded and off specification drugs/Medicines	28.4 , 28.5	1.37	35.96	35.9	1.43
8	Any process or distillation residue	36.1	0	12.88	12.19	0.69
9	Oil and Grease Skimming	35.4	0	0.125	0.125	0
10	paint and ink sludge/residue	19	0	0	0	0
Other Recyclable wastes						
11	Used oil kgs	20	965	1470	1540	895
12	E-waste kgs	18	4683	400	3600	1483
13	Lead Acid Battery Kg	17	460	1000	0	1460
14	Insulated Copper wire Scrap	33.1	0	0	0	0
15	Empty Drums,Containers etc (in numbers)	33.1	100	29215	29212	103

Registered

UTTAR PRADESH POLLUTION CONTROL BOARD
T.C. 12 V, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW

Ref: H10669 C-7/Haz-03/17 Dated: 14-10-17

1. Number of authorisation and date of issue: 40/HAZ-03/17 Date as above.
2. Reference of application (No. and date):
3. **M/s Teva API India Pvt. Ltd, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula, Distt-Amroha** is hereby granted an authorisation based on the enclosed signed inspection report for generation, storage & disposal of hazardous wastes as per following details.

S.No	Schedule-I Category No	Waste Details	Physical Characteristics	Qty MT/Annum	Final mode of disposal, recycle or reuse/SLF/incineration
1	28.1	Process Residue and wastes	Solid	750 MT	TSDF/Incinerator
2	28.2	Spent catalyst	Solid	40 MT	TSDF/ Incinerator
3	28.3	Spent carbon	Solid	40 MT	TSDF/ Incinerator
4	28.4	Off specification products	Solid	60 MT	TSDF/ Incinerator
5	28.5	Date-expired products	Solid	60 MT	TSDF/ Incinerator
6	28.6	Spent solvents	Liquid	260 KL	TSDF/Incinerator/Recycle/Reuse
7	33.1	Empty barrels/containers/liners contaminated with hazardous chemicals/wastes	Solid	40000 Nos	TSDF/Incinerator/Recycle/Reuse
8	35.2	Spent ion exchange resin containing toxic metals	Solid	5 MT	TSDF/ Incinerator
9	35.3	Chemical sludge from waste water treatment	Semi-Solid	500 MT	TSDF/ Incinerator
10	35.4	Oil and grease skimming	Liquid	5 MT	TSDF/ Incinerator
11	36.1	Any process or distillation residue	Semi-Solid	400 MT	TSDF/ Incinerator
12	36.2	Spent carbon or filter medium	Solid	10 MT	TSDF/ Incinerator
13	37.2	Ash from incinerator and flue gas cleaningresidue	Solid	50 MT	TSDF/ Incinerator
14	37.3	Concentration or evaporation residues	Solid	1000 MT	TSDF/ Incinerator
Sl. No.	**Schedule-IV Sl. No**	**Waste Details**	**Physical Characteristics**	**Qty MT**	**Final mode of disposal, recycle or reuse/SLF/Incineration**
15	7	Insulated Copper Wire Scrap or copper with PVC sheathing including ISRI-code material namely "Druid"	Solid	10 MT	Authorised Recycler
16	17	Used Lead acid battery including grid plates and other lead scrap/ashes/residues	Solid	5 MT	Authorised Recycler
17	18	Components of waste electrical and electronic assembles comprising accumulators and other batteries.	Solid	4 MT	Authorised Recycler
18	19	Paint and ink Sludge/residues	Liquid	10 MT	Authorised Recycler/TSDF
19	20	Used oil and waste oil	Liquid	10 MT	Authorised Recycler/TSDF

1. The authorisation shall be valid for a period of Five Year from the date of issue, if not suspended or cancelled earlier.
2. The authorisation is subject to the following general and specific conditions.

A. General conditions of authorisation:

1. The authorisation shall comply with the provisions of Environment (Protection) Act 1986 and rules made thereunder.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer of the U.P. Pollution Control Board.
3. The person authorised shall not rent lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the U.P. Pollution Control Board.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation 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 authorised 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 authorised person to take prior permission of the U.P. Pollution Control Board to close down the facility.

8. An application for the renewal of an authorisation shall be made in form 1, before its expiry as laid down in rule. It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorisation. It is also provided in the same orders that industries which are not complying with the conditions of authorisation shall not be allowed to operate. Hence in case you fail to apply for authorisation, before its expiry or fail to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
9. Annual return shall be filled by June 30th for the period ensuring 31st March of the Year.
10. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
11. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
12. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
13. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
14. The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.
15. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
16. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorisation issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundar Movement) Rules, 2016.
17. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
18. It is the mandatory duty of the authorised person to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.
19. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
20. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
21. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
22. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
23. Details of raw material which is (Hazardous waste) and product along with quantity shall be sent with in a month.
24. You shall become the member of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil & Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat. permitted by U.P.P.C.B), and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifest (document of proof) within one/three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only and common incinerator at Kumbhi, Kanpur Dehat, Uttar Pradesh for other incinerable wastes. The authorized incinerator is also with U.P. Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat.
25. You are required to store the hazardous waste safely and send it to TSDF/incinerator within Ninty days/Six months of its generation.
26. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to U.P.P.C.B. for each category of waste sent to TSDF/Incinerator.
27. Emission from the Common/Captive incinerator stack shall meet the prescribed standards under Environmental Protection Act, 1986.

(Ashish Tiwari) 14/10/17
Member Secretary

Copy to:- Regional Officer, U.P. Pollution Control Board, Bijnor for information and necessary action.

(Amit Chandra)
Environmental Engineer (Incharge)
Circle7

FORM 10
[See rule 19 (1)]

Occupier's Copy

MANIFEST FOR HAZARDOUS AND OTHER WASTE S.No.: 27139

1 Occupier's Name & Mailing Address (including Phone No. and email)	Teva API India Private Limited (Formerly Amsonau·P. PHNO→ 05984 302239 2240
2 Sender's Authorization No.	40/HWZ. 03/2017
3 Manifest Document No.	27139
4 Transporter's Name & Address (including Phone No. and email)	Bharat Oil & Waste Management Limited Sahibabad U·P.
5 Type of Vehicle	(Truck / Tanker / Special Vehicle)
6 Transporter's Registration	1086/UPPCB/GHZ Valid upto
7 Vehicle Registration No.	UP14FT.869M
8 Receiver's Name & Mailing Address (including Phone No. and email)	(I) BHARAT OIL COMPANY (I) R… E-18, Site-IV, Sahibabad Industrial … Ghaziabad, UP-201010 Tel.: 0120-4… e-mail:sales@bharatoil.com
(II) BHARAT OIL & WASTE MANAGEMENT LTD. Mauza Mukimpur, Roorkee-Lakshar Road, Roorkee - 247664 UK, Tel. :08874207664 e-mail:sales@bharatoil.com	(III) BHARAT OIL & WASTE MANAGEMENT LTD. Plot # 672, Sikandra Road, NH-2, Kumbhi Village, Tehsil Akbarpur, Kanpur Dehat, UP, Tel : 0512-2285296 e-mail:sales@bharatoil.com
9 Receiver's Authorization No.	(I) 1486/UPPCB/Ghaziabad(UPPCBRO)/HWM/GHAZIABAD/2018 Valid upto: 03/05/2023
(ii) AWH-38265 Valid upto: 31/03/2023	(iii)1403/UPPCB/KanpurDehat(UPPCBRO)/HWM/KANPUR DEHAT/2018 Valid upto:30/04/2023
10 Waste Description	Oil based Waste oil.
11 Total Quantity No. of Containers	15.40 CTR m³ or MT 7.0 Drum Nos.
12 Physical Form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13 Special Handling Instructions & Additional Information	Do not throw Drums from truck. In case of leakage/ seapage, use Washing soap at point of leak to stop its leakage.
14 SENDER'S CERTIFICATE	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.
Typed Name & Stamp : Teva API India Private Limited Signature :	Month 04 Day 03 Year 2019
15 Transporter Acknowledgement of Receipt of Waste	Month 04 Day 03 Year 2019
Typed Name & Stamp : Signature :	
16 Receiver's Certificate for Receipt of Hazardous and other Waste	Month Day Year
Typed Name & Stamp : Signature :	

FORM 6

See rule 19

E-WASTE MANIFEST

1.	Sender's Name and Mailing Address (including Phone No.) : 05924302226	Itrag API India Pvt Ltd, Plot, A-2, A-211, A-212 UPSIDC Industries Area, Gajraula (U.P.)
2.	Sender's Authorisation No, if Applicable :	40/HAZ-03/2017 Dtd. 14/10/2018
3.	Manifest Document No. :	01
4.	Transporter's Name and address : (including Phone No.)	—
5.	Type of vehicle :	(Truck or Tanker or Special Vehicle)
6.	Transporter's Registration No. :	UP15CT/9693
7.	Vehicle registration No. :	UP15CT/9693
8.	Receiver's name & address :	Hi-Green E-Waste Recycling Pvt. Ltd 17-18, 1st Floor, 525 Square Complex, Garh Road, Meerut, Uttar Pradesh - 250002
9.	Receiver's Authorisation No, if applicable :	1/H92-E-Waste Order /02/2015 dt 6.11.2015
10.	Description of E-Waste(Item, Weight / Numbers): 3670 kg	E-waste
11.	Name and stamp of Sender* (Manufacturer or Producer or Bulk Consumer or Collection Centre or Refurbisher or Dismantler): Signature: Month Day Year 04 - 15 2019	
12	Transporter Acknowledgment of Receipt of E-Wastes	
	Name and Stamp: Signature: Year	Month Day Year 04 15 2019
13.	Receiver* (Collection Centre or Refurbisher or Dismantler or Recycler) Certification of receipt of E-Waste	
	Name and Stamp: Signature:	Month Day Year 04 15 2019

18/6/20

Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, OHSAS 18001 : 2007 Certified Laboratory
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accreditated Laboratory,

Website : www.newconlab.in

ISO 9001/14001/OHSAS 18001
Reg. No. R191/7381

TEST CERTIFICATE

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO. NCL/TAGJ/5457/0007/25/07/2020	DATE OF REPORT: 30/07/2020
Name and Address of Customer	TEVA API INDIA LTD. PLOT NO. A-2, A02/1, A-2/2, UPSIDC INDUSTRIAL AREA GAJRAULA, DISTT-AMROHA, UTTAR PRADESH.

SAMPLING DETAIL

Analysis Start Date	: 25/07/2020	Analysis End Date	: 30/07/2020
Date of Sampling	: 24/07/2020	Sampling Done By	: NCL
Time of Sampling	: 11:30 Hrs.	Sampling Description	: EFFLUENT WATER AFTER TREATMENT
Sampling Location	: ETP OUTLET (POLISHER RO PERMEATE)	Sample ID No.	: 0007/25/07/2020
Sampling Protocol	: IS:3025(Part-I)	Packing Condition	: Sealed
Sampling Quantity	: Two +five Ltr.	Packed in	: PVC Cane

TEST RESULT

Sl.No.	Parameter	Unit	Protocol	Result	UPPCB Consent Standard (Max)	Standard (as per CPCB) (Max)
1	pH	--	APHA-4500 H^+(B)	7.25		6.0-8.5
2	Total Suspended Solids (TSS)	mg/L	APHA-2540 (D)	20	100	100
3	Total Dissolved Solids (TDS)	mg/L	APHA-2540 (C)	680		Not Specified
4	Sulphides (as S)	mg/L	IS:3025 P-29	ND(DL=0.05)		2.0
5	Bio-Chemical Oxygen Demand (3Days at 27°C)	mg/L	APHA-5210 (B)	12		30
6	Chemical Oxygen Demand (COD)	mg/L	APHA- 5220 (B)	53	250	250
7	Oil & Grease	mg/L	APHA 5520 (B)	1.8		10
8	Chromium Hexavalent (Cr+6)	mg/L	APHA 3500 Cr (B)	ND(DL=0.01)		0.1
9	Lead	mg/L	APHA 3111 (B)	ND(DL=0.01)		0.1
10	Arsenic	mg/L	APHA 3500 (As)	ND(DL=0.02)		0.2
11	Cyanide	mg/L	APHA 4500 CN (B)	ND(DL=0.05)		0.1
12	Phosphate	mg/L	APHA 4500 P-D	0.32		5.0
13	Phenolic compound	mg/L	APHA 5530-(C)	ND(DL=0.01)		0.10
14	Bio-Assay Test	-	IS -6582(Part2)2001	Passes test	-	90% survival of fish after 96 hours in 100%effluent

ND = NOT DETECTED, DL = DETECTION LIMIT

FOR NEWCON CONSULTANTS & LABORATORIES

INTEZAR KHAN
M.Sc (Env. Science)

NOTE : 1. The Results reported above pertains to the Tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to **GHAZIABAD JURISDICTION.** 3. The Report shall not be reproduced except in full without the permission of **MANAGING PARTNER.** 4. Our liability is limited to invoiced value only.

Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, OHSAS 18001 : 2007 Certified Laboratory
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accreditated Laboratory,
Website : www.newconlab.in

ISO 9001/14001/OHSAS 18001
Reg. No. R191/7381

TEST CERTIFICATE

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO. NCL/TAGJ/5202/019/18/06/2020	**DATE OF REPORT: 24/06/2020**
Name and Address of Customer	**TEVA API INDIA LTD. PLOT NO. A-2, A02/1, A-2/2, UPSIDC INDUSTRIAL AREA GAJRAULA, DISTT-AMROHA, UTTAR PRADESH.**

SAMPLING DETAIL

Analysis Start Date	: 18/06/2020	Analysis End Date	: 24/06/2020
Date of Sampling	: 17/06/2020	Sampling Done By	: NCL
Time of Sampling	: 11:20 Hrs.	Sampling Description	: EFFLUENT WATER AFTER TREATMENT
Sampling Location	: ETP OUTLET (POLISHER RO PERMEATE)	Sample ID No.	: 019/18/06/2020
Sampling Protocol	: IS:3025(Part-I)	Packing Condition	: Sealed
Sampling Quantity	: Two +five Ltr.	Packed in	: PVC Cane

TEST RESULT

Sl.No.	Parameter	Unit	Protocol	Result	UPPCB Consent Standard (Max)	Standard (as per CPCB) (Max)
1	pH	--	APHA-4500 H^+(B)	7.82		6.0-8.5
2	Total Suspended Solids (TSS)	mg/L	APHA-2540 (D)	16	100	100
3	Total Dissolved Solids (TDS)	mg/L	APHA-2540 (C)	196		Not Specified
4	Sulphides (as S)	mg/L	IS:3025 P-29	ND(DL=0.05)		2.0
5	Bio-Chemical Oxygen Demand (3Days at 27^{0}C)	mg/L	APHA-5210 (B)	8.0		30
6	Chemical Oxygen Demand (COD)	mg/L	APHA- 5220 (B)	45	250	250
7	Oil & Grease	mg/L	APHA 5520 (B)	1.0		10
8	Chromium Hexavalent (Cr+6)	mg/L	APHA 3500 Cr (B)	ND(DL=0.01)		0.1
9	Lead	mg/L	APHA 3111 (B)	ND(DL=0.01)		0.1
10	Arsenic	mg/L	APHA 3500 (As)	ND(DL=0.02)		0.2
11	Cyanide	mg/L	APHA 4500 CN (B)	ND(DL=0.05)		0.1
12	Phosphate	mg/L	APHA 4500 P-D	0.13		5.0
13	Phenolic compound	mg/L	APHA 5530-(C)	ND(DL=0.01)		0.10
14	Bio-Assay Test	-	IS -6582(Part2)2001	Passes test		90% survival of fish after 96 hours in 100% effluent

ND = NOT DETECTED, DL = DETECTION LIMIT

INDERDAB KHAN
M.Sc (Env. Science)

CHECKED BY

PREPARED BY

AUTHORIZED SIGNATORY

NOTE : 1. The Results reported above pertains to the Tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to **GHAZIABAD JURISDICTION.** 3. The Report shall not be reproduced except in full without the permission of **MANAGING PARTNER.** 4. Our liability is limited to invoiced value only.

Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, OHSAS 18001 : 2007 Certified Laboratory

Website : www.newconlab.in

ISO 9001/14001/OHSAS 18001
Reg. No. R191/7381

TEST CERTIFICATE

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO. NCL/TAGJ/5129/033/27/05/2020	DATE OF REPORT: 02/06/2020
Name and Address of Customer	TEVA API INDIA LTD. PLOT NO. A-2, A02/1, A-2/2, UPSIDC INDUSTRIAL AREA GAJRAULA, DISTT-AMROHA, UTTAR PRADESH.

SAMPLING DETAIL

Analysis Start Date	: 27/05/2020	Analysis End Date	: 02/06/2020
Date of Sampling	: 27/05/2020	Sampling Done By	: NCL
Time of Sampling	: 11:20 Hrs.	Sampling Description	: EFFLUENT WATER AFTER TREATMENT
Sampling Location	: POLISHER RO PERMEATE (FINAL TREATED WATER) (COUNTER SAMPLE)	Sample ID No.	: 033/27/05/2020
Sampling Protocol	: IS:3025(Part-I)	Packing	: Sealed
Sampling Quantity	: Seven Ltr.	Condition Packed in	: PVC Cane

TEST RESULT

Sl.No.	Parameter	Unit	Protocol	Result	Standard (as per CPCB) (Max)
1	pH	--	APHA-4500 H^+(B)	7.41	6.0-8.5
2	Total Suspended Solids (TSS)	mg/L	APHA-2540 (D)	18	100
3	Sulphides (as S)	mg/L	IS:3025 P-29	ND(DL=0.05)	2.0
4	Bio-Chemical Oxygen Demand (3Days at 27°C)	mg/L	APHA-5210 (B)	9.0	30
5	Chemical Oxygen Demand (COD)	mg/L	APHA- 5220 (B)	46	250
6	Oil & Grease	mg/L	APHA 5520 (B)	1.2	10
7	Chromium Hexavalent (Cr+6)	mg/L	APHA 3500 Cr (B)	ND(DL=0.01)	0.1
8	Lead	mg/L	APHA 3111 (B)	ND(DL=0.01)	0.1
9	Arsenic	mg/L	APHA 3500 (As)	ND(DL=0.03)	0.2
10	Cyanide	mg/L	APHA 4500 CN (B)	ND(DL=0.05)	0.1
11	Phosphate	mg/L	APHA 4500 P-D	0.32	5.0
12	Phenolic compound	mg/L	APHA 5530-(C)	ND(DL=0.01)	1.0
13	Mercury	mg/L	APHA 3112 (B)	ND(DL=0.001)	0.01
14	Total Dissolved Solids (TDS)	mg/L	APHA -2540 (C)	518	Not Specified
15	Bio-Assay Test	--	IS-6582 (Part-2)-2001	PASSES TEST	90% Survival Of The Fish After 96 Hour In 100% Effluent

FOR NEWCON CONSULTANTS & LABORATORIES

INTEKHAB KHAN
M.Sc (Env. Science)
CHECKED BY

PREPARED BY

AUTHORISED SIGNATORY

NOTE : 1. The Results reported above pertains to the Tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to **GHAZIABAD JURISDICTION.** 3. The Report shall not be reproduced except in full without the permission of **MANAGING PARTNER.** 4. Our liability is limited to invoiced value only.

