BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE
AT PUNE

APPEAL NO. 93/2024 WZ

TANAJI B. GAMBHIRE

APPELLANT

V/s

UNION OF INDIA & ORS.

RESPONDENTS

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PUNE
DATE : 13 /11/2024

ADVOCATE FOR RESPONDENT NO. 04

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
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V/s

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RESPONDENTS

REPLY ON BEHALF OF RESPONDENT NO.4,
(M/S Bioclean Systems (India) Pvt. Ltd)

MOST RESPECTFULLY SHOWETH:

1. At the outset, it is submitted that, the contents of the Appeal are not admitted by the Respondent No.4 and that the contents therein of are false and incorrect. The Respondent No.4 submits that the statements and averments made in the said Appeal are not admitted by the Respondent No.4 except so far they are expressly admitted herein under. It is further submitted that, the Respondent No.4 craves leave of this Hon'ble Tribunal to file a detailed Reply, if necessary in the present proceedings. At the outset, the Appeal filed by the Appellant is devoid of any merit and is liable to be dismissed with the compensatory cost. The Appellant herein is neither resident of the concerned area nor an aggrieved party. The

Applicant herein is claiming relief, which is beyond the purview of this Hon'ble Tribunal.

2. The Respondent No.4 submits that no substantial issue has been made out for adjudication of this Hon'ble Tribunal. The statutory authorities are already performing their statutory duties. The Respondent No.4 further submits that the Appellant herein has no locus to file the present Appeal and it is also not an aggrieved party to the present proceedings. The Hon'ble Supreme Court has held that the bonafides of the litigant are to be tested before proceeding with the proceedings for adjudication.
3. The present Appeal is filed by the Appellant whereby he has sought quashing and setting aside of Environment Clearance (**EC**) dated 8th February 2024 issued by the Respondent No.2 **(which is annexed at ANNEXURE – A-1 of the Appeal at Pg No.14 of the Appeal Paper Book)**.
4. The present Appeal is clearly abuse of process of law and has been wrongfully filed by the Appellant, lacking any merit in its assertions against the Respondent No.4. The Appeal is entirely founded on baseless assumptions, speculation, and conjectures, and thus holds no substance.

I. PRELIMINARY OBJECTIONS:

5. Appeal Not Maintainable Due to MoEFCC's 2nd AUGUST 2023 Notification Allowing SEIAA Members to Grant EC Post-Tenure:

   a. The sole ground for the Appellant's challenge in the present appeal is the claim that the EC, granted to Respondent No.4 by SEIAA, was issued during a period when SEIAA was allegedly not operational. However, this assertion is wholly unfounded and misleading as Ministry of Environment, Forest, and Climate Change vide its notification/office memorandum dated 2nd August 2023 explicitly grants authority to Member of SEIAAs to issue/grant Environment Clearance letter for category B proposals even after expiry of its tenure for certain period where after approval to grant EC the SEIAA has become non-functional.

   b. The Respondent No.4 submits that the present case is clearly covered by the *de-facto* doctrine as the decision

was taken in good faith and the law on the said aspect is clear.

6. Appellant's Wrongful Suppression of MoEFCC Notification Clarifying Procedure:

a. The Appellant has conveniently suppressed the material fact that the Ministry of Environment, Forest, and Climate Change (MOEFCC) issued a notification/office memorandum dated 2nd August 2023, titled *"Procedure for consideration of Category 'B' proposals at Central level due to the non-functionality or delay in constitution of SEIAA/SEAC."* This notification explicitly outlines the procedures for handling EC proposals when SEIAAs or SEACs are non-functional or delayed in their constitution.

b. The said notification categorizes various scenarios where EC proposals might be delayed, which includes:

I. Proposals submitted to SEIAA and not accepted by SEIAA.

II. Proposals received by SEAC/SEIAA and have been processed or are under processing.

III. Proposals considered and/or deferred by SEAC for various reasons.

IV. Proposals recommended by SEAC but not forwarded to/not approved by SEIAA.

V. Proposals (which do not require examination of SEAC) accepted by SEIAA but not processed and/or deferred for various reasons.

VI. Proposals approved by SEIAA, but minutes/letter not uploaded on PARIVESH.

c. For scenarios given in point I to V of the said notification, the MOEFCC has outlines a process where these pending proposals can be transferred from the state level to the Central level for further processing, ensuring they are not indefinitely stalled due to the non-functionality of SEIAAs/SEACs.

d. The Respondent No.4 submits that whereas point VI specifically addresses the scenario where proposals have already been approved by the SEIAA but the official minutes or approval letters have not yet been uploaded to

the PARIVESH system (*an online platform used for environmental clearances and monitoring*). Pertinently, the proposal of Respondent No.4 was covered under point VI as SEIAA has granted the EC to it on 5th January 2024, after which SEIAA's tenure had expired on 10th January 2024. However, official minutes of meetings and EC letter/certificate has been uploaded on the site of PARIVESH on 8th February 2024. It is thus submitted as stated earlier, the present scenario would be covered by the *de-facto* doctrine.

e. It is stated that the MOEFCC has granted a *"window period"* of fifteen (15) days, for the Member Secretary of the SEIAA, extendable with another fifteen (15) days to upload the minutes or approval letters related for the proposals covered under point VI, i.e., proposal which was duly approved by SEIAA before it became non-functioning.

f. In the case of Respondent No. 4, the SEIAA operated within this time frame, ensuring that the EC approval was

formalized and recorded in compliance with the procedure laid out by the MOEFCC.

Copy of Ministry of Environment, Forest, and Climate Change (MOEFCC) issued a notification/office memorandum dated 2nd August 2023, titled *"Procedure for consideration of Category 'B' proposals at Central level due to the non-functionality or delay in constitution of SEIAA/SEAC"* is annexed herewith as **ANNEXURE – R-1**.

7. Compliance of Due Process by Respondent No. 4:

a. Respondent No.4 has scrupulously followed the due process prescribed for seeking Environmental Clearance (EC) for its project categorized under Category B as per the EIA Notification, 2006. Environmental Clearance has been granted to Respondent No. 4 in absolute compliance with the provisions of the EIA Rules and Regulations and after a thorough and proper appraisal process.

b. Both SEAC II and SEIAA have granted approval to the proposal of Respondent No.4 in all their meetings whenever the proposal was listed for appraisal. The said

approvals were granted by the competent authorities within their tenure, following due deliberation and careful consideration. Thus, there has been no deviation from the prescribed procedures at any stage of the process.

c. The Respondent. No.4 submits that the Respondent No.4 has complied with all rules/regulations/procedures prevailing at that period of time. The Respondent No.4 thus cannot be denied the due benefits of the EC which has been obtained in accordance with the law.

8. Baseless Allegations of Misrepresentation and Non-Compliance by Appellant:

a. The Appellant's claims that Respondent No. 4 submitted a false, defective, and misleading application for the grant of Environmental Clearance (EC) and failed to comply with the conditions imposed by SEAC and SEIAA are entirely baseless and without merit.

b. Respondent No.4 has meticulously adhered to all regulatory requirements under the Environmental Impact Assessment (EIA) framework and has acted in full

compliance with the stipulated procedures. Respondent No. 4 has not only submitted its application in strict accordance with the provisions of the EIA but has also responded comprehensively to every query and concern raised by the SEAC and SEIAA.

c. The Respondent No.4 submits that the Respondent No.4 vide its letter dated 15th February 2023 submitted the application for grant of Environmental Clearance along with Form I & IA. The proposal was accepted by SEIAA on 19th February 2023. Copy of the letter dated 15th February 2023 is annexed hereto and marked as **ANNEXURE – R-2** respectively.

d. The Respondent No.4 submits that the proposal of the Respondent No.4 was considered during the 247th meeting held on 28th April 2023. During the course of the said meeting certain details were sought from the Respondent No.4. The Respondent No.4 vide its letter dated 18th August 2023 submitted the requisite details to the SEAC

for consideration. Copy of the reply letter dated 18th August 2023 is annexed hereto and marked as **ANENXURE – R-3**.

e. The Respondent No.4 further submits that the proposal of the Respondent No.4 was considered in 262nd meeting held on 9th September 2023. The proposal was recommended by SEAC. The proposal of the Respondent No.4 was thus considered in the 267th meeting of SEIAA held on 17th October 2023. During the course of the said meeting certain details were sought from the Respondent No.4. The Respondent No.4 submitted the requisite details to the SEIAA.

f. The proposal of the Respondent No.4 was thus considered in the 273rd meeting of SEIAA held on 5th January 2024. The SEIAA decided to grant the EC to the Respondent No.4.

g. It is stated that the EC was granted to Respondent No.4 by the SEIAA after carefully considering all the aforementioned submissions and ensuring that Respondent

No.4 had fully complied with all procedural and regulatory requirements. The SEIAA's decision was based on a thorough appraisal of the application, the responses to queries, and the supporting documentation provided by Respondent No.4. Thus, the Appellant's allegations of non-compliance and misrepresentation are devoid of any factual basis and are simply an attempt to mislead this Hon'ble Tribunal.

9. No Prejudice to Environmental Safeguards:

a. The Appellant has entirely failed to demonstrate any harm or prejudice to environmental safeguards as a result of the Environmental Clearance (EC) granted to Respondent No.4. There is no specific assertion in the appeal that the project in question will cause any environmental damage or degradation rendering the allegations of appellant baseless.

b. Respondent No.4 has adhered to all environmental regulations and requirements as mandated by law. The EC was granted after a thorough and lawful appraisal process conducted by the appropriate authorities, ensuring that all

environmental conditions were met. The Appellant's allegations lack any factual basis and do not provide any evidence of non-compliance with environmental safeguards. The absence of any concrete assertion regarding potential environmental harm demonstrates that the appeal is unfounded and serves no legitimate purpose other than to obstruct Respondent No.4's lawful activities.