Photographs of By-pass line to storm water drain in scrubbed water collection tank at wet scrubber provided near HCl tank

Figure 1: Drain by pass line – Before visit

Figure 2: Drain by pass line closed – Current condition

Photographs of the Scrubber as per CPCB guidelines

Photographs of the Scrubber at the HCl Unloading Area

Inlet and Outlet wastewater quality data (NABET accredited lab test reports) Test reports of ETP inlet wastewater quality (NABET accredited lab test reports) (average daily values)

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)
Jan 2020	6.82	218	5414	8308	1384	4.8
Feb	7.08	186	10029	10310	2050	6.2
March	6.81	208	10280	9181	1836	6
April	-	-	-	-	-	-
May	7.02	122	7010	11059	1840	5.8
June	7.07	214	9210	10120	2514	6.8
July	7.09	184	7240	11320	2260	7.8
Aug	6.93	190	5810	10108	2548	7.8
Sep	8.71	210	8750	9990	2380	8.2
Oct	8.59	286	10180	10814	3090	6.8
Nov	6.76	244	9540	7335	1830	8.4
Dec 2020	7.63	240	11454	8856	2210	6.8

Test reports of ETP outlet wastewater quality (NABET accredited lab test reports) (average daily values)

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)

Jan 2020	7.51	16	245	38	8.0	1.4
Feb	6.91	14	196	42	9.0	1.0
March	7.31	15	380	27	6.0	1.1
April	-	-	-	-	-	-
May	7.41	18	518	46	9.0	1.2
June	7.82	16	196	45	8.0	1.0
July	7.25	20	680	53	12	1.8
Aug	7.45	16	607	42	8.0	1.6
Sep	7.45	12	240	37	9.0	<1.0
Oct	7.17	16	370	34	9.0	<1.0
Nov	7.17	12	290	36	9.0	1.2
Dec 2020	7.22	16	590	43	12	1.4
CPCB limits	6.0-8.5	100	Not specified	250	30	10

Test reports of STP inlet wastewater quality (NABET accredited lab test reports) (average daily values)

STP-I

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)	Fecal Coliform (MPN/100 mL)
Jan 2020	7.33	58	401	362	75	4.4	-
Feb	7.37	48	492	289	72	3.6	-
March	7.13	72	460	409	111	3.8	-
April	-	-	-	-	-	-	-
May	7.06	74	380	310	52	5.2	1600
June	7.1	78	444	347	77	4.4	1600
July	7.2	66	640	287	92	5.2	1600
Aug	7.17	60	340	354	78	4.8	1600
Sep	7.62	48	520	283	66	3.6	1600
Oct	7.41	59	670	83	21	2.8	1600
Nov	7.51	16	496	38	10	1.8	1600
Dec 2020	7.31	68	522	263	95	4.4	1600

STP-II

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)	Fecal Coliform (MPN/100 mL)
Jan 2020	6.72	144	622	912	186	3.9	-
Feb	7.1	92	466	783	196	4.4	-
March	6.91	144	540	907	227	4.8	-
April	-	-	-	-	-	-	-
May	7.23	84	470	310	60	3.2	1600
June	7.03	144	714	783	170	4.8	1600
July	7.02	80	930	292	93	5.2	1600
Aug	6.83	144	470	775	193	5.8	1600
Sep	7.7	112	830	779	195	4.6	1600
Oct	6.88	138	1010	216	62	5.8	1600
Nov	7.43	138	710	294	74	3.8	1600
Dec 2020	7.24	88	630	648	190	7.4	1600

Test reports of STP outlet wastewater quality (NABET accredited lab test reports) (average daily values)

STP-I

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)	Fecal Coliform (MPN/100 mL)
Jan 2020	**7.48**	**22**	**318**	**52**	**11**	**2.1**	-
Feb	**7.18**	**12**	**497**	**44**	**9**	**1.2**	-
March	**7.69**	**28**	**402**	**57**	**12**	**1.8**	-
April	-	-	-	-	-	-	-
May	**7.23**	**14**	**340**	**50**	**6**	**1.2**	**500**
June	**7.41**	**16**	**406**	**52**	**11**	**2.0**	**350**
July	**7.56**	**28**	**550**	**63**	**14**	**2.0**	**300**
Aug	**7.73**	**20**	**384**	**39**	**10**	**2.0**	**300**
Sep	**7.64**	**22**	**470**	**37**	**12**	**2.0**	**280**

Oct	**7.41**	**14**	**510**	**39**	**12**	**1.6**	**350**
Nov	**7.43**	**38**	**466**	**58**	**15**	**2.2**	**300**
Dec 2020	**7.33**	**16**	**560**	**39**	**15**	**1.8**	**250**

STP-II

Parameter	pH	TSS (mg/l)	TDS (mg/l)	COD (mg/l)	BOD (mg/l)	Oil and grease (mg/l)	Fecal Coliform (MPN/100 mL)
Jan 2020	**7.38**	**28**	**615**	**59**	**12**	**2.4**	
Feb	**7.52**	**36**	**525**	**57**	**14**	**1.2**	
March	**7.53**	**32**	**586**	**73**	**15**	**2.8**	
April							
May	**7.43**	**26**	**590**	**50**	**10**	**1.8**	**300**
June	**7.33**	**28**	**810**	**70**	**14**	**2.2**	**500**
July	**7.41**	**34**	**880**	**64**	**15**	**2.4**	**350**
Aug	**7.53**	**28**	**610**	**59**	**12**	**1.8**	**280**
Sep	**7.54**	**24**	**820**	**42**	**11**	**1.6**	**300**
Oct	**7.40**	**18**	**826**	**57**	**15**	**1.8**	**280**
Nov	**7.33**	**16**	**814**	**46**	**13**	**1.8**	**280**
Dec 2020	**7.35**	**36**	**790**	**65**	**16**	**2.0**	**280**

teva | api

TAIL/GAJ/E&S/CGWA/2020/04

Date: 08.02.2020

To,

Regional Director
Central Ground Water Board
Northern Region, Bhujal Bhawan,
Sector – B, Sitapur Road Yojana
Lucknow – 226021 (UP)

Subject: Renewal of NOC for Ground Water withdrawal of existing Industrial unit **"TEVA API INDIA PVT. LTD"** located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, U.P - 244235.

Ref: Online application- 21-4/1440/UP/IND/2017 - dated 11/10/2019

NOC No. :- CGWA/NOC/IND/ORIG/2017/2872 valid up to 14.11..2019

Dear Sir,

We had submitted our online application to your good office on 11.10.2019 for renewal of NOC for ground water withdrawal of existing Industrial unit "**TEVA API INDIA PVT. LTD**" located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, UP., in prescribed format along with online application and other necessary documents.

We would like to inform you that our NOC No. CGWA/NOC/IND/ORIG/2017/2872, which was valid up to 14.11.2019, is not renewed till date, request you to kindly renew our NOC.

We will be highly thankful to you.

Thanking you

For TEVA API INDIA PVT LTD.
Gajraula

08/02/2020

CC:- Member secretory CGWA New Delhi.

teva | api

TAIL/GAJ/E&S/CGWA/2020/05 **Date: 17.03.2020**

To,

Regional Director
Central Ground Water Board
Northern Region, Bhujal Bhawan,
Sector – B, Sitapur Road Yojana
Lucknow – 226021 (UP)

Subject: Renewal of NOC for Ground Water withdrawal of existing Industrial unit **"TEVA API INDIA PVT. LTD"** located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, U.P - 244235.

Ref: Online application- 21-4/1440/UP/IND/2017 - dated 11/10/2019

NOC No. :- CGWA/NOC/IND/ORIG/2017/2872 valid up to 14.11..2019

Dear Sir,

We had submitted our online application to your good office on 11.10.2019 for renewal of NOC for ground water withdrawal of existing Industrial unit "**TEVA API INDIA PVT. LTD**" located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, UP., in prescribed format along with online application and other necessary documents.

We would like to inform you that our NOC No. CGWA/NOC/IND/ORIG/2017/2872, which was valid up to 14.11.2019, is not renewed till date, request you to kindly renew our NOC.

We will be highly thankful to you.

Thanking you

For TEVA API INDIA PVT LTD. Gajraula

Authorized Signatory

प्रेषक/DESPATCHER
Central Ground Water Board
Bhujal Bhawan, Sector-B
Sitapur Road Yojana

CC:- Member secretory CGWA New Delhi.

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

teva | api

Date: 20.07.2020

TAIL/GAJ/E&S/CGWA/2020/06

To,

Regional Director
Central Ground Water Board
Northern Region, Bhujal Bhawan,
Sector – B, Sitapur Road Yojana
Lucknow – 226021 (UP)

Subject: Renewal of NOC for Ground Water withdrawal of existing Industrial unit "**TEVA API INDIA PVT. LTD**" located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, U P - 244235

Ref: Online application- 21-4/1440/UP/IND/2017 - dated 11/10/2019

NOC No. :- CGWA/NOC/IND/ORIG/2017/2872 valid up to 14.11.2019

Dear Sir,

We had submitted our online application to your good office on 11.10.2019 for renewal of NOC for ground water withdrawal of existing Industrial unit "**TEVA API INDIA PVT. LTD**" located at A-2, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula District- Amroha, UP., in prescribed format along with online application and other necessary documents.

We would like to inform you that our NOC No. CGWA/NOC/IND/ORIG/2017/2872, which was valid up to 14.11.2019, is not renewed till date. Please refer our two earlier letters sent to your good office on 08.02.2020 and 17.03.2020.

Our is an existing industry since February 1995. We have already adopted 6 nearby ponds, recharging 142668 KL and 155435 KL is recharged through run off process, totaling 298104 KL per year. We are in the process of adopting another 2 ponds, where recharging will be to the tune of 22302 KL per year, thereby grand total recharged would be 320406 KL per year. Last year, we consumed 268998 KL through tube well. So, we can confirm that we are recharging more than the quantity what is consumed at the site. Moreover, we would like to draw your kind attention that we have a small township (

approximately 150 families live) attached with the factory and the water is managed from the plant for both township and plant.

The detail description is attached along with this application. We request you to kindly renew our NOC and oblige.

Thanking you

For TEVA API INDIA PVT LTD. Gajraula

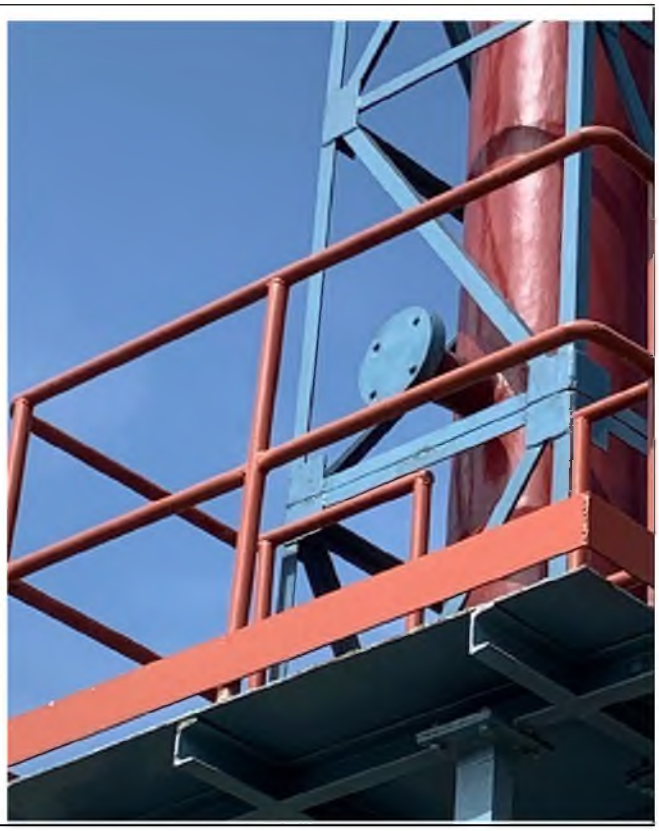
Authorized Signatory

CC:- Member Secretory, CGWA, New Delhi.

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha (Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office : 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063
CIN : U74899MH2002PTC326704

Photographs of the ladder, Platform and porthole
Photographs of the ladder, Platform and porthole at HCl scrubber stack


P-11023A
P-11023B



मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, ए–2, ए–2/1, ए–2/2, यूपीएसआईडीसी इण्डस्ट्रियल एरिया, गजरौला, जनपद–अमरोहा।

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड,

टी0सी0–12 वी, विभूति खण्ड,
गोमती नगर, लखनऊ।

पंजीकृत

संदर्भ संख्या M14133 /सी–7/जल/92/बिजनौर/2017 दिनॉक– 27.12.17

सेवा में,

मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0,
ए–2, ए–2/1, ए–2/2,
यूपीएसआईडीसी इण्डस्ट्रियल एरिया,
गजरौला, जनपद–अमरोहा।

विषयः जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा–25/26 और इसके संशोधित अधिनियम, 1978 के अन्तर्गत घरेलू/प्रकिया जनित उत्प्रवाह के निस्तारण हेतु सहमति ।

महोदय,

कृपया अपने सहमति आवेदन पत्र सं0– TAIL/GAJ/E&S/UPPCB/2017/101 दिनांक 16.11.2017 जो कि बोर्ड में दिनांक 23.11.2017 को प्राप्त हुआ है का संदर्भ लें। आपके सहमति आवेदन पत्र का परीक्षण किया गया। क्षेत्रीय अधिकारी, बिजनौर के पत्र दिनांक 12.10.2017 के द्वारा की गयी संस्तुति के दृष्टिगत सशर्त सहमति निर्गत की जा रही है।। सशर्त सहमति आदेश पत्रॉक–106/ W E&E [illegible]/2017 दिनांक 27.12.17 संलग्न है। आपका ध्यान निम्न बिन्दुओं पर आवश्यक कार्यवाही करने हेतु दिलाया जा रहा है।

1 सहमति शर्तों तथा निम्न बिन्दुओं का कड़ाई से अनुपालन किया जाना सुनिश्चित करें तथा अनुपालन आख्या पत्र प्राप्ति के एक माह के भीतर प्रेषित करें।

2 यह सहमति बल्क ड्रग्स इण्टरमीडिएट I & II, 620 MT/Years एवं परिसर के बाहर शून्य उत्प्रवाह निस्तारण हेतु मान्य है। अनुमन्य क्षमता से अधिक उत्पादन से पूर्व राज्य बोर्ड से स्थापनार्थ सहमति (अनापत्ति प्रमाण पत्र) प्राप्त करना अनिवार्य होगा।

3 केन्द्रीय भूजल प्राधिकरण से प्राप्त अनापत्ति प्रमाणपत्र दिनांक 04.12.2017 में अधिरोपित शर्तों का अक्षरशः अनुपालन सुनिश्चित किया जाए।

4 उद्योग में घरेलू उत्प्रवाह के निस्तारण हेतु 70 केएलडी एवं 100 केएलडी क्षमता के सीवेज ट्रीटमेन्ट के माध्यम से किया जाता है। शोधित उत्प्रवाह का निस्तारण उद्योग परिसर में सिंचाई हेतु एवं ई0टी0पी0 के माध्यम से निस्तारित किया जाना सुनिश्चित किया जाए।

5 उत्प्रवाह शुद्धिकरण संयंत्र से शुद्धिकृत उत्प्रवाह एवं सिंचाई हेतु प्रेषित किये जा रहे शुद्धिकृत उत्प्रवाह का दैनिक रिकार्ड मैनटेन किया जाए।

6 उद्योग से औद्योगिक उत्प्रवाह की मात्रा 370 कि0ली0/दिन से अधिक अनुमन्य नहीं है जिसका निस्तारण उद्योग के ई0टी0पी0 के द्वारा किया जाए एवं शुद्धिकृत उत्प्रवाह को पुनः प्रयोग किया जाए। किसी भी दशा में उत्प्रवाह का निस्तारण उद्योग परिसर के बाहर न किया जाए।

7 उद्योग द्वारा वर्षा जल संचयन हेतु एक रूफ टाप रेन वाटर हार्वेस्टिंग सिस्टम की स्थापना हेतु समयबद्ध कार्यक्रम एवं प्रस्ताव बोर्ड में एक माह में प्रेषित किया जाना सुनिश्चित किया जाए।

8 जल सप्लाई स्त्रोत (ट्यूबवेल) एवं उत्प्रवाह शुद्धिकरण संयंत्र (ई0टी0पी0) के आउटलेट पर इलेक्ट्रोमैग्नेटिक फ्लो मीटर स्थापित किये जाए एवं भू–जल दोहन एवं सिंचाई हेतु प्रयोग किये गये उत्प्रवाह की मात्रा का रिकार्ड मेन्टेन किया जाए तथा उत्प्रवाह मीटर मापी गयी रीडिंग हर महीने समय से अवश्य भेजें।

9 स्थापित उत्प्रवाह शुद्धिकरण संयंत्र के संचालन में प्रयुक्त होने वाले विद्युत की माप हेतु अलग से विद्युत मीटर स्थापित किया जाए तथा प्रयुक्त होने वाले रसायनों की खपत की प्रत्येक दिवस की लागबुक मेण्टेन की जाए।

10 स्थापित ऑनलाइन मानिटरिंग सिस्टम का सुचारू रूप से संचालन एवं रख–रखाव किया जाए तथा शोधित उत्प्रवाह के आंकड़े नियमित रूप से प्रतिमाह बोर्ड को प्रेषित किये जायें।

11 एसटीपी से शोधित उत्प्रवाह को सिंचाई हेतु प्रयोग किये जाने एवं ई0टी0पी0 में शोधन हेतु प्रेषित किये जाने हेतु पाइप लाइन्स पर पृथक रूप से फ्लो मीर्टस स्थापित किये जाएं।

12 कृपया ठोस अवशिष्ट पदार्थो को इस प्रकार से निस्तारित करना सुनिश्चित करें जिससे कि नदी, सरिता, भूमिगत जल या अन्य किसी स्त्रोत का जल प्रदूषित न हो।

13 परिसंकटमय एवं अन्य अपशिष्ट (प्रबन्धन एवं सीमापार संचालन) नियम, 2016 के प्राविधानों का अनुपालन सुनिश्चित किया जाए एवं उक्त नियम के नियम–6 के अनुसार परिसंकटमय अपशिष्ट के सुरक्षित भण्डारण एवं निस्तारण हेतु व्यवस्था सुनिश्चित कर बोर्ड से प्राधिकार प्राप्त किया जाए।

14 जल संसाधन, नदी विकास और गंगा संरक्षण मंत्रालय, भारत सरकार द्वारा जारी अधिसूचना सं0 का0 अ0 3187 (अ)दिनांक 07.10.2016 के प्रावधानों का अक्षरशः समयबद्ध अनुपालन सुनिश्चित किया जाए।

15 मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा ओ0ए0 सं0 200/2014 एम0सी0 मेहता प्रति यूनियन आफ इण्डिया व अन्य में पारित आदेश दिनांक 13.07.2017 में गजरौला क्षेत्र के अन्तर्गत आच्छादित इकाईयों के संबंध में जारी निर्देशों का अक्षरशः अनुपालन सुनिश्चित किया जाए।

16 जल प्रदूषण (निवारण एवं नियंत्रण) अधिनियम, 1974, पर्यावरण (संरक्षण) अधिनियम, 1986 के प्राविधानों एवं केन्द्रीय प्रदूषण नियंत्रण बोर्ड नई दिल्ली द्वारा जारी निर्देशों का अक्षरशः अनुपालन सुनिश्चित करें।

17 उचित मात्रा में वृक्षारोपण करें जिससे कि वातावरण में सुधार हो तथा प्रगति आख्या हर तीसरे महीने भेजें।

18 उद्योग का पर्यावरणीय वक्तव्य 30 सितम्बर तक बोर्ड को प्रेषित करना सुनिश्चित करें।

19 मा0 सर्वोच्च न्यायालय में दायर रिट याचिका सं0 418/98 इम्तियाज अहमद बनाम भारत सरकार व अन्य में पारित आदेश दिनांक 20.02.2002 का अक्षरशः अनुपालन सुनिश्चित किया जाए।

इस सहमति आदेश में अंकित प्राविधान तथा सहमति शर्तो के होते हुए भी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ, जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 तथा इसके अधिनियम, 1978 की धारा–27(2) के अन्तर्गत उपरोक्त वर्णित किसी भी/सभी शर्तो में पुनः विचार करने के लिए जो उचित हो, का अधिकार व शक्ति, बोर्ड आरक्षित रखती है।

सक्षम अधिकारी की अनुमति से निर्गत।

भवदीय,

संलग्नक : उपरोक्तानुसार ।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी(वृत्त–7)

पृष्ठ संख्या– तद् दिनॉक–

प्रतिलिपिः– क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, बिजनौर को सूचनार्थ एवम् आवश्यक कार्यवाही हेतु प्रेषित।

मुख्य पर्यावरण अधिकारी (वृत्त–7)

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड,

टी0सी0–12 वी, विभूति खण्ड,
गोमती नगर, लखनऊ

केवल सरिता/भूमि में निस्तारण के लिए
वर्तमान/बदली हुई क्षमता के लिए

फार्म XV

सहमति आदेश पत्र

संदर्भ संख्या 106 /सहमति/जल आदेश/ 2017 लखनऊ, दिनॉक– 27.12.17

विषय :मैसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, ए–2, ए–2/1, ए–2/2, यूपीएसआईडीसी इण्डस्ट्रियल एरिया, गजरौला, जनपद–अमरोहा को जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा–25/26 के अन्तर्गत उत्प्रवाह निस्तारण हेतु सहमति।

संदर्भ : आवेदन पत्र संख्या– TAIL/GAJ/E&S/UPPCB/2017/101 प्राप्ति दिनॉक :23.11.2017

1. जल राशि का सीवन में या भूमि पर बहिःश्राव के निस्तारण के लिए जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 जिससे आगे उक्त अधिनियम कहा गया है, के अधीन सहमति प्राप्त करने के लिए उपर्युक्त आवेदन पत्र के निर्देश में **मैसर्स तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, ए–2, ए–2/1, ए–2/2, यूपीएसआईडीसी इण्डस्ट्रियल एरिया, गजरौला, जनपद–अमरोहा** को उसके परिसर से निकलने वाले उसके घरेलू नगर पालिका/औद्योगिक बहिःश्राव के शतप्रतिशत रिसाइकिल अथवा भूमि पर सिंचाई हेतु प्रयोग किये जाने के लिये अनुलग्नक में उल्लिखित समान्य और विशेष शर्तो के अनुसार बोर्ड द्वारा प्राधिकार दिया जाता है।
2. यह सहमति दिनॉक–**31.12.2019** तक की अवधि के लिए मान्य है।
3. इस सहमति आदेश में अंकित प्राविधानों तथा सहमति शर्तो के होते हुए भी, उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, लखनऊ जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 और इसके संशोधित अधिनियम, 1978 की धारा–27(2) के अन्तर्गत वर्णित किसी भी/सभी शर्तो में पुनः विचार करने या संशोधन के लिए अधिनियम के अनुसार जो उचित हो, का अधिकार व शक्ति बोर्ड आरक्षित रखती है। उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड के लिए और उसकी ओर से।

सक्षम अधिकारी की अनुमति से निर्गत।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी (वृत्त–7)

अनुलग्नक : संलग्नक ।

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड,
लखनऊ

संलग्नक आदेश संख्या–...../सहमति(जल)/आदेश/.....दिनॉक.....

सहमति शर्तें

1. अधिकतम दैनक उत्प्रवाह और प्रति घण्टे में निस्तारित होने वाले उत्प्रवाह की दर निम्न से अधिक नही होनी चाहिए ।

उत्प्रवाह का प्रकार		अधिकतम दैनिक निस्तारण मी	अधिकतम प्रति घंटा निस्तारण मी
(i)	घरेलू–	170 कि0ली0/दिन (एसटीपी 70 केएलडी एवं 100 केएलडी) शोधित उत्प्रवाह को गार्डनिंग अथवा पुनः प्रयोग किया जाए, किसी भी दशा में उत्प्रवाह का निस्तारण परिसर के बाहर अनुमन्य नहीं हैं।	
(ii)	अन्य	70 कि0ली0/दिन (कूलिंग टावर/ब्वायलर ब्लो डाउन) – स्थापित वाटर ट्रीटमेंट प्लांट क्षमता 100 कि0ली0 से मानकों के अनुरूप शोधन के उपरान्त भूमि पर सिंचाई हेतु, किसी भी दशा में उत्प्रवाह का निस्तारण परिसर के बाहर अनुमन्य नहीं हैं।	
(ii)	औद्योगिक–	370 कि0ली0/दिन ई0टी0पी0 के द्वारा किया जाए (शोधित उत्प्रवाह को पुनः चकित किया जाए तथा परिसर के बाहर किसी भी प्रकार का उत्प्रवाह निस्तारण अनुमन्य नहीं है)।	

2. एकत्र करने की व्यवस्था के अन्तिम छोर टर्मिनल मेनहोल, उत्प्रवाह मापन तथा उत्वाह का नमूना एकत्र करने की व्यवस्था होनी चाहिए। कोई भी उत्प्रवाह टर्मिनल, मेनहोल के डाउन स्ट्रीम पर सीवर में प्रवेश नही करना चाहिए। सहमति आवेदन पत्र में सूचित उत्प्रवाह के अलावा अन्य कोई उत्प्रवाह एकत्र करने की व्यवस्था में प्रवेश नही करना चाहिए तथा यह भी सुनिश्चित करें कि घरेलू उत्प्रवाह स्ट्रीम वाटर ड्रेन में निस्तारित न हो ।
3. घरेलू उत्प्रवाह सेप्टिक टैंक या अन्य शुद्धिकरण संयंत्र में शुद्धिकृत किया जाये जिससे शुद्धिकृत उत्प्रवाह निम्न मानकों के अनुरूप हो।

27 से0 पर 3 दिन की बी0ओ0डी0	30 मिग्रा0/ली0
कुल निलम्बित ठोस	100 मिग्रा0/ली0

4. शर्त संख्या 2 में संदर्भित टर्मिनल मेनहोल ऊपर से ढके, ताले लगाने की व्यवस्था युक्त, कम से कम MX15 साइज और आवश्यक गहराई के ईट या सीमेन्ट कंक्रीट के चैम्बर होने चाहिए। टर्मिनल, मेनहोल में उत्प्रवाह तथा विश्लेषित के लिए नमूना लेने की व्यवस्था होनी चाहिए।
5. शुद्धिकृत औद्योगिक उत्प्रवाह के निस्तारण बिन्दु से अन्तिम निस्तारण बिन्दु/पुनः प्रयोग/गार्डनिंग/भूमि सिंचाई तक पक्के, ढके हुए बन्द पाइप युक्त ड्रेन से होकर निस्तारित किया जाये। पक्की ड्रेन या बन्द पाइप को इस प्रकार बिछाना चाहिए जिससे कि अनाधिकृत व्यक्तियों द्वारा उसमें नुकसान न पहुँचाया जाये। टर्मिनल निस्तारण बिन्दु को भी टर्मिनल मेनहोल की भॉति बनाया जाये, बन्द पाइपों में स्थल की आवश्यकता के अनुसार माध्यमिक निरीक्षण कक्ष बनाये जाये।

6. अन्य प्रचालक जिनके मान मानक में न दिये हो उनका मान उद्योग में निर्माण प्रकिया में प्रयुक्त किये जाने वाले जल के मानकों से अधिक नहीं होना चाहिए।
7. औद्योगिक उत्प्रवाह के नमूने एकत्र करने व विश्लेषित करने की विधि भारतीय मानक के अनुरूप होना चाहिए।
8. इस शर्तो का विशेष रूप से उत्प्रवाह शुद्धिकरण, उत्प्रवाह मापन, नमूना एकत्र करने की व्यवस्था, टर्मिनल मेनहोल व टर्मिनल निस्तारण बिन्दु के संबंध में **दो माह** या उससे पहले पूर्ण अनुपालन किया जाये।
9. बोर्ड से निर्गत सहमति आदेश की प्राप्ति के 30 दिन के भीतर तथा उसके बाद प्रत्येक महीने की दस तारीख तक मासिक प्रगति आख्या, सहमति शर्तो की अनुपालन आख्या के साथ जरूर भेजें।
10. विस्तृत निर्माण स्थल, रेखाचित्र उत्प्रवाह ले जाने वाली पाइप लाइन की अनुदैर्ध्य काट व प्लान तथा अन्तिम निस्तारण बिन्दु का रेखाचित्र इस सहमति आदेश के जारी करने के एक माह के भीतर बोर्ड को भेजें।
11. परिसर में एकत्र होने वाले बरसात, तूफान के जल को भली भॉति रखा जाये और किसी भी बिन्दु पर घरेलू व औद्योगिक अवशिष्ट से मिलने न दिया जाये। कच्चे माल, उत्पाद या अन्य कोई पदार्थ जो तूफानी जल के साथ बहकर जा सकते हो, का खुले में ढेर न लगाया जाये।
12. फैक्ट्री परिसर में उत्पन्न होने वाले सभी ठोस अपशिष्ट पदार्थो का भली भॉति वर्गीकरण व निम्न प्रकार से निस्तारण किया जाये।

    (i) अक्रिय पदार्थ होन पर उसका भूमि भराव के लिए इस प्रकार प्रयोग सुनिश्चित किया जाये कि रिसाव की स्थिति पैदा न हो जिससे कि वह भूमिगत जल में प्रवेश न करें या बरसाती, तूफ़ानी जल के द्वारा बहा न दिया जाए।

    (ii) ज्वलनशील कार्बनिक पदार्थ होने पर नियंत्रित प्रज्वलन किया जाये।

    (iii) जैविक अवघट्य पदार्थ होने पर कम्पोस्टिंग की जाये।
13. विषैले पदार्थों का विषैलापन अगर संभव हो सके तो दूर किया जाये अन्यथा उन्हें बोर्ड की लिखित अनुमति प्राप्त कर सुरक्षित क्षेत्रों में मुहरबन्द स्टील ड्रम में रखा और दफनाया जाए। विषमुक्त करने या मुहरबन्द करने और दफनाने का कार्य बोर्ड के अधिकृत व्यक्ति की उपस्थिति में ही अनुमति लेकर किया जाय।
14. यदि फैक्ट्री के किसी संयंत्र/संयंत्रों में कोई दोषपूर्ण स्थिति उत्पन्न हो जिसके फलस्वरूप निस्तारित उत्प्रवाह की मात्रा बढ़ जाए और/या उपरोक्त पैरा–3 व 4 में वर्णित मानकों का उल्लंघन हो तो बोर्ड को टेलीग्राफिकली तथा ऑचलिक स्वास्थ्य अधिकारी/मुख्य चिकित्सा अधिकारी को स्थिति बताते हुए सूचित किया जाए।
15. प्रार्थी फैक्ट्री के अन्दर व परिसर में अच्छा रख–रखाव स्थापित करें। सभी पाइप, वाल्ब, सीवर और ड्रेन रिसावरोधी होने चाहिए। फर्श की धुलाई से जनित उत्प्रवाह, उत्प्रवाह एकत्र करने की व्यवस्था में प्रवेश करना चाहिए और शर्त के अनुसार किसी बरसाती/तूफानी जल की नाली या खुले स्थान पर नही दिया जाना चाहिए।
16. प्रार्थी को टर्मिनल मेनहोल तथा अन्तिम निस्तारण बिन्दु पर बोर्ड के स्टाफ या बोर्ड द्वारा अधिकृत एजेन्सी के लिए उत्प्रवाह का नमूना एकत्र करने की व्यवस्था करनी चाहिए।
17 शुद्धिकृत घरेलू व प्रकिया जनित उत्पव्राह का नमूना किसी भी सामान्य उत्पादन कार्य किये जाने वाले दिन, तीन महीने में एक बार लिया जाये और उन्हें पर्यावरण (संरक्षण) अधिनियम, 1986 के प्राविधानों के अन्तर्गत निर्धारित मानकों के अनुसार सभी प्रचालकों के लिए विश्लेषित किया जाये। संलग्न प्रपत्र के अनुसार पूर्ण विश्लेषण करवाने के बाद तुरन्त/समय–समय पर विश्लेषण आख्या बोर्ड में जमा की जाए।
18. प्रार्थी/कम्पनी बिना लापरवाही किये इस सहमति आदेश में दिय गये निर्देशों तथा बाद में समय–समय पर निर्गत निर्देशों का अनुपालन करें। प्रार्थी/कम्पनी अगर किसी समय निर्गत किसी आदेश/निर्देश का पालन न करें और/या इस सहमति आदेश की शर्तो का उल्लंघन करें तो वह कानून/अधिनियम के प्राविधानों के अन्तर्गत विधिक कार्यवाही के लिए उत्तरदायी होगी।
19. प्रार्थी बोर्ड की पूर्व लिखित सहमति के बिना अन्तिम निस्तारण बिन्दु और उत्प्रवाह की गुणता व मात्रा, उत्प्रवाह निस्तारण की दर, उत्प्रवाह का तापमान न बदले या परिवर्तन करे।

20. उपरोक्त शर्ते जब तक अधिनियम/संशोधित अधिनियम की धारा 27(2) के अन्तर्गत समाप्त नही कर दी जाती है, तब तक लागू रहेगी।
21. प्रार्थी की सहमति की अवधि समाप्त होने के कम से कम 03 माह पहले या प्रस्तावित नये या परिवर्तित निस्तारण बिन्दु के चालू होने और/या निस्तारण किये जाने के 03 माह पूर्व, जो भी पहले हो, तक सहमति के नवीनीकरण हेतु आवेदन करना चाहिए।
22. एक निरीक्षण पुस्तिका खोली जानी चाहिए और बोर्ड के अधिकारियों को फैक्ट्री भ्रमण के समय उपलब्ध कराया जाना चाहिए।
23. प्रार्थी उत्प्रवाह शुद्धिकरण संयंत्र संस्थान के निर्माण, स्थापना या प्रयोग में लाने संबंधी कोई भी सूचना और जल प्रदूषण निवारण व नियंत्रण से संबंधित सूचना फैक्ट्री में बोर्ड से आये अधिकारी और/या बोर्ड को अवश्य उपलब्ध कराये।
24. फैक्ट्री परिसर से अन्तिम निस्तारण बिन्दु जैसे साल भर बहने वाली नदी या सिचाई योग्य फार्म, तक उत्पव्राह ले जाने वाली चैनल, सीवर, ड्रेन या नाले में पर्याप्त प्रवाह सुनिश्चित किया जाए। जल के भराव जिससे एनारोबिक स्थितियॉ या मच्छरों की पैदावार हो, को नही होने दिया जाए।
25. निदेशक (निदेशकों), साझेदार (साझेदारों), प्रोपराइटर(प्रोपराइटरों) के नाम, पदों व टेलीफोन की सूचना दी जाये।
26. यह सहमति आदेश में अंकित प्राविधान तथा दिये गये सहमति शर्तो के होते हुए भी उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 तथा इसके संशोधित अधिनियम, 1978 की धारा 27(2) के अन्तर्गत उपरोक्त वर्णित किसी भी/सभी शर्तो में पुनः विचार करने या संशोधन के लिए, अधिनियम के अनुसार जो उचित हो, या अधिकार व शक्ति, बोर्ड आरक्षित रखती है।

सक्षम अधिकारी की अनुमति से निर्गत।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी (वृत्त–7)

TAIL/GAJ/E&S/UPPCB/2020/66 Date: -09/07/2020

To
The Chief Environment Officer
U.P Pollution Control Board
Pickup Bhawan, Gomti Nagar
Vibhuti khand, 3rd floor, B-Block
Lucknow--226010

Sub: - Regarding Compliance of Water and Air consent Ref No. - 68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA PHULE NAGAR/2019 and 68214/UPPCB/Bijnore(UPPCBRO)/CTO/Air/JYOTIBA PHULE NAGAR/2019.