BRIEF FACTS OF THE PRESENT CASE:

10. The brief facts of the present case are enumerated as under: -

a. Respondent No.4, is a Corporate Body registered under the laws of India, having its registered office at Plot No. D-7, MIDC Shrirampur, Dist. Ahmednagar, Maharashtra, PIN-413709

b. The Respondent No.4 filed an application with the Ministry of Environment, Forest and Climate Change seeking Environment Clearance (***EC***) for proposed Biomedical Waste Treatment Facility. The application of Respondent No.4 has been registered in ***"Category B-1"***

projects vide proposal no. SIA/MH/IND/416512. Copy of Respondent No.4's application no. SIA/MH/IND/416512 is annexed herewith as **ANNEUXRE – R-4**. The said application has been considered and the EC has been granted to the Respondent No.4.

PARAWISE REPLY

11. The Respondent No.4 submits that with respect to the contents of Para 1 of the appeal are a matter of record and hence needs no reply.

12. The Respondent No.4 submits that with respect to the contents of Para 2 of the Appeal to an extent are a matter of record and needs no response. Rest of the contents of the said para are denied being ill-motivated, false and incorrect. It is stated that the present appeal at the outset is not maintainable as the same wrongly challenges the issuance of EC to the answering Respondent by Respondent Nos.2 & 3. It is further stated that the contention of the Appellant that SEIAA was non-functional and hence cannot grant EC is misconceived. The Respondent's proposal was approved by SEIAA on 5th January 2024, i.e., when

the SEIAA was operational and was uploaded on online portal (PARIVESH) on 8th February 2024, exercising the power/authority given by MOEFCC vide its notification dated 02.08.2023 whereby, MOEFCC has categorically granted a *"window period"* of fifteen (15) days, for the Member Secretary of the SEIAA, extendable with another fifteen (15) days to upload the minutes or approval letters related for the proposals which was duly approved by SEIAA before it became non-functioning.

13. The Respondent No.4 submits that with respect to the contents of Para 3 of the appeal are denied being false and incorrect as the appeal filed by the Appellant is misconceived, without merit, and lacks any cause of action. The issues raised by the Appellant as mixed questions of law and facts are wholly untenable and do not warrant consideration by this Hon'ble Tribunal. The appeal is not maintainable and should be dismissed at the outset.

Rebuttal to Issues Raised by the Appellant:

13.1. Whether the impugned EC can be granted when SEIAA is not in operation & functioning due to its expiry of tenure since 10.01.2024?

- The Appellant's contention regarding the invalidity of the Environmental Clearance (EC) due to the alleged non-operation of SEIAA is fundamentally flawed. Even in instances where SEIAA's tenure has expired, MOEFCC vide its notification dated 2nd August 2023 has ensured the continuity of administrative functions. The impugned EC was issued by authorized officials within the authority granted to it under MOEFCC notification dated 2nd August 2023, ensuring that all necessary legal and procedural requirements were met. Therefore, this issue raised by the Appellant is misconceived and does not affect the validity of the EC.

13.2. Whether the SEIAA have followed the due process of law and also, the procedures under EIA Notification, 2006, law laid down by Hon'ble Supreme Court and by Hon'ble NGT Rulings?

- Respondent No.4 submits that the SEIAA, through its authorized representatives, followed due process and adhered to the procedures

prescribed under the EIA Notification, 2006, as well as the precedents set by the Hon'ble Supreme Court and the Hon'ble NGT. The granting of the impugned EC was conducted in strict compliance with all applicable legal requirements, leaving no room for questioning its validity. The Appellant's suggestion that due process was not followed is speculative and baseless in view of the notification of MOEFCC dated 2nd August 2023.

13.3. Whether the Conduct of Member Secretary of SEIAA, Respondent No.4 is in collusion and needs strict Legal action?

- The allegation of collusion between the Member Secretary of SEIAA and the Respondent No.4 is entirely unfounded and unsupported by any credible evidence. Respondent No.4 strongly denies any collusion or wrongdoing in the process of granting the EC. The entire process was conducted with transparency and in accordance with the law.

The Appellant's baseless allegations are an attempt to jeopardize the authority vested in SEIAA and SEAC.

13.4. Whether the impugned EC is tenable in the eyes of law being granted by ex-officio in absence of any powers and without authority?

- The impugned EC was granted by officials who were vested with the necessary authority to act on behalf of SEIAA. The delegation of authority in such circumstances is well within the legal framework and ensures the uninterrupted functioning of administrative duties. The Appellant's challenge to the authority of these officials is without merit, and the EC remains fully tenable in the eyes of the law.

13.5. Whether there is compliance to the conditions imposed in SEAC & SEIAA minutes and who have verified the same in the absence of SEIAA?