Dear Sir,

We are thankful to you & your good office for issuing us renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 where we have mentioned the discrepancies needs to be corrected.

Further to this, we would like to inform you that based on our earlier letter we request you to kindly issue the amended consent letter as earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1 Kind of Effluent : Domestic	We are having two nos of STP, having approved capacity of 100 KLD and 70 KLD as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017,

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

teva | api

	Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	you are hereby requested to please amend the domestic effluent quantity for 170 KLD . We have been issued consent of 80 KLD against 170 KLD.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	We are treating the Cooling Tower blow down water and Boiler blow down water separately as per the previous order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017. Cooling Tower (C.T) blowdown water and Cooling Tower blow down water is treated in separate WWTP plant. You are hereby requested to please add 70 KLD WWTP in the present consent order which was missed out in consent order for the current consent order..

Your good self is requested to please consider our request mentioned above and grant us amended Water consent.

We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

For **Teva API India Pvt. Ltd**,

Authorized Signatory 09/07/2020

CC: - R.O UPPCB , Bijnore

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha (Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

TAPI
Teva Active Pharmaceutical Ingredients

TAIL/GAJ/E&S/UPPCB/2020/107 **Date: - 03/12/2020**

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor-246701 (U.P)

Subject:-Regarding follow-up on amendment in Water consent No. - 68215/UPPCB/Bijnore (UPPCBRO) / CTO/Water/JYOTIBA PHULE NAGAR/2019.

Reference Letter No. :- Teva's earlier letter no. TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020

Dear Sir,

We are thankful to you & your good office for the renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 and letter to your good office TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 where we have mentioned the discrepancies that needs correction in the renewed consent order.

Further to this, we would like to inform you that based on our earlier letters, we request you to kindly issue the amended consent letter at the earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1	We are having two nos. of STP, having approved discharge of 100 KLD and 70 KLD for irrigation, as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017.

TEVA

TAPI

Teva Active Pharmaceutical Ingredients

	Kind of Effluent : Domestic Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	In the current renewed Consent order, by mistake we have been issued consent for discharge of 80 KLD against 170 KLD of domestic effluent from STPs. you are hereby requested to please amend the domestic effluent quantity as 170 KLD and use of the same in irrigation.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	As per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, under others category, we are separately treating the Cooling Tower blow down water and Boiler blow down water of 70 KLD in a dedicated WWTP plant and the treated water is used for irrigation. And as per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, we are treating 370 KLD of industrial effluent in the ETP /ZLD and the treated water is recycled back in the Utilities. You are hereby requested to kindly amend the current consent order in line with the previous consent order as follows: - 70 KLD WWTP treated water to be used in irrigation. - 370 KLD of industrial effluent in the ETP /ZLD and treated water to be recycled back in the Utilities.

Your good self is requested to please consider our request mentioned above and grant us the amended Water consent.
We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

For **Teva API India Pvt. Ltd,**

Authorized Signatory

CC:- CEO – 7

teva | api

TAIL/GAJ/E&S/UPPCB/2020/121 **Date: - 24/12/2020**

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor-246701 (U.P)

Subject:-Regarding follow-up on amendment in Water consent No. - 68215/UPPCB/Bijnore (UPPCBRO) / CTO/Water/JYOTIBA PHULE NAGAR/2019.

Reference Letter No. :- Teva's earlier letter no. TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 and letter No. TAIL/GAJ/E&S/UPPCB/2020/107 , 3.12.2020 .

Dear Sir,

We are thankful to you & your good office for the renewal of Water and Air consent, Ref.No.-68215/UPPCB/Bijnore(UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019. Compliance report on the above mentioned consent order was sent to on dated 1.07.2020 vide letter no. TAIL/GAJ/E&S/UPPCB/2020/56 and letter to your good office TAIL/GAJ/E&S/UPPCB/2020/66 , Date: - 09/07/2020 where we have mentioned the discrepancies that needs correction in the renewed consent order.

Further to this, we would like to inform you that based on our earlier letters, we request you to kindly issue the amended consent letter at the earliest.

Water Consent:- (68215/UPPCB/Bijnore (UPPCBRO)/CTO/Water/JYOTIBA,PHULE NAGAR / 2019)

S.N	Consent order	Discrepancy from previous consent order
1	The quantity of maximum daily effluent discharge should not be more than the following S.No 1	We are having two nos. of STP, having approved discharge of 100 KLD and 70 KLD for irrigation, as per the Previous consent order no. Water Consent - H14133/C-7/Water/92/Bijnor/2017.

	Kind of Effluent : Domestic Maximum daily discharge, KL/day : 80 KLD (recycled in process, used in irrigation) Treatment facility and discharge point : STP	In the current renewed Consent order, by mistake we have been issued consent for discharge of 80 KLD against 170 KLD of domestic effluent from STPs. you are hereby requested to please amend the domestic effluent quantity as 170 KLD and use of the same in irrigation.
2	Kind of Effluent : Industrial Maximum daily discharge, KL/day : 370 KLD (ZLD)Treatment facility and discharge point : ETP	As per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, under others category, we are separately treating the Cooling Tower blow down water and Boiler blow down water of 70 KLD in a dedicated WWTP plant and the treated water is used for irrigation. And as per the previous Water Consent order - H14133/C-7/Water/92/Bijnor/2017, we are treating 370 KLD of industrial effluent in the ETP /ZLD and the treated water is recycled back in the Utilities. You are hereby requested to kindly amend the current consent order in line with the previous consent order as follows: - 70 KLD WWTP treated water to be used in irrigation. - 370 KLD of industrial effluent in the ETP /ZLD and treated water to be recycled back in the Utilities.

Your good self is requested to please consider our request mentioned above and grant us the amended Water consent.
We assure our best cooperation in this regards.

Thanking you,

Your's faithfully,

24/12/2020

For **Teva API India Pvt. Ltd,**

Authorized Signatory

CC:- CEO – 7 , UPPCB , Lucknow .

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

teva | api

TAIL/GAJ/E&S/UPPCB/2020/54 Date: - 25/06/2020

To,
The Regional Officer,
U.P. Pollution Control Board
Maharishi Dayanand Nagar,
Near Sale Tax Office, Chakkar Road,
Bijnor.

Subject: - Submission of form-4 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016,for the financial year 2019-2020.

Dear Sir,

We are enclosing herewith form-4 with required information and annexures, under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for the purpose of annual return for the period of April-2019 to March-2020.

This is for your information & records please.

Thanking you,

Yours's faithfully,

For **Teva API India Pvt. Ltd**,

Authorized Signatory

Encl:-

- **Form-4.**
- **Annexure-I, II, III & IV**
- **Copy of Manifest :- E-waste , Used Oil**
- **Copy of Hazardous waste authorization**
- Hazardous waste manifest

CC:- The chief Environmental officer(circle-7) ,UPPCB, Lucknow

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha (Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City, Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

Production details April 2019 to March 2020 - Annexure -I

Product Name	1-Apr-19	1-May-19	1-Jun-19	1-Jul-19	1-Aug-19	1-Sep-19	1-Oct-19	1-Nov-19	1-Dec-19	1-Jan-20	1-Feb-20	1-Mar-20	Total
Famciclovir	0	0	0	597.3	401.5	1184.2	0	0	0	0	1009.73	1295.01	4487.74
Pioglitazone HCl	0	0	0	0	102.3	307.6	0	0	0	308.38	0	0	718.28
Pioglitazone HCl	611	716.8	1021.5	97.6	0	0	409.9	940	0	0	505.57	818.22	5120.59
Ezetimibe	947.2	900.7	1028.35	1127.3	1263.1	784.6	157.1	770.5	1122.6	296.9	0	0	8398.35
Caspofungin Acetate	0.841	4.577	21.268	7.199	0	3.362	4.364	14.113	19.986	9.24	0	1.826	86.776
Pregabalin	3790.85	0	1897.05	1977.4	0	2392.2	3117.6	897.86	0	0	3998.75	3069.15	21140.86
Pregabalin	939.6	4946.9	1178.35	0	0	0	0	0	0	0	0	0	7064.85
Pregabalin	0	0	0	0	538.85	844.4	0	0	339.94	0	0	0	1723.19
Pregabalin new	0	0	693.95	0	2030	0	0	797.05	0	0	0	0	3521
Montelukast Sodium-US	702.35	1041.1			0	0		660.5			465.65		2869.6
Montelukast Sodium	Dry Production		850.2	95.9	0	0	0		395.8	303.1		0	1645
Montelukast Sodium	0	0	0	46.5	301.2	0	0	0	0	0	0	0	347.7
Fluvastatin Sodium	330.8	454.2	0	0	0	0	232.4	1222.4	372.8	0	0	486.7	3099.3
Olanzapine	0	0	205.3	0	0	236.65	274.02	0	0	0	359.1	0	1075.07
Valsartan Azide	1267.13	906.02	1194.41	814.35	1849.2	1462.55	1130.5	737	0	0	0	0	9361.16
Valsartan Azide	0	0	0	0	0	0	0	0	9.48	202.2	210.9	434.5	857.08
Diltiazem HCl	16007.8	3381.6	0	0	0	0	0	5183.7	7906.1	4829.6	0	0	37308.8
Eletriptan HBr	120.5	100.93	0	0	0	0	0	61.07	77.57	0	0	0	360.07
Rosuvastatin	0	0	0	0	0	0	0	0	0	0	45.62	48.7	94.32
CLD CSA	0	0	0	0	0	0	0	0	0	0	0	7570.08	7570.08
Venlafaxine	0	0	0	0	0	0	0	2473.8	6261.3	2510.6	0	6531.9	17777.6
CLP-8	7.425	6.709	7.026	7.476	7.628	7.669	7.852	7.865	0.632	0	0	0	60.282
Pregabalin Crude	1000.51	1593	967.4	0	0			0	0	2537.4			6098.31
Trityl Losartan	0	0	583.45	2121.45	1376.39	766.05	1794.05	1394.2	316.1	959.3	0	0	9310.99
SAS	0	0	900.8	1160.7	232	0	0	0	0	0	0	0	2293.5

ZLD IAA	0	0	0	0	0	0	0	17.7	0	0	0	0	17.7
RML-12	0	0	0	0	26.7	106.45	0	0	0	0	0	0	133.15
Ven-I	1279.95	0	0	0	0	0	0	0	0	0	0	0	1279.95
C6	0	5881.05	3754.1	8139.37	1556.05	7836.15	8271.2	4277.9	1027.6	0	0	0	40743.42
Hydantoic	0	4640.5	8238.6	3385.1	838.3	0	0	0	0	0	0	0	17102.5
Montelukast	0	0	0	0	0	0	0	0	0	0	0	506.5	506.5
Migalastat	Dry Production						1.18	0	0	0	0	0	1.18
Diene-JP	Dry Production							205.5	203.8	207.8	212.1	0	829.2
	27005.956	24574.086	22541.754	19577.65	10523.218	15931.88	15400.17	19661.158	18053.708	12164.52	6807.42	20762.586	213004.1

FORM 4

[See rules 6(5), 13(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS (2019-20)

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility: -	Teva API INDIA PVT LTD, Plot no. A-2,A-2/1,A-2/2 UPSIDC Industrial Area Gajraula ,Amroha U.P 244235 (INDIA) 05924-252591,92,93
2. Authorization No. and Date of issue:-	H-10669 – C-7/HAZ –03/17 – Date of issue :- 14.10.2017
3. Name of the authorized person and full address with telephone, fax number and e-mail:-	Sh. Deepak Kushalnath Shukla, Teva API India Pvt Ltd, A-2 UPSIDC, Ind. Area, Gajraula, Amroha,U.P (INDIA) Phone No: 05924-252202, .E.mail :- DeepakKushalnath.Shukla03 @teva.co.in

4. **Production during the year (product wise), wherever applicable:- Refer the Annexure-I**

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise	**: -**	**Attached as Annexure –II**
2. Quantity dispatched **(i) to disposal facility** **(ii) to recycler or co-processors or pre-processor** **(iii) others**	**:-**	**Attached as Annexure -III**
3. Quantity utilized in-house, if any -	**:-**	NA
4. Quantity in storage at the end of the year: -	**:-**	**Attached as Annexure -IV**

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received -
2. Quantity in stock at the beginning of the year -
3. Quantity treated –
4. Quantity disposed in landfills as such and after treatment –
5. Quantity incinerated (if applicable) -
6. Quantity processed other than specified above -
7. Quantity in storage at the end of the year -

Part C. To be filled by recyclers or co-processors or other users

1. Quantity of waste received during the year –
(i) Domestic sources
(ii) imported (if applicable)
3. Quantity recycled or co-processed or used.
2. Quantity in stock at the beginning of the year –
4. Quantity of products dispatched (wherever applicable) –
5. Quantity of waste generated -
6. Quantity of waste disposed -
7. Quantity re-exported (wherever applicable)-
8. Quantity in storage at the end of the year -

Signature of the Occupier or
Operator of the disposal facility

TEVA API INDIA PVT. LTD.

Date. 26/6/2020

Authorised Signatory

Place. Gujarat

26/06/2020

Annexure-II

Total quantity of waste generated category wise from 1-April 2019 to 31 March 2020			
S.NO	**Type of Hazardous waste**	**Category of waste as per schedule I**	**Quantity Generated (MT)**
1	Process Residue and Wastes	28.1	496.5
2	Concentration or evaporation residue	37.3	846.9
3	Spent Carbon	28.3	21
4	Spent organic solvent	28.6	21.9
5	Chemical sludge from waste water treatment	35.3	436.2
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	40.0
7	Date Expired, Discarded and off specification drugs/Medicines	28.4 , 28.5	35.96
8	Any process or distillation residue	36.1	12.88
9	Oil & Grease skimming	35.4	0.125
10	paint and ink sludge/residue	19	0
Other Recyclable wastes			
11	Used oil	20	1470 kgs
12	E-waste	18	400 kgs
13	Lead Acid Battery	17	1000 Kg
14	Empty Drums,Containers etc (in numbers)	33.1	29215

Annexure-III

Total quantity of waste Dispossed off Category wise from 1-April 2019 to 31 March 2020				
S.NO	**Type of Hazardous waste**	**Category of waste as per schedule I**	**Quantity (MT) Generated**	
1	Process Residue and Wastes	28.1	497.6	Sent to secure landfill in common T.S.D.F,Kanpur , Incinerated TSDF/inhouse
2	Concentration or evaporation residue	37.3	858.2	Sent to secure landfill in common T.S.D.F,Kanpur , Incinerated TSDF/inhouse
3	Spent Carbon	28.3	22.2	Incinerated common TSDF
4	Spent organic solvent	28.6	18.5	Inhouse incinertor
5	Chemical sludge from waste water treatment	35.3	436	Sent to secure landfill in common T.S.D.F,Kanpur
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	39.6	Sent to secure landfill in common T.S.D.F,Kanpur
7	Date Expired, Discarded and off specification drugs/Medicines	28.4	35.9	Incinerated common TSDF
8	Any process or distillation residue	36.1	12.19	Sent to Common TSDF and Inhouse incinerator
9	Oil & Grease skimming	35.4	0.125	Inhouse incinertor
10	Paint and ink sludge/residue	19	0	No Generation for category No. 19 of the waste
Other Recyclable wastes				
11	Used oil	20	1540 kgs	Sent to authorized recycler
12	E-waste	18	3600 kgs	Send to authorized recycler
13	Lead Acid Battery	17	00 Kg	Send to authorized recycler
14	Empty Drums,Containers etc (in numbers)	33.1	29215	Sent to authorized recycler

Annexure-IV

Quantity in storage at the end of the year category wise (on dated 31 march -2020)

S.NO	Type of Hazardous waste	Category of waste as per schedule I	Opening Balance start of the year (MT)	Generation during the year(MT)	Disposed off / Incinerated during the year (MT)	Closing Balance end of the year (MT)
1	Process Residue and Wastes	28.1	2.2	496.5	497.6	1.1
2	Concentration or evaporation residue	37.3	20	846.9	858.2	8.7
3	Spent Carbon	28.3	1.671	21	22.2	0.471
4	Spent organic solvent	28.6	9.21	21.9	18.5	12.61
5	Chemical sludge from waste water treatment	35.3	7.3	436.2	436.05	7.45
6	Ash from Incineration of hazardous waste, Flue gas cleaning residue	37.2	2.529	40	39.6	2.929
7	Date Expired, Discarded and off specification drugs/Medicines	28.4 , 28.5	1.37	35.96	35.9	1.43
8	Any process or distillation residue	36.1	0	12.88	12.19	0.69
9	Oil and Grease Skimming	35.4	0	0.125	0.125	0
10	paint and ink sludge/residue	19	0	0	0	0
Other Recyclable wastes						
11	Used oil kgs	20	965	1470	1540	895
12	E-waste kgs	18	4683	400	3600	1483
13	Lead Acid Battery Kg	17	460	1000	0	1460
14	Insulated Copper wire Scrap	33.1	0	0	0	0
15	Empty Drums,Containers etc (in numbers)	33.1	100	29215	29212	103

Registered

UTTAR PRADESH POLLUTION CONTROL BOARD
T.C. 12 V, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW

Ref: H10669 C-7/Haz-03/17 Dated: 14-10-17

1. Number of authorisation and date of issue: 40/HAZ-03/17 Date as above.
2. Reference of application (No. and date):
3. **M/s Teva API India Pvt. Ltd, A-2/1, A-2/2, UPSIDC, Industrial Area, Gajraula, Distt-Amroha** is hereby granted an authorisation based on the enclosed signed inspection report for generation, storage & disposal of hazardous wastes as per following details.