- The compliance with the conditions imposed by SEAC and SEIAA was duly verified by

competent authorities acting within their legal mandate. The Appellant's doubts regarding verification are unfounded. It is stated that Respondent No. 4 has duly replied to each and every concern raised by both SEIAA and SEAC. Contents of para 8 of the preliminary objections may be read as part and parcel of the reply to the present para as the same has not been repeated herein for the sake of brevity.

13.6. Whether the Respondent No. 3-Shri. Pravin C. Darade has powers in personal capacity to grant impugned EC? And is there any abuse of process of law by Respondent No. 3-Shri. Pravin C. Darade?

- The said question as framed is mischievous and reeks of ulterior motives of the appellant. The EC has been issued in compliance with the applicable law and authority vested by law. There has been no abuse of the process of law, and the EC was granted in full compliance with the applicable legal provisions.

14. The Respondent No.4 submits that with respect to the contents of Para 4.1. of the appeal is denied being false and incorrect. The Appellant appears to be indulging in extortive acts by abusing legal process. It is stated that the present appeal is without any merit as the EC has been granted to Respondent No.4 in absolute compliance of the provisions of EIA Rules and Regulation.

15. The Respondent No.4 submits that with respect to the contents of Para 4.2 of the appeal is a matter record and needs no response.

16. The Respondent No.4 submits that with respect to the contents of Para 4.3 of the appeal are denied being false and incorrect. It is denied that Respondent No.4 has procured the subject EC from SEIAA false, baseless and misleading information without following the due process. Respondent No.4 states that it has taken part in each and every meeting of both SEAC and SEIAA and provided all the information/documents as sought by both the authorities.

17. The Respondent No.4 submits that with respect to the contents of Para 4.4, 4.5 and 4.6 of the appeal are matter of record and needs no response.

18. The Respondent No.4 submits that with respect to the contents of Para 4.7 to the extent are a matter of record and needs no

response. Rest of the contents are denied being false and incorrect. It is denied that Respondent No.4 has not complied with any condition proposed by SEAC II. Respondent No.4 after the 182nd meeting of SEAC III has submitted a point wise reply dated 25th December 2023, wherein it has addressed all the conditions recommended by SEAC II.

19. The Respondent No.4 submits that with respect to the contents of Para 4.8 of the appeal are matter of record and needs no response.

20. The Respondent No.4 submits that with respect to the contents of Para 4.9 of the appeal are denied being false, incorrect and an afterthought. The present appeal is without any substantive basis and are an attempt to misconstrue the facts and the law. The appeal itself is misconceived, lacks any cause of action, and is therefore not maintainable.

REPLY TO GROUNDS:

21. Ground 5.1 of the appeal is denied being misconceived. It is stated that Respondent No.3 in terms of MOEFCC notification dated 2nd August 2023 is lawfully authorized to grant EC for the

proposals which was duly approved by SEIAA before it became non-functioning for a period of one month after the expiry of the tenure of SEIAA Committee.

22. Ground 5.2 of the appeal is denied being false, incorrect and misconceived. It is denied EC granted to Respondent No.4 has been approved illegal manner and in abuse of process of law.

23. Ground 5.3 of the appeal is denied being false and incorrect. It is stated that subject EC has been granted to Respondent No.4 after following due process and procedure by both Respondent Nos.2 & 3 and Respondent No.4.

24. Ground 5.4 and 5.5 of the appeal is categorically denied being false and incorrect. Respondent No.4 at no point of time submitted any false and baseless information before SEIAA. Respondent No.4 has time and again provided the required documents and information as sought by SEAC II and SEIAA in its meetings. The Appellant's allegation that false, baseless, or misleading information was submitted to the SEIAA during the process of obtaining EC. It is stated that all information provided by Respondent No. 4 was accurate, truthful, and in compliance with the applicable regulations and guidelines. The accusation of *"Suppressio Veri Suggestio Falsi"* is without any basis in fact or

law. The process of obtaining the EC involved thorough scrutiny by SEIAA, which included multiple levels of review and verification of the information provided by Respondent No.4. The SEIAA, being a competent authority, would not have granted the EC if any discrepancies or falsehoods had been detected in the application submitted by Respondent No. 4.

25. Ground 5.6 of the appeal is denied being false, incorrect and untenable in the eye of law. It is denied that EC granted to Respondent No.4 by SEIAA valid and correct and issued in due compliance of the relevant rules and regulations.

26. Ground 5.6 of the appeal is denied being false, incorrect and untenable in the eye of law. It is denied that the EC granted is illegal or that it warrants quashing along with any legal action or costs. The EC was granted following all due processes under the law, including proper evaluation and compliance with all applicable norms and guidelines. The Appellant's demand for quashing the EC is baseless and devoid of merit, and the prayer for legal action against Respondent No.4 is entirely unwarranted.

27. Ground 6(a) of the appeal is denied being false and incorrect. It is stated that there is no basis to the claim that there was a lack of coordination between MOEFCC and SEIAA during the grant of

the EC. The entire process was conducted in accordance with the law, with due regard to environmental protection and MOEFCC notification dated 2nd August 2023. Respondent No. 4 has strictly followed all required environmental regulations, and the EC was granted after careful consideration of all relevant factors.