S.No	Schedule-I Category No	Waste Details	Physical Characteristics	Qty MT/Annum	Final mode of disposal, recycle or reuse/SLF/incineration
1	28.1	Process Residue and wastes	Solid	750 MT	TSDF/Incinerator
2	28.2	Spent catalyst	Solid	40 MT	TSDF/ Incinerator
3	28.3	Spent carbon	Solid	40 MT	TSDF/ Incinerator
4	28.4	Off specification products	Solid	60 MT	TSDF/ Incinerator
5	28.5	Date-expired products	Solid	60 MT	TSDF/ Incinerator
6	28.6	Spent solvents	Liquid	260 KL	TSDF/Incinerator/Recycle/Reuse
7	33.1	Empty barrels/containers/liners contaminated with hazardous chemicals/wastes	Solid	40000 Nos	TSDF/Incinerator/Recycle/Reuse
8	35.2	Spent ion exchange resin containing toxic metals	Solid	5 MT	TSDF/ Incinerator
9	35.3	Chemical sludge from waste water treatment	Semi-Solid	500 MT	TSDF/ Incinerator
10	35.4	Oil and grease skimming	Liquid	5 MT	TSDF/ Incinerator
11	36.1	Any process or distillation residue	Semi-Solid	400 MT	TSDF/ Incinerator
12	36.2	Spent carbon or filter medium	Solid	10 MT	TSDF/ Incinerator
13	37.2	Ash from incinerator and flue gas cleaningresidue	Solid	50 MT	TSDF/ Incinerator
14	37.3	Concentration or evaporation residues	Solid	1000 MT	TSDF/ Incinerator
Sl. No.	**Schedule-IV Sl. No**	**Waste Details**	**Physical Characteristics**	**Qty MT**	**Final mode of disposal, recycle or reuse/SLF/Incineration**
15	7	Insulated Copper Wire Scrap or copper with PVC sheathing including ISRI-code material namely "Druid"	Solid	10 MT	Authorised Recycler
16	17	Used Lead acid battery including grid plates and other lead scrap/ashes/residues	Solid	5 MT	Authorised Recycler
17	18	Components of waste electrical and electronic assembles comprising accumulators and other batteries.	Solid	4 MT	Authorised Recycler
18	19	Paint and ink Sludge/residues	Liquid	10 MT	Authorised Recycler/TSDF
19	20	Used oil and waste oil	Liquid	10 MT	Authorised Recycler/TSDF

1. The authorisation shall be valid for a period of Five Year from the date of issue, if not suspended or cancelled earlier.
2. The authorisation is subject to the following general and specific conditions.

A. General conditions of authorisation:

1. The authorisation shall comply with the provisions of Environment (Protection) Act 1986 and rules made thereunder.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer of the U.P. Pollution Control Board.
3. The person authorised shall not rent lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the U.P. Pollution Control Board.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation 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 authorised 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 authorised person to take prior permission of the U.P. Pollution Control Board to close down the facility.

8. An application for the renewal of an authorisation shall be made in form 1, before its expiry as laid down in rule. It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorisation. It is also provided in the same orders that industries which are not complying with the conditions of authorisation shall not be allowed to operate. Hence in case you fail to apply for authorisation, before its expiry or fail to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
9. Annual return shall be filled by June 30th for the period ensuring 31st March of the Year.
10. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
11. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
12. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
13. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
14. The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.
15. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
16. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorisation issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundar Movement) Rules, 2016.
17. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
18. It is the mandatory duty of the authorised person to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.
19. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
20. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
21. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
22. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
23. Details of raw material which is (Hazardous waste) and product along with quantity shall be sent with in a month.
24. You shall become the member of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil & Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat. permitted by U.P.P.C.B), and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifest (document of proof) within one/three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only and common incinerator at Kumbhi, Kanpur Dehat, Uttar Pradesh for other incinerable wastes. The authorized incinerator is also with U.P. Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat.
25. You are required to store the hazardous waste safely and send it to TSDF/incinerator within Ninty days/Six months of its generation.
26. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to U.P.P.C.B. for each category of waste sent to TSDF/Incinerator.
27. Emission from the Common/Captive incinerator stack shall meet the prescribed standards under Environmental Protection Act, 1986.

(Ashish Tiwari) 14/10/17
Member Secretary

Copy to:- Regional Officer, U.P. Pollution Control Board, Bijnor for information and necessary action.

(Amit Chandra)
Environmental Engineer (Incharge)
Circle7

FORM 10
[See rule 19 (1)]

Occupier's Copy

MANIFEST FOR HAZARDOUS AND OTHER WASTE S.No.: 27139

1 Occupier's Name & Mailing Address (including Phone No. and email)	Teva API India Private Limited (Formerly Amsonau P. PHNO→ 05984 302239 2240
2 Sender's Authorization No.	40/HWZ. 03/2017
3 Manifest Document No.	27139
4 Transporter's Name & Address (including Phone No. and email)	Bharat Oil & Waste Management limited Sahibabad U.P.
5 Type of Vehicle	(Truck / Tanker / Special Vehicle)
6 Transporter's Registration	1486/UPPCB/GHZ Valid upto
7 Vehicle Registration No.	UP14FT.869M
8 Receiver's Name & Mailing Address (including Phone No. and email)	(I) BHARAT OIL COMPANY (I) R… E-18, Site-IV, Sahibabad Industrial … Ghaziabad, UP-201010 Tel.: 0120-4… e-mail:sales@bharatoil.com
(II) BHARAT OIL & WASTE MANAGEMENT LTD. Mauza Mukimpur, Roorkee-Lakshar Road, Roorkee - 247664 UK, Tel. :08874207664 e-mail:sales@bharatoil.com	(III) BHARAT OIL & WASTE MANAGEMENT LTD. Plot # 672, Sikandra Road, NH-2, Kumbhi Village, Tehsil Akbarpur, Kanpur Dehat, UP, Tel : 0512-2285296 e-mail:sales@bharatoil.com
9 Receiver's Authorization No.	(I) 1486/UPPCB/Ghaziabad(UPPCBRO)/HWM/GHAZIABAD/2018 Valid upto: 03/05/2023
(ii) AWH-38265 Valid upto: 31/03/2023	(iii)1403/UPPCB/KanpurDehat(UPPCBRO)/HWM/KANPUR DEHAT/2018 Valid upto:30/04/2023
10 Waste Description	Oil based Waste oil.
11 Total Quantity No. of Containers	15.40 KL m³ or MT 7.0 Drum Nos.
12 Physical Form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13 Special Handling Instructions & Additional Information	Do not throw Drums from truck. In case of leakage/ seapage, use Washing soap at point of leak to stop its leakage.
14 SENDER'S CERTIFICATE	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.
Typed Name & Stamp : Teva API India Private Limited Signature :	Month 04 Day 03 Year 2019
15 Transporter Acknowledgement of Receipt of Waste	Month 04 Day 03 Year 2019
Typed Name & Stamp : Signature :	
16 Receiver's Certificate for Receipt of Hazardous and other Waste	Month Day Year
Typed Name & Stamp : Signature :	

FORM 6

See rule 19

E-WASTE MANIFEST

1.	Sender's Name and Mailing Address (including Phone No.) : 05924302226	Tempo API India Pvt Ltd. Plot, A-2, A-211, A-212 UPSIDC Industrial Area, Gajraula (U.P.)
2.	Sender's Authorisation No, if Applicable :	40/HAZ-03/2017 Dtd. 14/10/2018
3.	Manifest Document No. :	01
4.	Transporter's Name and address : (including Phone No.)	—
5.	Type of vehicle :	(Truck or Tanker or Special Vehicle)
6.	Transporter's Registration No. :	UP15CT/9693
7.	Vehicle registration No. :	UP15CT/9693
8.	Receiver's name & address :	Hi-Green E-Waste Recycling Pvt. Ltd 17-18, 1st Floor, 525 Square Complex, Garh Road, Meerut, Uttar Pradesh - 250002
9.	Receiver's Authorisation No, if applicable :	/H92-E-Waste Order /02/2015 dt 6.11.2015
10.	Description of E-Waste(Item, Weight / Numbers): 3670 kg	E-waste
11.	Name and stamp of Sender* (Manufacturer or Producer or Bulk Consumer or Collection Centre or Refurbisher or Dismantler): Signature: Month 04 Day 15 Year 2019	
12	Transporter Acknowledgment of Receipt of E-Wastes	
	Name and Stamp: Signature: Year	Month 04 Day 15 Year 2019
13.	Receiver* (Collection Centre or Refurbisher or Dismantler or Recycler) Certification of receipt of E-Waste	
	Name and Stamp: Signature:	Month 04 Day 15 Year 2019

18/4/2019

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

संदर्भ संख्याः 116483 सी-7/वाए-21/21 दिनॉकः 06-4-21

सेवा में,

मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0,
इण्डस्ट्रियल एरिया, गजरौला,
जिला–अमरोहा।

यह कि मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा द्वारा प्रोसेसिंग केमिकल्स एवं साल्वेन्ट का प्रयोग कर बल्क ड्रग्स एवं इन्टरमीडिएट का उत्पादन कार्य करते हुए उपरोक्त वर्णित स्थल पर कार्यरत है, जोकि वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 यथासंशोधित की धारा–40 के अन्तर्गत एक कम्पनी है।

यह कि उद्योग के पक्ष में बोर्ड के पत्र सं0-G0214/यूपीपीसीबी/बिजनौर (यूपीपीसीबीआरओ)/सीटीओ/एअर/ज्योतिबाफूलेनगर/2019 दिनांक 04.06.2020 द्वारा वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 की धारा–21/22 के अन्तर्गत सशर्त सहमति प्रदान की गयी है जिसकी वैधता दिनांक 31.12.2021 तक है।

यह कि दिनांक 07.06.2020 को उद्योग में हुए गैस रिसाव की जॉच जिलाधिकारी, अमरोहा द्वारा गठित अन्तर्विभागीय समिति द्वारा दिनांक 09.06.2020 को की गयी तथा पाया गया कि हाइड्रोक्लोरिक ऐसिड भण्डारण टैंक पर स्थापित वेट स्कबर की फ्लैंज की मरम्मत की गयी थी तथा निरीक्षण के दौरान वेट स्कबर संचालित नहीं पाया गया।

यह कि बोर्ड के पत्र दिनांक 11.06.2020 द्वारा वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 की धारा–31ए सपठित 21(6) के अन्तर्गत सहमति आदेश खण्डित किये जाने तथा उद्योग को बन्द किये जाने हेतु कारण बताओ नोटिस जारी किया जोकि वर्तमान में प्रभावी है।

यह कि माननीय राष्ट्रीय हरित अधिकरण द्वारा ओ0ए0 सं0–89/2020 जितेन्द्र सिंह बनाम सेन्ट्रल पोल्यूशन कन्ट्रोल बोर्ड एवं अन्य में पारित आदेश दिनांक 18.06.2020 के क्रम में केन्द्रीय प्रदूषण नियंत्रण बोर्ड एवं उ0प्र0 प्रदूषण नियंत्रण बोर्ड तथा जिला प्रशासन, अमरोहा द्वारा दिनांक 11.08.2020 को उद्योग का निरीक्षण किया गया। निरीक्षण के दौरान पाया गया कि उद्योग में Ammonia gas, Hydrogen Bromide gas and Hydrochloric acid gas सिलेण्डर का रख–रखाव सन्तोषजनक पाया गया तथा संयुक्त समिति द्वारा निरीक्षण दिनांक 11.08.2020 के दौरान किये गये अनुश्रवण में स्टैक उत्सर्जन मानकों के अनुरूप पाये गये हैं तथा टॉक्सिक गैसेज का उत्सर्जन नहीं पाया गया है। संयुक्त समिति द्वारा उक्त निरीक्षण रिपोर्ट दिनांक 11.08.2020 में निम्न संस्तुतियॉ की गयी हैं :–

I. Monitoring data of boiler stack, HCl tank and ambient air quality does not reflect the emission of toxic gases during visit on 11-08-2020. However, joint inspection on dated 09-06- 2020 by SDM Amroha, Assistant Director Industry, Moradabad; Chief Fire Officer Amroha and UPPCB on dated 09-06-2020 due to non-operational condition of wet scrubber attached to HCl tank, unit was unable to Control the emission of HCl vapour on dated 07-06-2020 and the incident of gas leakage took place.

II. Unit shall make sure, the air pollution control devices provided work efficiently and no such incidence of leakage of gas occurs in future due to negligence of operation and maintenance.

III. Ladder facility with stack shall be provided as per CPCB guidelines.

IV. Regular calibration of OCEMS attached to boiler shall be ensured.

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यह कि माननीय राष्ट्रीय हरित अधिकरण द्वारा ओ0ए0 सं0–89/2020 जितेन्द्र सिंह बनाम सेन्ट्रल पोल्यूशन कन्ट्रोल बोर्ड एवं अन्य में पारित आदेश दिनांक 12.02.2021 में निम्नानुसार निर्देश जारी किये गये हैं :–

"From the above, it is clearly seen that there is serious violation of environmental norms, including non-compliance of Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 claimed under the Environment (Protection) Act, 1986. Prima facie, the unit has to pay compensation for the damage caused apart from taking preventive measures for future."

यह कि उद्योग द्वारा किये गये उल्लंघन की अवधि दिनाक 07.06.2020 से दिनांक 11.08.2020 तक कुल दिवस 66 दिन हेतु केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक–08.02.2019 द्वारा जारी Levying of Environmental Compensation against Defaulting Industries के अनुसार उद्योग पर अधिरोपित की जाने वाली पर्यावरणीय क्षतिपूर्ति निम्नानुसार आंकलित की जाती है:–

EC=PI x N x R x S x LF

PI=60 (Red Category Industry default in Air)

N= 66 Days

R= 250

S=1.5 (Large Unit)

LF= 1

EC=Rs. 14,85,000/- (Rs. Forteen Lakh Eighty Five Thousand only)

उद्योग द्वारा किये गये उल्लंघन हेतु सक्षम अधिकारी से अनुमोदन के उपरान्त केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक–08.02.2019 द्वारा जारी Levying of Environmental Compensation against Defaulting Industries के अनुसार मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा पर रू0 14,85,000/- (रूपये चौदह लाख पचासी हजार मात्र) का पर्यावरणीय क्षतिपूर्ति के रूप में अर्थदण्ड अधिरोपित किये जाने हेतु नोटिस प्रेषित किया जाता है।

उद्योग के विरूद्ध पूर्व में जारी कारण बताओ नोटिस दिनांक 11.06.2020 यथावत् प्रभावी रहेगा तथा उक्त के संबंध में अंतिम निर्णय अधिरोपित पर्यावरणीय क्षतिपूर्ति धनराशि जमा किये जाने के साथ ही लिया जाएगा।

आपको निर्देशित किया जाता है कि उक्त के दृष्टिगत अपना स्पष्टीकरण 15 दिन के अन्दर बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे। निर्धारित समयावधि में स्पष्टीकरण प्राप्त न होने अथवा संतोषजनक उत्तर प्राप्त न होने की दशा में उक्त निर्देशो की पुष्टि करते हुए उद्योग के विरूद्ध पर्यावरणीय अधिनियमों के अन्तर्गत कार्यवाही प्रारम्भ कर दी जायेगी, जिसका सम्पूर्ण उत्तरदायित्व स्वंय उद्योग एवं उद्योग स्वामी का होगा।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी, वृत्त–7

प्रतिलिपिः क्षेत्रीय अधिकारी उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, बिजनौर को इस निर्देश के साथ की उक्त निर्देशों के क्रम उद्योग का निरीक्षण करते हुए ससमय निरीक्षण आख्या स्पष्ट संस्तुति सहित बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे।

मुख्य पर्यावरण अधिकारी, वृत्त–7

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

संदर्भ संख्याः H61/482/ज-7/ज्यो० 92/21 दिनांकः 6/4/21

सेवा में,

मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0,
इण्डस्ट्रियल एरिया, गजरौला,
जिला–अमरोहा।

यह कि मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा द्वारा प्रोसेसिंग केमिकल्स एवं साल्वेन्ट का प्रयोग कर बल्क ड्रग्स एवं इन्टरमीडिएट का उत्पादन कार्य करते हुए उपरोक्त वर्णित स्थल पर कार्यरत है, जोकि जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 यथासशोधित की धारा–47 के अन्तर्गत एक कम्पनी है।

यह कि उद्योग के पक्ष मे बोर्ड के पत्र सं0–68215/यूपीपीसीबी/बिजनौर (यूपीपीसीबीआरओ)/सीटीओ/वाटर/ज्योतिबाफूलेनगर/2019 दिनांक 04.06.2020 द्वारा जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा–25/26 के अन्तर्गत सशर्त सहमति प्रदान की गयी है जिसकी वैधता दिनांक 31.12.2021 तक है।

यह कि माननीय राष्ट्रीय हरित अधिकरण द्वारा ओ0ए0 सं0–89/2020 जितेन्द्र सिंह बनाम सेन्ट्रल पोल्यूशन कन्ट्रोल बोर्ड एव अन्य में पारित आदेश दिनांक 18.06.2020 के कम में केन्द्रीय प्रदूषण नियंत्रण बोर्ड एवं उ0प्र0 प्रदूषण नियंत्रण बोर्ड तथा जिला प्रशासन, अमरोहा द्वारा दिनांक 11.08.2020 को उद्योग का निरीक्षण किया गया।

यह कि निरीक्षण के दौरान पाया गया कि उद्योग द्वारा अशुद्धिकृत/अपूर्ण शोधित उत्प्रवाह का निस्तारण स्ट्राम वाटर ड्रेन के माध्यम से किया जा रहा था। स्ट्राम वाटर ड्रेन में निस्तारित किये जा रहे उत्प्रवाह में पी0एच0 5.49, सी0ओ0डी0–2544 मि0ग्रा0/ली0, बी0ओ0डी0–835 मि0ग्रा0/ली0 पाये गये जो दर्शाता है कि अशुद्धिकृत उत्प्रवाह स्ट्राम वाटर ड्रेन के माध्यम से हो रहा है। उद्योग द्वारा वेट स्कबर पर स्कबर वाटर टैंक में स्ट्राम वाटर ड्रेन हेतु बाईपास लाइन पायी गयी तथा ई0टी0पी0 में केमिकल की डोजिंग अनियंत्रित रूप से की जाती पायी गयी। निरीक्षण के दौरान पाया गया कि आवासीय कालोनी हेतु स्थापित एस0टी0पी0–I के इनलेट पर बी0ओ0डी0 अत्यधिक कम पायी गयी जिससे स्पष्ट है कि उद्योग द्वारा डाइलुशन किया जा रहा है। समिति द्वारा उक्त निरीक्षण दिनांक 11.08.2020 में निम्नानुसार संस्तुतियॉ की गयी हैं :–

I. Unit was found non-compliant w.r.t. discharge of untreated/ partially effluent through storm water drain and violating the condition of ZLD.
II. Unit shall make sure that no untreated/partially treated effluent and seepage/run-off from the industrial process area discharged into storm water drain.
III. Unit shall strictly follow the conditions laid down inconsent to operate issued by UPPCB.
IV. The unit should carry out adequacy assessment of ZLD system at operational capacity of 1.77MT/day, by areputed Government technical institute.
V. Facility for dosing and mixing of alum and polyelectrolyte shall be provided in separate tanks.