28. Ground 6(b) of the appeal is denied being false and incorrect. clearly, the Appellant has failed to establish any prima-facie case that justifies the quashing of the EC or the imposition of a stay on its operation. The EC was granted in compliance with all legal requirements, and Respondent No. 4 is not engaged in any illegal construction activity. The demand for a stay is entirely without merit and would unjustly halt a legally approved project, causing irreparable harm to Respondent No.4 and other stakeholders. There is no basis for any prohibition or stay, and the Hon'ble Tribunal is urged to dismiss this request.

29. Ground 6(c) of the appeal is denied being false and incorrect. Respondent No. 4 firmly denies the baseless and defamatory characterization as a *"white-collar defaulter"* or *"violator."* The EC was obtained through a lawful and transparent process, with all due diligence exercised. The insinuation of corruption or impropriety is wholly unfounded and intended to malign

Respondent No. 4 without any supporting evidence. Respondent No. 4 maintains that the EC process was conducted with full integrity and in accordance with the law.

30. Ground 6(d) of the appeal is denied being false and incorrect. Respondent No. 4 states that the Appellant's allegations of *"intentional violations of laws"* are entirely unfounded. The Appellant has not demonstrated any specific legal violation by Respondent No.4. The EC was granted following the legal procedures established under the NGT Act, 2010, and related rules. The Appellant's invocation of this Hon'ble Tribunal's jurisdiction is an attempt to obstruct a legally compliant project, and the appeal lacks merit.

31. Ground 6(e) of the appeal is denied being false and incorrect. Respondent No. 4 takes note of this submission and has no further comments on this point as it does not raise any substantive legal issue against Respondent No. 4.

32. Ground 6(f) is denied being false and incorrect. It is stated that the Appellant’s actions are not based on any genuine public interest concern. Instead, the appeal appears to be driven by a desire to obstruct a legally compliant project without any substantial legal grounds.

33. Contents of Para 6(g) and 6(h)of the appeal is not maintainable and is illegal. Respondent No. 4 reserves the right to respond to any such additional grounds or documents as per the directions of this Hon'ble Tribunal.

34. Contents of Para 6(i) of the appeal calls for no reply.

35. Contents of Para 6(j) of the appeal denied being incorrect. It is stated that there is no prima facie case in favour of the appellant and the present appeal does not calls for any relief as sought by appellant.

36. Contents of para 7 of the appeal are denied being false and incorrect. It is specifically denied that the present appeals consist question of public importance.

37. Contents of para 8 of the appeal are denied being false and incorrect. It is, however, submitted that the present appeal is not maintainable and without jurisdiction as the same is without any cause of action.

38. Contents of para 9 of the appeal are denied being false and incorrect. It is stated that there is no cause of action in favour of the Appellant and against the Respondent No.4.

39. Contents of para 11 of the appeal, i.e., Prayer clause is incorrect and vehemently denied. The Appellant is by instituting this

appeal is only trying to harass the Respondent No.4 and waste the precious time of this Hon'ble Tribunal.

40. The Appellant has not provided any concrete evidence to support the allegations of misrepresentation, non-compliance, or submission of a defective application by Respondent No. 4. The claims made by the Appellant are speculative, unsupported by facts, and appear to be an attempt to obstruct the lawful grant of EC. It is stated that in the absence of any substantive evidence, the appeal lacks merit and should be dismissed.

41. It is stated that Respondent No. 4 has followed the due process prescribed for seeking EC in respect of projects categorized under Category B. The EC has been granted to Respondent No.4 in absolute compliance of the provisions of EIA Rules and Regulation.

42. The Appellant has failed to demonstrate any actual harm or prejudice to environmental safeguards resulting from the grant of EC to Respondent No.4. On the contrary, Respondent No.4 has complied with all environmental conditions and requirements imposed by SEAC and SEIAA, thereby ensuring that the environmental integrity of the project is maintained. The

appellant’s appeal is thus not only baseless but also an abuse of the legal process.

43. The present appeal is a vexatious attempt to delay and hinder the lawful operations of Respondent No.4, despite the latter’s compliance with all legal and procedural requirements. The appellant's continued pursuit of this appeal, despite the lack of any substantive grounds, constitutes an abuse of process.

44. Given the baseless nature of the Appellant’s claims, it is evident that the appeal is an abuse of the judicial process, aimed at causing undue delay and prejudice to Respondent No.4. The Appellant's conduct warrants the imposition of heavy costs to deter such frivolous and malicious litigation in the future.

45. In light of the aforesaid facts and circumstances, and in view of the comprehensive submissions made by Respondent No.4, a para-wise reply to the appeal is not warranted. The baseless and unsubstantiated nature of the Appellant’s allegations does not necessitate a detailed response, as the grounds for rejection of the appeal are clear and evident.