यह कि उद्योग द्वारा केन्द्रीय भूजल प्राधिकरण से भूजल दोहन हेतु अनुमति प्राप्त नही की गयी है।

यह कि निरीक्षण दिनांक 11.08.2020 में पाये गये उल्लंघन के दृष्टिगत उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा पर केन्द्रीय

.....2–

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प्रदूषण नियंत्रण बोर्ड नई दिल्ली द्वारा जारी गाईड लाइन "Levying of Environmental Compensation against Defaulting Industries" के अनुसार दैनिक पर्यावरणीय क्षतिपूर्ति निम्नानुसार आंकलित की जाती है–

EC=PI x N x R x L x LF

PI=60 (Red Category Industry only effluent discharge violation)

N= 1 Days

R= 250

L=1.5 (Large Unit)

LF= 1

EC=Rs. 22,500/- (Rs. Twenty Two Thousand Five Hundered Only/Per day)

अतः उपरोक्त तथ्यों के दृष्टिगत उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा के विरूद्ध सक्षम अधिकारी के अनुमोदनोपरान्त निम्नानुसार निर्देश जारी किये जाते है–

1. **जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा–33ए सपठित 27(2) के अन्तर्गत बोर्ड के पत्र दिनांक 25.01.2021 द्वारा निर्गत सहमति जल खण्डित करते हुए बन्दी आदेश जारी किये जाने हेतु निम्नानुसार कारण बताओ नोटिस जारी किये जाते है –:**
   I. यह कि क्यों न उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा के पक्ष में बोर्ड के पत्र सं0–68215/यूपीपीसीबी/बिजनौर (यूपीपीसीबीआरओ)/सीटीओ/वाटर/ज्योतिबाफूलेनगर/2019 दिनांक 04.06.2020 द्वारा निर्गत सशर्त सहमति जल को तत्काल प्रभाव से खण्डित कर दिया जाये।
   II. यह कि क्यों न उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा के संचालन को रोके जाने हेतु बन्दी आदेश जारी कर दिये जाये।
   III. यह कि क्यो न सक्षम अधिकारियों से यह अपेक्षा की जाये कि उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा के संचालन से सम्बद्ध समस्त विद्युत कनेक्शनों एवं जल आपूर्ति कनेक्शन को तत्काल प्रभाव से रोक दिया जाये।
2. संयुक्त समिति द्वारा किये गये निरीक्षण दिनांक 11.08.2020 में पाये गये उल्लंघन के दृष्टिगत उद्योग मै0 तेवा ए0पी0आई0 (इण्डिया) प्रा0 लि0, इण्डस्ट्रियल एरिया, गजरौला, जिला–अमरोहा पर केन्द्रीय प्रदूषण निगंत्रण बोर्ड नई दिल्ली द्वारा जारी गाईड लाइन के अनुसार उक्त उल्लंघन का समाधान किये जाने की तिथि तक रूपये 22,500/– प्रति दिन की दर से पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सबध बोर्ड द्वारा कार्यवाही प्रारम्भ कर दी जाये।

आपको निर्देशित किया जाता है कि उपरोक्त निर्देशों एवं संयुक्त समिति द्वारा दिनांक 11.08.2020 को किये गये निरीक्षण में की गयी संस्तुतियों के दृष्टिगत निराकरण करते हुए अपना स्पष्टीकरण 15 दिन के अन्दर बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे। निर्धारित समयावधि में स्पष्टीकरण प्राप्त न होने अथवा संतोषजनक उत्तर प्राप्त न होने की दशा में उक्त निर्देशो की पुष्टी करते हुए उद्योग के विरूद्ध पर्यावरणीय अधिनियमों के अन्तर्गत कार्यवाही प्रारम्भ कर दी जायेगी, जिसका सम्पूर्ण उत्तरदायित्व स्वंय उद्योग एवं उद्योग स्वामी का होगा।

(अमित चन्द्रा)
मुख्य पर्यावरण अधिकारी, वृत्त–7

प्रतिलिपिः क्षेत्रीय अधिकारी उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, बिजनौर को इस निर्देश के साथ की उक्त निर्देशों के क्रम उद्योग का निरीक्षण करते हुए ससमय निरीक्षण आख्या स्पष्ट संस्तुति सहित बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करे।

मुख्य पर्यावरण अधिकारी, वृत्त–7

UTTAR PRADESH POLLUTION CONTRAL BOARD

Ref. No. H61483/C-7/Air-21/21 **Date 06/04/2021**

To

Teva API India Private Limited
Industrial Area, Gajraula,
District- Amroha.

That M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha by using raw material in the form of processing chemical and solvent etc is producing bulk drugs and intermediate 620 metric ton per year and is operational at above stated place, which is a Company covered under Section 40 of Air (Prevention and Control of Pollution) Act, 1981.

That the Industry has been given conditional consent vide Board's letter no. C0214/UPPCV/Bijnor(UPPCBRO)/CTO/Air/Jyotiba Phule Nagar/2019 dated 04.06.2020 under Section 21/22 of the Air (Prevention and control of pollution) Act, 1981 which is valid till 31.12.2021.

That in relation to the complaint of gas leak on 07.06.2020 the industry was investigated by the inter-department committee which was constituted by the District Magistrate, Amroha on 09.06.2020 and it was found that the wet scrubber flange installed on the Hydrochloric Acid storage tank was repaired. During the inspection it was found that the wet scrubber is not operational.

That under Section 31A read with 21(6) of the Air (Prevention and control of pollution) Act, 1981, a show cause notice has been issued by the Board's letter dated 11.06.2020 for cancelation of the consent order and closure of the industry which is currently effective.

That by virtue of the order dated 18.06.2020 passed by the Hon'ble National Green Tribunal in O.A. No. 89/2020 in Jitendra Singh Vs Central

Pollution Control Board and Ors., the Central Pollution Control Board along with the U.P. Pollution Control Board and District Administration, Amrohah conducted an inspection of the industry on 11.08.2020. During the inspection it was found that the upkeep of the cylinders containing Ammonia gas, Hydrogen Bromide gas and hydrochloric gas was found satisfactory. During the inspection conducted by the joint committee on 11.08.2020, it was found that, stack leakage control was as per acceptable standards and there is no leakage of any toxic gases. The joint committee vide its report dated 11.08.2020 made the following observations:

I. Monitoring data of boiler stack, HCL tank and ambient air quality does not reflect the emission of toxic gases during visit on 11-08-2020. However, joint inspection on dated 09-06-2020 by SDM, Amroha, Assistant Director Industry, Moradabad; Chief Fire Officer, Amroha and UPPCB on dated 09-06-2020 due to non-operational condition of wet scrubber attached to HCL tank, unit was unable to control the emission of HCL vapor on dated 07-06-2020 and the incident of gas leakage took place.

II. Unit shall make sure, the air pollution control devices provided for efficiency and no such incidence of leakage of gas occurs in future due to negligence of operation and maintenance.

III. Ladder facility with stack shall as provided per CPCB guidelines.

IV. Regular calibration of OCEMS attached to boiler shall be ensured.

That the Hon'ble National Green Tribunal in O.A. No. 89/2020 in Jitendra Singh Vs Central Pollution Control Board and Ors. vide order dated 12.02.2021 has passed the following orders:-

“From the above, it is clearly seen that there is serious violation of environmental norms, including non-compliance of Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 claimed under the Environment (protection) Act, 1986. Prima facie, the unit has to pay

compensation for the damage caused apart from taking preventive measures for future".

That the duration of violation committed by the industry is from 07.06.2020 to 11.08.2020 which makes a total of 66 days. The Central Pollution Control Board vide its letter dated 08.02.2019 had communicated the "Levying of Environmental Compensation against the Defaulting Industries", on the industry in accordance with the following:-

EC = PI x N x R x S x LF

PI = 60 (Red Category Industry default in Air)

N = 66 days

R = 250

S = 1.5(Large Unit)

LF = 1

EC = Rs. 14,85,000/- (Rs. Fourteen Lakh Eighty Five Thousand Only)

That in view of the violation done by the industry and after the request of the competent officer, the Central Pollution Control Board vide its letter dated 08.02.2019 issued notice and imposed the environmental damages of Rs. 14,85,000/- (Rupees Fourteen Lakh Eighty Five Thousand Only) on M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha in accordance with the "Levying of Environmental Compensation against the Defaulting Industries".

That the show cause notice issued earlier to the industry on 11.06.2020 shall remain effective and the final decision in relation to the same shall be taken at the along with the deposit of the imposed Environmental Damages amount.

That in view of the above you are hereby directed to submit your explanation within 15 days to the Board headquarters. If you fail to send in your explanation or if the explanation is found unsatisfactory, the authority shall be bound to take any such decision keeping in mind the environmental

regulations against the industry. The authority can also initiate interim investigation the responsibility of which shall be completely borne by the industry and its owner.

-SD-

(Amit Chandra)

Chief environment officer, Circle-7

Copy:- The Regional Officer, Uttar Pradesh Pollution Control Board, Bijnor, is hereby directed to send the inspection report in the manner as prescribed above to the Board headquarters with clear recommendations.

-SD-

Chief environment officer, Circle-7

UTTAR PRADESH POLLUTION CONTRAL BOARD

Ref. No. H61482/C-7/Water-92/21 **Date 06/04/2021**

To

Teva API India Private Limited
Industrial Area, Gajraula,
Amroha.

That M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha by using raw material in the form of processing chemical and solvent etc is producing bulk drugs and intermediate 620 metric ton per year and is operational at above stated place, which is a Company covered under Section 40 of Air (Prevention and Control of Pollution) Act, 1981.

That the Industry has been given conditional consent vide Board's letter no. 68215/UPPCB/Bijnor(UPPCBRO)/CTO/Water/JyotibaPhuleNagar/2019 dated 04.06.2020 under Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 which was valid till 31.12.2021.

That by virtue of the order dated 18.06.2020 passed by the Hon'ble National Green Tribunal in O.A. No. 89/2020 in Jitendra Singh Vs Central Pollution Control Board and Ors., the Central Pollution Control Board along with the U.P. pollution control board and district administration Amrohah conducted an inspection of the industry on 11.08.2020.

That during the inspection it was found that the impure/ partially treated effluent was being disposed by the industry through storm water drain. The effluent being disposed by the storm water drain had PH level of 5.49, COD - 2544 mg/l, and BOD 835 mg/l. which indicates that impure effluent is passing through storm water drain. During the inspection it was found that industry was using the wet scrubber over the scrubber water tank in which a Bypass line was found for drainage of storm water and the chemical dosing

in ETP was found to be uncontrolled. During the inspection it was found that the inlet for the STP installed for the residential colony had a very a very minimal amount of BOD which clearly depicts that the industry was engaged in dilution. The committee vide its inspection on 11.08.2020 had made the following observations:-

I. Unit was found non-compliant w.r.t. discharge of untreated/ partially effluent through storm water drain and violating the condition of ZLD.

II. Unit shall make sure that no untreated/partially treated effluent and seepage/run-off from the industrial process area discharged into storm water drain.

III. Unit shall strictly follow the conditions laid down in consent to operate issued by OPPBC.

IV. The unit should carry out adequacy assessment of ZLD system at operational capacity of 1.77 MT/day, by a reputed Government technical institute.

V. Facility of dosing and mixing of alum and polyelectrolyte shall be provided in separate tanks.

That the industry has not obtained permission from the central ground water authority for the extraction of ground water.

That in view of the inspection dated 11.08.2020 it was found that the M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha was engaged in the violation therefore, the Central Pollution Control Board New Delhi in accordance with the guidelines of the “Levying of Environmental Compensation against the Defaulting Industries” has imposed the following environmental damages on a day to day basis:-

EC = PI x N x R x L x LF

PI = 60 (Red Category Industry only effluent discharge violation)

N = 1 days

R = 250

S = 1.5(Large Unit)

LF = 1

EC= Rs. 22,500/- (Rs. Twenty Two Thousand Five Hundred Only)

Therefore, in view of the above and after the approval of concerned person M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha has been directed to do the following:-

1. That by the Board's letter dated 25.01.2021 under Section 33A r/w Section 27(2) of the Water (Prevention and Control of Pollution) Act, 1974, a show cause notice has been issued containing the following points for cancelation of the consent order and closure of the industry which is currently effective:-
   I. To explain why the consent letter bearing No. 68215/UPPCB/Bijnor/UPPCBRO/CTO/Water/JyotebhaPhule Nagar/2019 dated 04.06.2020 should not be canceled against M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha.
   II. To explain why a direction for closure of operations of M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha should not be issued
   III. To explain why it should not be expected of the competent officers to completely stop electricity and water supply connection for M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha with immediate effect.
2. In view of the violation found in to have been committed by M/s Teva API India Private Limited, Industrial Area, Gajraula, Amroha the inspection carried out by the joint committee dated 11.08.2020 the Central Pollution Control Board imposed the environmental damages of Rs. 22,500/- to be paid per day till the time the violations is not remedied and till the time the investigation is initiated.

That in view of the inspection done by the joint committee on 11.08.2020 and its observations you are hereby directed to submit your explanation within 15 days to the Board headquarters. If you fail to send in your explanation or if the explanation is found unsatisfactory, the authority shall be bound to take any such decision keeping in mind the environmental regulations against the industry. The authority can also initiate interim investigation the responsibility of which shall be completely borne by the industry and its owner.

-SD-

(Amit Chandra)

Chief environment officer, Circle-7

Copy:- The Regional Officer, Uttar Pradesh Pollution Control Board, Bijnor, is hereby directed to send the inspection report in the manner as prescribed above to the Board headquarters with clear recommendations.

-SD-

Chief environment officer, Circle-7

TIG/GAJ/E&S/UPPCB/2021/21 Dated 22.05.2021

To,

Chief Environment Officer C-7

TC 12, Vibhuti Khand,

Gomti Nagar, Lucknow,

U.P. - 226010

Sub: Response to the show cause notice dated 06.04.2021 (received on 28.04.2021) having ref. no. H61483/C-7/Air-21/21 issued to Teva API India Pvt. Ltd, Gajraula unit by UPPCB.

Respected Sir,

At the outset it is submitted that pursuant to Order dated 18.06.2020 by Hon'ble National Green Tribunal (**"NGT"**) a Joint Inspection Committee was formed which conducted investigation at the premises of the Gajraula facility of Teva API India Private Limited and subsequently submitted its report before Hon'ble NGT. Pending disposal of the matter before Hon'ble NGT, any continuation of proceedings pursuant to this show cause notice will amount to double jeopardy, multiplicity of proceedings and may lead to a situation where conflicting Orders can be passed. In view of matter being sub-judice before Hon'ble NGT, you are requested to withdraw/hold the above referred Show-Cause Notice dated 06.04.2021. As a responsible organization we are willing to support any proceedings before your good-self subject to and post adjudication by the Hon'ble NGT. Having said so, while maintaining this stand that the matter is sub-judice and should not be continued with, in view of issuance of your formal Show-Cause Notice, we are accordingly preferring the following response.

PRELIMINARY SUBMISSIONS

Teva API India Pvt. Ltd. (**"Teva API"**) has been running the facility at Gajraula (**"Facility"**) since 2003 following compliances of all environmental regulations as applicable from time to time. The same has been verified and endorsed by all competent authorities i.e. State and Central.

We also would like to bring to the notice of your good office that that as a global pharmaceutical company, and the largest supplier of generic medicines worldwide, we are deeply committed to supply quality medicines to millions of patients we serve around the world every day and we do this with high standards of EHS&S. In this global pandemic situation, our company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through our Facility. There has never been any incident of environmental hazard being created by the Facility for that matter. In fact, Teva API has always been in fore front when it comes to ensure compliances with all requirements of Laws to ensure safety in operation of the Facility.