PRAYER

In the aforesaid premise, it is most humbly prayed that this Hon’ble Tribunal may graciously be pleased to:

A. Dismiss the appeal filed by the appellant with exemplary costs;

And/or

B. Pass any such other further orders as this Hon’ble Tribunal may deem fit and proper in the facts and circumstances of the present case and in the interests of justice.

Pune

Date : 13/11/2024

Advocate for Respondent No.4

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE
AT PUNE

APPEAL NO. 93/2024 WZ

TANAJI B. GAMBHIRE

APPELLANT

V/s

UNION OF INDIA & ORS.

RESPONDENTS

A F F I D A V I T

MAY IT PLEASE THE HON'BLE TRIBUNAL:

I, Mr. Shrikant Sharad Khaire, adult, Occu.: business, having office at Plot No. D-7, MIDC Shrirampur, Dist.: Ahmednagar, Maharashtra-413709 do hereby state on solemn affirmation as under: -

I am the Director of the Respondent No.4 above named and responsible for day to day administration of my business. As such, I have gone through the Reply and annexure thereto being filed today. I find that the contents therein are true and correct to the best of my knowledge and belief and which may be reated as part and parcel of the present affidavit.

WHATEVER STATED ABOVE is true and correct to the best of my knowledge and belief. In witness whereof I have signed hereunder at Pune on 13th day of November 2024

NOTARY
ADV. VIJAY ANANDRAO KIRTANE
PUNE CITY (MAHARASHTRA)
REGD.NO. 19907
EXP. DT. 12/3/2025
GOVERNMENT OF INDIA

DEPONENT

BEFORE ME

VIJAY ANANDRAO KIRTANE
NOTARY GOVT. OF INDIA
PUNE CITY (MAHARASHTRA)

13 NOV 2024

NOTED AND REGISTERED
SERIAL NUMBER 274/2024

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ANNEXURE-R-1

F.No. IA3-22/10/2022-IA.III [E 177258]
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division
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Indira Paryavaran Bhawan
3rd Floor, Vayu Wing, Jor Bagh Road
Ali Ganj, New Delhi-3

Dated: 2nd August, 2023

OFFICE MEMORANDUM

Subject: Procedure for consideration of Category 'B' proposals at Central level due to the non-functionality or delay in constitution of SEIAA/SEAC – reg.

The State Environmental Impact Assessment Authorities (SEIAAs)/State Expert Appraisal Committees (SEACs) have been constituted in exercise of the powers conferred by sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for decentralisation of the Environment Clearance (EC) process and grant of Environment Clearances at the State level. All projects or activities under Category 'B' in the Schedule of the EIA Notification, 2006 are appraised by the respective SEACs/SEIAAs of the States/UTs.

2. As per the extant provisions of EIA, 2006, in the absence of a duly constituted SEIAA/SEAC, a Category 'B' project shall be considered at the Central Level as a Category 'B' project. However, instances have been brought to the notice of this Ministry that in the event of non-functionality or delay in constitution of SEIAA/SEAC, many proposals submitted to SEIAA are held up at different stages of EC process at the State level. The matter has been examined in the Ministry and it is observed that there could be different situations arising out of non-functionality or delay in constitution of SEIAA/SEAC as enumerated below:

i. Proposals submitted to SEIAA and not accepted by SEIAA.

ii. Proposals received by SEAC/SEIAA and have been processed or are under processing.

iii. Proposals considered and/or deferred by SEAC for various reasons.

iv. Proposals recommended by SEAC but not forwarded to/not approved by SEIAA.

v. Proposals (which do not require examination of SEAC) accepted by SEIAA but not processed and/or deferred for various reasons.

vi. Proposals approved by SEIAA but minutes/letter not uploaded on PARIVESH.

3. In this regard, the Ministry deems it necessary to clarify the process for handling such proposals. For the scenarios mentioned at sub para (i) to (v) of para 2 above, the following procedures shall be followed:

i. Consequent upon the non-functioning/discontinuation of SEIAA/SEACs, the Member Secretary of SEIAA/State Government shall submit the details of the pending proposals to the PARIVESH of MoEF&CC with a request to transfer such proposals to the Central level.

ii. PARIVESH shall examine the aforesaid request and seek the approval of the Competent Authority for the transfer of proposals from SEIAA/SEAC to the Central level.

iii. Thereafter, the proposals from the SEIAA/SEAC shall be transferred through PARIVESH to the concerned Member Secretary of the EAC at Central level.

iv. The concerned Member Secretary of the EAC at Central level shall carry out the due diligence to ascertain the level of examination/appraisal needed to be carried out by the Central level EAC based on the stage at which the proposal was pending for appraisal at the concerned SEIAA/SEAC.

4. For the scenario mentioned at sub para (vi) of para 2 above, based on the request from the Member Secretary of SEIAA/State Government, a window period of 15 days shall be provided to the Member Secretary SEIAA, extendable by a further period of 15 days, to only upload the minutes/letters for the proposals which were duly approved by SEIAA before it became non-functional.