That Teva API at the Facility has been adopting highest environmental and safety management systems and the Facility is an ISO 14001:2015 and ISO 45001:2018 certified Facility, which are risk based management systems that are more stringent than the previous versions of ISO 14001:2004 and OHSAS 18001 standards. The Facility is certified for ISO 14001:2015 and ISO 45001:2018 by BSI, a reputed certification institute. Copy of Certificate of Registration under Environmental Management System ISO 14001:2015 and ISO 45001:2018 are attached herewith as **Annexure 1 (Colly)**. A detailed aspect impact and hazard identification activities are documented and necessary risk mitigation measures are already in place. These management systems were audited and the certification agency has granted certification based on the merits of the systems implemented at the site. Further, the Facility has world class Environment, Health and Safety systems at the site. Facility is having the approved Disaster plan by authority and continue to conduct different mock drills considering different foreseeable scenarios (including toxic gas release and response) on periodic basis. The relevant documents in this regard are annexed herewith as **Annexure 2 (Colly).**

There has been no leakage whatsoever from the Facility whether before or after the inspection conducted on 07.06.2020 and 09.06.2020. This is further supported from the fact that no incident of any harm or hazard leakage has been reported from any hospital to the people living in vicinity/near the Facility nor did any complain being made by any people in the vicinity of the aid Facility about any hazard/harm being caused.
There are approx. 1150 workers working at the Facility and out of them 631 were present on 07.06.2020. No incident of such leakage or any harm or even any foul smell was reported by any worker.

Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

Needless to say that no health hazard was ever caused to anyone within the Facility.

That even in cases of any theoretical gas leakage there can be broadly two parameters to assess as under:-

i health emergency involving people within the premises of the Facility and in the vicinity of the Facility;

ii Deterioration of Air Quality in the immediate vicinity of the plant or presence of alleged leaked substance in the air;

Whereas, in the present case concerning above aspects even Inspection Report of the joint committee is negative:

a. No incident of any harm or discomfort has been reported from any hospital or by the people living in the vicinity/near the Facility. No complaints were received /registered at the site, by any people in the immediate vicinity of the Facility, about any such abnormal events. Further, no incident of any harm or discomfort was reported by hundreds of workers present in the Facility at the relevant time of alleged leakage.

b. As per the conclusion at para 9(6) of the Investigation Report submitted by the joint committee before NGT, the Ambient Air quality was within permissible norms and does not reflect the emission of toxic gases during the visit. In fact, all the stipulated parameters in the ambient air quality are well within the National Ambient Air Quality Standards (NAAQs). Further, monthly reports of ambient air monitoring (annexed below in reply to finding & recommendation) conducted by independent accredited agency. Those monthly reports show that the Air quality was within permissible norms and does not reflect the emission of any toxic gas. It is emphatically stated that the Facility is complying with all the parameter as set out in guidelines in this regard.

REPLY TO FINDINGS AND RECOMMENDATIONS

1. **Monitoring data of boiler stack, HCl tank and ambient air quality doesn't reflect the emissions of toxic gases during the visit on 11-08-2020. However, joint inspection on dated 09-06-2020 by SDM Amroha and UPPCB, Assist director Industry, Moradabad, Chief Fire Officer Amroha and UPPCB on dated 09-06-2020 due to non-operational condition of scrubber attached to HCl tank, unit was unable to control the emissions of HCl vapour on dated 07-06-2020 and the incident of gas leakage took place.**

The finding in the show-cause Notice against the Facility that gas leakage took place is simply based on the assumption that since the scrubber was found non-operational on 09.06.2020 therefore gas leakage took place on 07.06.2020.

The facility is operating an HCl scrubber to control any fugitive emissions generated during the HCl unloading operations from the road tankers. HCl unloading operations are less frequent and about two unloading events are envisaged every month to meet the plant records. In general, HCl emissions take place only during the unloading (from tanker to storage tank) operations. As a part of the safe design principles, the vents from the HCl storage tank is connected to a dedicated scrubber to absorb the HCl vapours. During the normal operations (when no unloading/transferring operations in place), the HCl will be in equilibrium state and the possibility of generation of HCl emissions will not be possible.

On the day of the inspection, neither HCl unloading operation, nor any major Maintenance activities were scheduled, hence the authorised and trained personnel was not available at the specific area. The main gate material entry logbook records confirmed that no HCl unloading was happening during the alleged incident period. Copy of the material gate log books for the specific inspection dates are presented in **Annexure 3**. The emergency staff who was asked to operate the wet scrubber was not the designated regular operator for such specific operation, but he tried as instructed by the Inspection team. The regular operator was on lunch break during that period and on his arrival back to the inspection place at site the system was operated and shown to the inspection team, it was working and found normal.

An attempt was made to estimate the HCl emissions from the tanker. The rate of release of HCl vapour form the storage tank is equivalent to the volume displaced in the tank due to HCl filing. Based on the site data, it is noted that the capacity of the HCl storage tank is 23 Tons and scrubber air volume handling capacity is in the order of 2,200 Nm^3/hr, which is adequate to handle the air displaced from the HCL tanker. The scrubber is fitted with a circulation pump of capacity 5 m^3/hr with a ID fan capacity of 2200 Nm^3/hr. Photographs of the scrubber are presented in **Annexure 4**. Pump capacity and scrubber fan capacities are adequate to meet continuous unloading operations.

In order to ensure desired alkali strength in the circulating fluid, PH of the liquid is monitored frequently and necessary alkali is added to the scrubber. Scrubber operational logbook has been maintained and typical copies of the logbook are presented in **Annexure 5**.
The emission test reports of NABL accredited lab of the scrubber outlet gases are presented in **Annexure 6.** It can be inferred from the test results that the net HCL vapours from the scrubber is 24 mg/Nm^3.

Although there are no specific emission limits are prescribed for the HCl vapours, these levels within the industry good practice limit of 35 mg/Nm^3 for HCL furnace stacks for Chloro-alkali industry, which was also refereed by the Joint Inspection Committee. The emission tests conducted by the joint inspection committee on 11.08.2020 also reconfirms that the HCl emissions from the scrubber are in the order of 1 mg/Nm^3. This fact reconfirms that the scrubber is working satisfactorily and meeting the indicative emission norms based on the measured HCl emissions from the stack, it is further estimated that the net residual HCl emissions from the scrubber during the tanker loading operations will be in the order of 0.06 Kg/hr which is insignificant. These residual and trace emissions once released into the environment will get rapidly diluted and the concentrations at the facility boundary will reach less than 0.1 µg/m^3, which is far below any detectable limits. Hence the possibility of impact of any release of HCl emissions from the scrubber stack will insignificant. No incident of HCl leakage / discomfort has been reported by the community in the vicinity/near the Factory. This can be further justified with the facts that no complaints were received /registered at the site, by any people in the immediate vicinity of the Factory, about any such abnormal events.

The measured ambient air quality the facility also indicates that all stipulated gaseous pollutant parameters such as SO2, NOx, CO, NH3, BkP, Benzene are well within the norms. In addition, the measured HCl levels in the ambient air at the facility boundary were reported to be below detectable limits. Copies of the NABL lab test reports are presented in **Annexure 7.**

2. **Unit shall make sure, the air pollution control devices provided work efficiently and no such incidents of leakage of gas occurs in future due to negligence of operation and maintenance.**

A good engineering practice already being followed to inspect the system and operate the scrubber to avoid any fumes in to the environment. As per on going practices, only authorized and trained personnel will be allowed to operate at HCl storage areas. It is pertinent to mention herein that the joint inspection team during their visit on 09.06.2020 frequently monitored the scrubber system to verify any abnormality, fumes, etc., however no abnormality was noticed. Further, the preventive maintenance is being performed according to the approved preventive maintenance schedule which is part of the SOP, "Preventive and reparative maintenance". Copy of the preventive maintenance records of wet scrubber is attached herewith as **Annexure 8.**

It is further submitted that the HCL vapours are likely to be emitted only during the HCL tanker unloading in to the HCL Storage tank. HCL loading operations are periodic in nature and scrubber is operated all the time during the tanker unloading operations. Based on the industry practice, HCL emissions from such operations will be insignificant and absolutely no emissions will be released from the static storage tank. Hence, the scrubber serves as an additional protective measure, to treat any trace HCL vapour emissions, if any. Further, as per the plant records, there was no tanker unloading between 01.06.2020 to 23.06.2020. Hence, the allegation of HCL vapour release is baseless.

We humbly request your good office to take note of the above facts and absolve from the allegation under this show-cause notice. TEVA API is committed to install a PH sensor also will be installed on the neutralizing circulation system to monitor the strength of the solution and also to make up desired quantities of neutralizing agent as per the requirements.

3. **Ladder facility with stack shall be provided as per CPCB guidelines**

As per the CPCB guidance document section 1.4.4, Safe and easy access to the work platform should be provided via caged ladder, stairway, or other suitable means. As per these guidelines, a safe guardrail should be provided on the platform. Angular rail is preferable than round rail member.

No ladder well, stairwell, or other such openings should be located within 1 meter of any port. Ladder wells should be covered at the platform. Any stairwell leading directly to the platform should be equipped with a safety bar at the opening. Adequate stack ladder arrangements are provided to facilitate the movement of people and also instruments for stack sampling program. Necessary sampling ports are provided as per the CPCB guidelines. Copy of the photographs of the ladder are attached herewith as **Annexure 9 .**

4. **Regular calibration of OCEMS attached boiler shall be ensured**

The existing OCEM facilities are maintained and operated by Forbes Marshal which is a CPCB accredited agency. These systems are fitted with self-calibration facility and the system operator is periodically undertaking calibration of the sensors using standard gases. Copies of the calibration certificates are presented in **Annexure 10**. Summary of the instrument performance is presented in the following table for a quick reference. It can be inferred from the calibration data that the system is working as per the guidelines stipulated by CPCB and hence the reported values are highly reliable. It can be noted that all PM values in the boiler stacks for the period of June'20 are within the permissible limit which is far below the CPCB standards.

S.NO	Calibration specification	Requirement as per CPCB Guidelines	Actual measured values on the PM sensor of the CEMS installed on the boiler stack
1	Zero Drift between two servicing intervals	≤± 2 % of Full Scale range	Less than ±1%
2	Reference point Drift between two servicing intervals	≤± 2 % of Reference value range	less than ± 2% as per Isokinetic results
3	Analyzer's Linearity	The difference between the actual value and the reference value must not exceed ±2 percent of full scale (for a 5 point check).	less than ± 2%
4	Performance Accuracy	≤ ± 10 % of compared Reference measurement	±5 % of Full scale.

As per the consent issued by UPPCB, boiler stack emissions are regulated for particulate matter emissions with a maximum limit of 150 mg/Nm^3 as per the CTO. The existing boiler is operated with LSHS (Low sulphur high stock) with ash content less than 1% and hence the next PM emissions from the boiler stack were reported to be far below the stipulated norms. No specific limits are stipulated by UPPCB and CPCB for SO_2, NOx and other pollutants for boilers. Online emission monitoring units are installed for measuring PM, SO_2 and NOx as per the CPCB guidelines for CEMPS program. The measured pollutant concentration data is linked to CPCB server. Online PM emission data of boiler stack for the month of June'20 was with in the permissible limit and Photographs of online CEMS unit is annexed in **Annexure 11**. It can be also inferred from the NABL accredited lab test report for the month of June'20 found 119 mg/NM^3 which is far below the stipulated norms. Details of the NABL lab test report for the same month is presented in **Annexure 12**.

CONCLUSION

In view of submissions/clarifications made above and the documents annexed read with Reply dated 26.06.2020 to the earlier Show-Cause Notice dated 11.06.2020, it is clear that there is no violation on the part of the Facility of any provision of The Air (Prevention And Control Of Pollution) Act, 1981 or the condition of consent dated 04.06.2020 as stated in the above referred Show-Cause Notice.

Needless to say that the Facility is providing essential services in these Covid times. Further, livelihood of 1150 workers of the Facility and in all livelihoods of approx. 2500 people (directly or indirectly) dependent on the Facility. In such circumstances any action detrimental to the running of the Facility would cause irreparable loss to thousands of people and disruption in supply to essential services.

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Further, it may be noted that being a responsible organisation we are paying the Environmental Compensation (**"EC"**) imposed under the present Show-Cause Notice under protest just to avoid any sort of disruption in the operation of the Facility which is providing essential services in Covid pandemic times.

The present payment of EC should not be construed as an admission of guilty of the allegations of the Show-Cause Notice under reply. Accordingly, we reserve our right to seek recovery of Rs 14,85,000/- ("Rupees Fourteen Lakhs Eighty Five Thousand") which is being paid strictly under protest.

We trust that you will find the above reply in order. In the event, should you require any other clarification/documents, we request your good self to grant us an opportunity of being heard & give us personnel hearing so as to enable us to further clarify your queries / doubts if any. We assure you of our full co-operation as we have been doing in the past.

Thanking You,

For Teva API India Private limited

Name- **Mr. Rajesh Naik**
Designation- **Site General**

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TIG/GAJ/E&S/UPPCB/2021/19 Dated 13.05.2021

To,
Chief Environment Officer C-7
TC 12, Vibhuti Khand,
Gomti Nagar, Lucknow,
U.P. - 226010

Sub: Response to the show cause notice dated 06.04.2021 (received on 28.04.2021) having ref. no. H61482/C-7/Water-92/21 issued to Teva API India Pvt. Ltd, Gajraula unit by UPPCB

Respected Sir,

We hereby acknowledge the receipt of the Show Cause Notice No.H61482/C-7/Water-92/21 dated 06.04.2021 which was received on 28.04.2021 from your good office with regards to certain observations on environmental compliance aspects at our Gajraula facility

At the outset it is submitted that pursuant to Order dated 18.06.2020 by Hon'ble National Green Tribunal (**"NGT"**) a Joint Inspection Committee was formed which conducted investigation at the premises of the Gajraula facility of Teva API India Private Limited and subsequently submitted its report before Hon'ble NGT. Pending disposal of the matter before Hon'ble NGT, any continuation of proceedings pursuant to this show cause notice will amount to double jeopardy, multiplicity of proceedings and may lead to a situation where conflicting Orders can be passed. In view of matter being sub judice before Hon'ble NGT, you are requested to withdraw/hold the above referred Show Cause Notice dated 06.04.2021. As a responsible organisation we are willing to support any proceedings before your good-self subject to and post adjudication by the Hon'ble

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NGT. Having said so, while maintaining this stand that the matter is sub-judice and should not be continued with, in view of issuance of your formal Show-Cause Notice, we are accordingly preferring the following response.

We would like to share the following facts and various environmental stewardship activities that are being adopted by TEVA API, Gajraula facility for your kind perusal and consideration. We have also submitted detailed point wise response for the queries raised in your cited in the above reference:

Teva API India Pvt. Ltd. (**"Teva API"**) has been running the facility at Gajraula (**"Facility"**) since 2003 with valid consent to operate under The Air (Prevention and Control of Pollution) Act 1981 and The Water (Prevention and Control of Pollution) Act 1974 and the same is renewed from time to time as per the guidelines issued by your good office. We also submit that the Facility is having a valid consent to operate until 31st December 2021 (**"CTO"**). We also submit that the Facility has been maintaining highest environmental standards and various mandated environmental parameters are being monitored periodically as per the directions of your good office and the environmental quality data has been submitted to your good office from time to time. The Facility was never found non-compliant with any of the stipulated environmental quality parameters, which reconfirms that the Facility has established robust environmental management systems.

Being a global pharmaceutical company and the largest supplier of generic medicines worldwide, we are deeply committed to supply quality medicines to millions of patients we serve around the world every day and we do this with high standards of EHS&S. In this global pandemic situation, our company is considered as one of the essential services to support patients. Around 2500 people are directly and indirectly employed through our Facility. There has never been any incident of environmental hazard being created by the Facility for that matter. In fact, Teva API has always been in fore front when it

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comes to ensure compliances with all requirements of Laws to ensure safety in operation of the Facility.

Teva API at the Facility, Gajraula has been adopting highest environmental and safety management systems and the Facility is an ISO 14001:2015 and ISO 45001:2018 certified Facility, which are risk based management systems that are more stringent than the previous versions of ISO 14001:2004 and OHSAS 18001 standards. The Facility is certified for ISO 14001:2015 and ISO 45001:2018 by BSI, a reputed certification institute. Copy of Certificate of Registration under Environmental Management System ISO 14001:2015 and ISO 45001:2018 are attached herewith as **Annexure 1.**

We hereby submitting pointwise reply with some facts, figures and other supporting documents in different Annexures and wish to share that the Facility has been adopting the good industrial environmental protection and stewardship initiatives under "Water and wastewater management aspects":

REPLY TO FINDINGS AND RECOMMENDATIONS:

1. **Unit was found non-compliant w.r.t. discharge of untreated/partially treated effluents through storm water drains and violating the condition of ZLD**

   The above finding in the show-cause Notice against the Facility is based on the following three reasons, which being replied as under:

   a. ***That the Facility is discharging untreated or partially treated water through the storm water drain. The water having pH value 5.49, COD-2544 and BOD-805 was found in storm water drain.***

      Water consumption and wastewater generation details are submitted to your good office on monthly basis. Flow meters are installed at the influent and

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treated wastewater lines at the ETP to ensure 100% accountability of wastewater generated, treated and reused. It may be noted from the information submitted to your good office for the period Jan 2020 – December 2020 that, water consumption and wastewater generation are maintained less than 700 m3/day and 260 m3/day respectively which are well within the stipulated consented levels of 1455 m3/day and 370 m3/day respectively (Please refer to **Annexure 2).** Details of water consumption and wastewater generation are regularly reported under Annual environmental audit statement (Form V) to your good office as per the guidelines.

It is important to note that any spill of untreated wastewater in the storm water drain is transferred back to ETP. In this evident from the fact that all the solvent storage tanks are provided with dykes and spill collection pits, the storm water collected from the dyke pits is transferred to ETP area during the first rain for further treatment.

In order to ensure that untreated storm water is not accidentally released into the environment, storm water outfall is provided with two level gates and valves to avoid any incident. (Please refer to **Annexure 3** for site photographs). Teva API has developed robust storm water management system. The storm water collected from the Facility is collected in a dedicated 200 m^3 (100 x 2 Nos) tank located at the final storm water outfall point. As per SOP, irrespective of the quality of the water, this water will be treated in the ETP in a proportionate manner without disturbing the treatment operations. Photographs of the first wash storm water collection tank is shown in **Annexure 4**.

It is pertinent to mention herein that at para 9(14) of the conclusion of the Inspection Report submitted by the joint committee before the Hon'ble National Green Tribunal (**"NGT"**) it was noted that the Ground water beneath the Facility

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was qualitatively found to be within permissible limits as per BIS standard. This shows that no pollution to the ground water is caused by the Facility of Teva API. Had it been the case that the Facility would be releasing untreated wastewater in storm water drain into the environment then certainly the ground water beneath would have become contaminated, which is not the case. Assuming without admitting, mere presence of untreated/partially treated wastewater in the storm water drain does not imply any pollution is caused to the environment because such untreated water is never released in the environment without passing through ETP.

b. ***That the Facility has provided a by-pass line to storm water drain in scrubbed water collection tank at wet scrubber provided near HCL storage tank.***

As detailed above as per good Environmental Management practices, any spill from the storage tanks across the facilities is collected and transferred to the Effluent Treatment Plant (**"ETP"**) equalization tank for further treatment. The drain valve was available as a part of the old design and was non-operational all the time. As a current practice, effluent being pumped through a level sensor based pumping arrangement which is working in auto mode. However, as an abundant caution, and in view of an observation from your good office in the notice under reply, this drain valve was removed with all required civil modification. True copy of photographs are attached herewith as **Annexure 5.**

The fact that there is no discharge of untreated/partially treated wastewater from the Facility is evident from the fact that Treated Effluent Water Sample Analysis Reports for the month of May 2020, June 2020 July 2020 and August 2020 clearly shows that all stipulated parameter of pollutants are well below the permitted limits prescribed by CPCB. Copy of Treated Effluent Water Sample Analysis Reports for the month of May 2020, June 2020, July 2020 and August

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2020 are annexed herewith as **Annexure 6**. Treated wastewater quality analysis reports by NABL accredited lab are also enclosed as **Annexure 7**. The test reports of joint inspection committee and also long-term plant records confirm that the treated wastewater quality was found to comply with stipulated norms.

c. ***That it was found during Inspection on 11.08.2020 that at STP inlet provided for the purpose of residential colony, BOD was extremely low which shows that the Facility is causing dilution.***

The allegation is denied. There was no dilution with domestic effluent coming from residential colony. Residential colony having intermittent collection pits which allows suspended particles to settle down and allows only supernatant stream to STP that is the reason BOD found comparatively low. BOD value of discharged domestic effluent as per CTO is 30 Mg/L. We are attaching a copy of valid CTO in **Annexure 8.**

In view of submissions/clarifications made above and the documents annexed read with Reply dated 26.06.2020 to the earlier Show-Cause Notice dated 11.06.2020, it is clear that there is no violation on the part of the Facility of any provision of The Water (Prevention And Control Of Pollution) Act, 1974 or the condition of consent dated 04.06.2020 as stated in the above referred Show-Cause Notice

2. **The unit shall make sure that no untreated/partially treated effluent and seepage/runoff from the industrial processes are discharged into storm water drain**

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We submit that based on the facts specified under point No 1, the facility has adopted robust systems to ensure 100% leak free wastewater collection from the respective units. In addition to the above-mentioned measures, the following additional measures were adopted:

i. Entire wastewater collection network is through closed pipe/drain network and hence no cross contamination of wastewater with storm water is envisaged.

ii. Dedicated concrete collection tanks with transfer pumps are in operation for transferring the wastewater to ETP.

Suitable bunds are provided for the process units, Storage tanks (solvents etc), MEE and Hazardous waste storage shed to avoid mixing of any spills from process units with storm water (please refer to **Annexure 9** for site photographs). Necessary spill collection sumps are provided at each process block to collect any storm water runoff from such process area to further treat the spills in ETP.

Due to implementation of above-mentioned multiple layers of pollution prevention and control measures, the possibility of discharge of any wastewater or contaminated storm water into the public drains does not happened.

3. Unit shall strictly follow the conditions laid down in consent to operate issued by UPPCB

In continuation to the submissions made above, we once again reiterate that TEVA API is committed to maintain highest environmental systems and has been complying with all stipulated conditions in the CTO. Point wise compliance statement is enclosed as **Annexure 10** and salient features are highlighted hereunder for your quick reference:

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i. The Facility is granted permission to treat 370 m3/day of wastewater. The current wastewater quantities are maintained within the stipulated levels.

ii. The Facility has installed a full-fledged ZLD facility and the treated wastewater is used for plant applications and greenbelt development.

iii. Treated wastewater quality is regularly monitored and monthly reports are submitted to your good office.

iv. Dedicated STPs are installed and treated sewage quality reports are presented in **Annexure 11**. The treated sewage is used for greenbelt development within the Facility.

v. The Facility has submitted application to CGWB for renewal of ground water permits on 14.10.2019 and the application has been pending with authorities, since then. TVA-API have been incessantly following up with the authorities through a series of communications letter no. TAIL/GAJ/E&S/CGWA/2020/04 dated 08.02.2020, TAIL/GAJ/E&S/CGWA/2020/05 dated 17.03.2020, TAIL/GAJ/E&S/CGWA/2020/06 dated 20.07.2020. TEVA API is awaiting the response and hearing from the concerned authorities. Moreover, TEVA API has also filed Application No. AMRH1220RIN0025 and AMRH1220RIN0026 dated 30.12.2020 with UPGWD department for necessary bore well registration. As per the notification issued by the Ministry of Jal Sakti, GOI, dated 24.09.2020, TEVA API has engaged NABET/CGWB accredited consultant and already submitted an interim report on 24.12.2020. As per the CGWB circular dated 11.02.2021, the UP State Govt. has constituted State Ground water department and now the application needs to be submitted to concerned authorities for necessary renewal before 31st June 2021, as per the current regulations. TEVA API has recently tried to submit the online application which could not be submitted due to some technical problem in concerned website. Details of recent communications with

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authorities' w.r.t. ground water drawl permit renewal are presented in **Annexure 12**.

4. **The unit should carry out adequacy assessment of ZLD system at operational capacity of 1.77 MT/day, by a reputed government technical institute**

We submit that the Facility is granted consent to produce about 620 MTPA and we have never exceeded a peak production capacity of 620 MTPA. Being a Pharmaceutical company we are batch and multiple step process manufacturing organization (not continuous), so operational capacity (1.77 TPD) assumption is not practical & appropriate.

Since the API manufacturing output depends on market demand and the production is primarily a batch process, depending on the batch size, the overall production throughput may slightly vary from day to day operations, however the annual operating capacity remains with in the consented limit.

As a part of Teva API's corporate environmental management plan, Teva API have engaged a NABET accredited professional consultant to undertake a detailed adequacy study. Based on the detailed design evaluation by NABET accredited consultants, it is concluded that the existing ETP units both in terms of civil tank sizes and mechanical units in terms of pumps and blowers are adequate to treat the consented wastewater quantity of 370 m3/day. Salient findings of the ETP adequacy report are presented hereunder and TEVA API is committed to adopt all possible roust Practices and procedures.

- Wastewater flow in the Facility is reported to in the range of 131 to 317 m3/day (Avg: 240 m3/day) as against the consented level of 370 m3/day. Based on the

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long-term plant records, it is noted that the overall wastewater quantity never exceeded the consented levels.

- MEE and VTFD present in the High-TDS wastewater stream is adequate for the consented wastewater quantities and hence no further modifications or upgrades are suggested,
- Based on the plant data, it is inferred that the equalization tank and pH correction practices are adequate, however the PH levels shall be maintained between 7 to 7.5 instead of 8 to 8.3 to achieve effective coagulation and settling of TSS in the clarifier,
- The existing primary clarifier is adequate for handling consented quantities of 370 m3/day,
- The existing air supplying blowers in the Bio-Reactor 1A system are adequate to handle peak wastewater flow of 222 m3/day,
- Bio-Reactor 1B has been constantly subjected to extreme endogenous conditions. This was evidenced through significant bulking was observed in the aeration tank. About 1000 Kg/day of COD can be removed in the existing biological treatment facility based on the aeration system capacity and hence the system has already reached its full capacity in terms of COD removal.
- Considering the consented wastewater flow of 370 m3/day with an average COD level of 5,000 mg/l (as per plant data) the estimated peak COD load on Bio-Reactor II will be in the order of 1800 Kg/day, as against the maximum COD removal capacity of 1600 Kg/day. Hence the existing system is adequate to meet the consented load scenario, however the process parameters such as sludge age, MLVSS and sludge recycling quantities shall be readjusted to achieve maximum removal efficiency of the reactor to maintain outlet COD less than the RO feed criteria of 2000 mg/l.
- The existing RO#1 unit has adequate capacity to handle the consented peak flows,

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- The existing RO Unit # 2 is adequate for processing consented peak wastewater quantities. Since the existing flux on the RO #2 is less when compared with the design levels, the facility can explore the possibility of increasing the recovery levels in the RO #2 systems by another 5%, which will help to reduce the hydraulic load on the down-stream MVRE-MEE and also steam demand and thereby carbon footprint.
- Although the MEE has adequate evaporation capacity, due to receipt of diluted rejects in some cases (lower solids concentration) from the upstream treatment units, the concentration factor can be increased up to 25 to 30% solids as good engineering practices.

Based on the detailed assessment, it can be concluded that the existing ETP/ZLD facility is meeting the discharge norms and meeting the wastewater recycling objectives.

TEVA API will approach a reputed technical institute to validate the ETP/ZLD adequacy and the same will be done in due course.

5. Facility for doing and mixing the Alum and polymer shall be provided in separate tanks

Wastewater from the following streams are collected in the equalization tank of the Low-TDS wastewater treatment facility: (i). Low-TDS wastewater generation from process units, (ii). utility wastewater, (iii). condensate from High-TDS wastewater steam MEE & VTFD units and (iv). internal ETP system backwash and ETP/ZLD systems CIP wastewater. Wastewater is passed through gravity assisted oil and grease rap and collected in the equalization tank. The hydraulic retention for the current operating load is 1.2 to 2.2 days for the equalization tank capacity of 400 m3, which is adequate for a typical design. The standard deviation of all

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COD/BOD/TDS parameters at the outlet of the equalization tank was reported to be less than 15%, which is adequate as per the design intent of 20 to 25% for any ETP facilities. An online PH meter is installed on the equalization. 48% NaOH solution is prepared a tank and pumped to equalization tank for neutralization. Manual PH neutralization process has been adopted at the equalization tank by adding about 1100 Kg/day of NaOH. Long-term plan data indicated that the PH levels were maintained between 8 to 8.3 at the outlet of the equalization tank, which is slightly alkali in nature, which will be essential for nitrification in the biological treatment system, however for ideal flocculation using Alum, requires the PH in the range of 6.6 to 7.5. Hence considering the alkali requirement for nitrification in the down-stream biological treatment facility, the PH levels at the outlet of Equalization tank are marginally maintained higher. In order to maintain uniform mixing and also to ensure that the suspended solids are not getting settled, coarse bubble diffused aeration system in place for the equalization tank. Two number of blowers with an air delivery capacity of 280 Nm^3/Hr each (11KW each) with an operating pressure 7000 mm/wc. The minimum suggested energy required for effective mixing is 15 W/m3, whereas in the current scenario the system is provided to deliver 40 W/m3 of mixing energy and hence the system is adequate. Based on the long-term plant data, it is noted that the monthly average TSS levels in the inlet and outlet of the clarifier was reported to be in the range of 1080 mg/l to 1600 mg/l and 123 to 143 mg/l with an average TSS removal efficiency of 88%, which is in line with the industry benchmark value. This aspect confirms that the PH correction and chemical dosing is adequate.

Photographs of NaoH dosing at equalization tank, Alum and polyelectrolyte dosing system at primary clarifier are shown in **Annexure 13**.

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CONCLUSION:

In view of submissions/clarifications made above and the documents annexed read with Reply dated 26.06.2020 to the earlier Show-Cause Notice dated 11.06.2020, it is clear that there is no violation on the part of the Facility of any provision of The Water (Prevention And Control Of Pollution) Act, 1974 or the condition of consent dated 04.06.2020 as stated in the above referred Show-Cause Notice. Hence, you are requested to withdraw the above stated Show-Cause Notice under reply. Accordingly, the Environmental Compensation which that Show-Cause Notice imposes on Teva API may also be withdrawn.

Needless to say that the Facility which is a pharmaceutical company is providing essential services in Covid pandemic times with utmost responsibility. Further, livelihood of 1150 workers of the Facility and in all livelihoods of approx. 2500 people (directly or indirectly) dependent on the Facility. In such circumstances any action detrimental to the running of the Facility would cause irreparable loss to thousands of people.

Further, it may be noted that being a responsible organisation and despite the fact that there is no specific amount demanded and only a calculation of Rs 22,500/- per day as Environmental Compensation (**"EC"**) is shared, we propose to make a deposit to prove our bonafide. While refuting any obligation including either of per day penalty of Rs 22,500/- or any observation as suggested in the Show-Cause Notice, in order to ensure continuity of our operations during critical Covid pandemic times, we are paying this EC referred under the present Show-Cause Notice strictly under protest with in 15 working days from the date of this letter reply. At the cost of repetition please note that this deposit is made only to avoid any sort of disruption in the operation of the Facility which is providing essential services in Covid pandemic times. Accordingly, the present payment of EC may not be construed as an admission

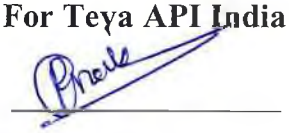
Teva API India Private Limited
A-2, A-2/1, A-2/2 UPSIDC Industrial Area, Bijnor Road, Gajraula - 244 235, District : Amroha
(Uttar Pradesh) India. Tel : +91-5924-252591, 92, 93 Fax: +91-5924-252590
Regd Office: 12th floor, Commerz II, International Business Park, Oberoi Garden City,
Off. Western Highway, Goregaon (E), Mumbai, Mumbai City, Maharashtra, India - 400063 CIN : U74899MH2002PTC326704

of guilt concerning the allegations of the Show-Cause Notice. We reserve our right to seek recovery of Rs. 14, 85,000 ("Rupees Fourteen Lakh Eighty Five Thousand Only") which is being paid under protest.

We trust that you will find the above reply in order. In the event, should you require any other clarification/documents, we request your good self to grant us an opportunity of being heard & give us personnel hearing so as to enable us to further clarify your queries / doubts if any. We assure you of our full co-operation as we have been doing in the past.

Thanking You,

For Teva API India Private limited



Name- **Mr. Rajesh Naik**
Designation- **Site General Manager**

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VAKALATNAMA

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW DELHI

Original Application No. 89/2020

IN THE MATTER OF:

Jitendra Singh ...Applicant(s)

Vs

Central Pollution Control Board & Ors. ...Respondent(s)

KNOW ALL to whom these presents shall come that I, Rajesh Umakant Naik, working as Site General Manager of Teva API India Private Limited, Respondent No. 4 in the above stated matter do hereby appoint:

Kapil Dev Sapra (D/1864/99), Vikas Dutta (D/134/98 (R)), Maninder Singh (D/15/2007); Siddharth Silwal (D/781/2004), Shiva Sambyal (JK/512/2010), Nivedita Grover (D/2552/2015), Ujjwal Nagaich (D/4600/18) at Kapil Sapra & Associates, Advocates, Plot No. 1/ 26, Westend Marg, Said-ul-Azaib, M.B. Road, New Delhi – 110 030; lit@ksalegal.com; Tel.: (+91-11) 2953-5561/ 62/ 63.

To act, appear, plead in the above-noted case in the Department/ Tribunal /Court or in any other Court in which the same may be tried or heard and also in the appellate Courts including before National Green Tribunal subject to payment of fees separately for each court by me/us.

To sign, file, verify and present pleadings, replications, appeals, cross-objections or petitions, for executions, review, revision, restoration, withdrawal, compromise or other petitions, replies, objections or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.

To file and take back documents.

To withdraw or compromise the said case or submit to arbitration any differences or disputes that may arise touching or in any manner relating to the said case.

To take out execution proceedings.

To deposit, draw and receive moneys, cheques and grant receipts thereof and to do all other acts and things which may be necessary to be done for the progress and in the course of the prosecution of the said cases.

To appoint and instruct any other Legal Practitioner (s) / Consultant (s) authorizing him to exercise the power and authority hereby conferred upon the advocates whenever they may think fit to do so and to sign the power of attorney on my/our behalf.

And I/we the undersigned do hereby agree to ratify and confirm the acts done by the Advocate (s) or his/their substitute in the matter as my/our own acts as if done by me/us to all intents and purposes.

And I/we the undersigned undertake that I/we or my/our duly authorized agent would appear in court on all hearings and will inform the Advocate (s) for appearance, when the case is called.

And I/we the undersigned do hereby agree not to hold the Advocate (s) or his their substitute responsible for the result of the said case in consequence of his/their absence from the court when the said case is called up for hearing, or any negligence of the said Advocate (s) or his /their substitute.

And I/we the undersigned, do hereby agree that in the event of the whole or any part of the fee agreed by me/us to be paid to the Advocate (s) remaining unpaid, he/they shall be entitled to withdraw from the prosecution of the said case until the same is paid up. If any costs are allowed for an adjournment, the Advocate (s) would be entitled to the same. The fee settled is only for the above case and court.

IN WITNESS WHEREOF I/we do hereunto set my/our hand to these present, the contents of which have been understood by me/us this 17th day of June 2021.

Accepted subject to the terms of fees.

ADVOCATE(S)

CLIENT

I identify the client signing in my presence

₹1 NCT OF DELHI COURT FEE DLCT0724296H2014N 07-AUG-2020

₹1 NCT OF DELHI COURT FEE DLCT0724315H2014N 07-AUG-2020

₹1 NCT OF DELHI COURT FEE DLCT0724298H2014N 07-AUG-2020