5. Further, in case of only SEIAA becoming non-functional / discontinued due to various reasons, the proposals pending with SEAC for (re)consideration up to the day of such discontinuation shall be (re)considered by the respective SEAC and forwarded to the Ministry along with recommendation as per the procedure prescribed at Para 3 above.

6. This is issued with the approval of Competent Authority.

2/8/2023

(Sundar Ramanathan)
Scientist E

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs

4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
5. All the Officers of IA Division

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. Sr.PPS to Secretary (EF&CC)
4. Sr.PPS to AS(TK) / AS (NPG)
5. Sr.PPS to JS (SKB)
6. Website, MoEF&CC
7. Guard file.

ANNEXURE-R-2

BIOCLEAN SYSTEMS (INDIA) PVT. LTD.
A ISO 9001 - 2015 COMPANY

DATE: 08.12.2023

To,
Hon. Chairman & Member Secretary,
State Environmental Impact
Assessment Authority (SEIAA),
Department of Environment,
Mumbai.

Sub. : Submission of compliance to **Additional Details Sought (ADS)** w.r.t establishment of Common Bio-Medical Waste Treatment and Disposal facility (CBWTF) by **M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL),** at Plot No. D-7, MIDC Shrirampur, Tal. Shrirampur, Dist.: Ahmednagar, Maharashtra

Ref. :
1. Form-2 submitted online on 15.02.2023.
2. Proposal considered in **262nd SEAC-1** Meeting held on **04.09.2023** followed by consideration in Case considered in 267th SEIAA meeting on 17.10.2023 (MOM of the SEIAA Meeting enclosed at **Enclosure-I**)

Project Proposal No. : SIA/MH/INFRA2/416512/2023

Respected Sir,

This has reference to a Form 2 submitted online on **15.02.2023**. The same was w.r.t establishment of Common Bio-Medical Waste Treatment and Disposal facility (CBWTF) by **M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL),** at Plot No. D-7, MIDC Shrirampur, Tal. Shrirampur, Dist.: Ahmednagar, Maharashtra

The case was considered for grant of Environmental Clearance (EC) in **262nd SEAC-1** Meeting held on **04.09.2023** and **same was recommended to SEIAA for grant of EC**. Subsequently, case was

considered in **267th SEIAA** meeting held on **17.10.2023.** During deliberations in meeting, Hon. Members stated that there should be 500 M buffer space around the BMW facility project as per provisions in the guidelines published by CPCB (Revised Guidelines for CBWTF, 2016. A copy of the same is attached at Annexure – I). Further, mention was also made regarding the directions from Hon. Gujarat High Court w.r.t. locating the BMW facility. Subsequently, we were asked to refer both the documents for further information and necessary actions. Accordingly, in Minutes of Meeting (MoM) following paragraph has been appeared –

"Provide 500 m buffer zone from the proposed project site as per the guidelines of Central Pollution Control Board (CPCB)."

Sir, our proposed project of CBWTF is located on Plot No. D-7 in Shrirampur MIDC, Dist.: Ahmednagar. The MIDC is notified industrial area wherein a plot for our BMW facility has been dedicatedly allocated. During deliberations in meeting, Hon. Members stated that there should be 500 M buffer space around the BMW facility project as per provisions in the guidelines published by CPCB (Revised Guidelines for CBWTF, 2016. A copy of the same is attached at Annexure – I). Further, mention was also made regarding the directions from Hon. Gujarat High Court w.r.t. locating the BMW facility. Subsequently, we were asked to refer both the documents for further information and necessary actions.

Sir, after the meeting we referred to the Revised Guidelines by CPCB for CBWTF, 2016 (A copy is enclosed at **Annexure - I**) and found following at Description 6: Location Criteria (Page No. 8 of 52) –

The location criteria for development of a CBWTF are as follows: *A CBWTF shall be developed **in a notified industrial area without any requirement of buffer zone.***

Link:*https://cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/Common_Bio_Medical_Waste_treatment_facilities.pdf*

Also, the order of Hon. Gujarat High Court is referred (A copy is enclosed at **Annexure - II**), following description is observed –

- The case is w.r.t. the location of the CBWTF in proximity to residential area & located in non-industrial area. It is stated in final analysis of the court judgment on Page No. 67 of 71 as follows – *The revised guidelines for the Common Bio- Medical Waste Treatment and Disposal Facility, as issued by the C.P.C.B. itself, provide **that the buffer zone distance from the notified residential area** may be reduced to less than 500 meters by the State Pollution Control Board or the Pollution Control Committee without referring the*

matter to the C.P.C.B. by prescribing the additional control measures such as (i) adoption of best available technologies (BAT) by the proponent of CBWTF; (ii) prescribing stringent standards for operation of the CBWTF by the SPCB/PCC; (iii) adoption of zero liquid discharge by the CBWTF and (iv) in case of any complaints from the public, then CBWTF should prove that the facility is not causing any adverse impact on environment and habitation in the vicinity. If SPCB/PCC is not in a position to resolve the issue relating to buffer zone while selecting the site for CBWTFs, in such a case, SPCBs/PCCs may refer the matter to CPCB.

Link: https://gujarathc-casestatus.nic.in/gujarathc/#

Sir, from above facts, it is clear that for a CBWTF project located in MIDC area (i.e. Notified Industrial area), the criteria of having 500 M buffer zone around the facility do not become applicable. In our present case, since the proposed CBWTF project is located in Shrirampur MIDC on Plot No. D-7, granting EC will not be violation of any stipulations. Moreover, Hon. SEIAA committee has previously granted permissions to number of such CBWTF project located in MIDC areas without imposing the condition of 500 M buffer zone around the industry/CBWT project.

Under above circumstances and in the light of the documents presented namely 1) Revised Guidelines for CBWTF; 2016, 2) Hon. Gujarat High Court Order, 3) Consent to Establish issued by MPCB 4) MIDC approved Plot Layout Drawing, 5) Plot Allotment Letter & 6) Shrirampur MIDC Notification.

We hope that the details presented above are in accordance with your requirements and further request you kindly to consider our proposal in upcoming SEIAA meeting for grant of EC.

Please do the needful and oblige.

Thanking You.

Yours faithfully,

BIOCLEAN SYSTEMS (I) PVT. LTD.

Mr. Shrikant S. Khaire
(Managing Director)
M/s. Bioclean Systems (India) Pvt. Ltd.

Enclosure - I

Minutes of 267th Day 1 (Part C) meeting of SEIAA held on 17th October, 2023.

Item no. 45

Proposal No.:- SIA/MH/INFRA2/416512/2023 **Type of Project: EC**

Subject- Environmental Clearance for Proposed Establishment of Common Bio-Medical Waste Treatment and Disposal Facility (CBWTF) having Capacity of 400 Kg/Hr. (2 Units each having capacity of 200 Kg/ Hr.) at Plot No. D-7, MIDC Shrirampur, Tal. Shrirampur, Dist. Ahmednagar, Maharashtra by M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)

Project Details-

The proposed project activity is listed for Biomedical Water Treatment Facility under category 7(da) B1, Biomedical Waste Treatment as per provisions of the EIA Notification, 2006 and the proposal is appraised in the SEAC-1 committee.

SEAC Deliberation –

Representative of PP was present during the meeting along with Accredited Environmental consultant M/s. Equinox Env. India Pvt. Ltd.

Standard Terms of Reference (ToR) issued by State Level Environment Impact Assessment Authority (SEIAA); Govt. of Maharashtra vide letter File No. SIA / MH / MIS / 82436 / 2022 dated 26.04.202.

The Maharashtra Pollution Control Board had issued Consents to Establish to the company after meeting the location criteria as per prevailing rules on 04.22.2022. The jurisdiction of the proposed project is all talukas of District Ahmednagar excluding the Ahmednagar Municipal Corporation Area.

The brief information of the project as submitted by the PP is as below,

No.	Particulars Required	Details
1	Name of the project & Address along with all corner latitude and longitude	**M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)** Plot No. D-7, MIDC Shrirampur, Tal. Shrirampur, Dist.: Ahmednagar, Maharashtra. Latitude: 19°37'52.51" N, Longitude: 74°36'23.72" E Latitude: 19°37'52.25" N, Longitude: 74°36'25.52" E Latitude: 19°37'54.86" N, Longitude: 74°36'25.84" E Latitude: 19°37'55.07" N, Longitude: 74°36'24.08" E
2	Type of Organization (Private / Government / Semi Government etc.)	**Private**
3	Correspondence Address and contact details of Project Proponent.	**M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)** **Address:** Plot No. D-7, MIDC Shrirampur, Tal. Shrirampur, Dist.: Ahmednagar, Maharashtra. **Contact Details:** Mr. Shrikant S Khaire Mobile No. : +91 9011049607 E-Mail : biocleansystem@yahoo.com
4	Type of project (ToR / EC / Amendment in ToR / Amendment in	**Environmental Clearance (EC)**

Member Secretary

Chairman

	EC / Revalidation / Expansion / Process change etc.)		
5	Category of project as per EIA Notification 2006 amended from time to time (Pl. mention category A,B,B1,B2 etc. whichever is applicable)	Environmental Impact Assessment (EIA) Notification No. S. O. 1533 (E) dated 14.09.2006 & amendments thereto issued by the Ministry of Environment, Forest & Climate Change (MoEFCC), New Delhi; the proposed project comes under **'Category – B1', Schedule 7 (da).**	
6	If earlier ToR is obtained pl. mention details (ToR letter No. & Date, SEAC / EAC Meeting No.)	Standard Terms of Reference (ToR) issued by State Level Environment Impact Assessment Authority (SEIAA); Govt. of Maharashtra vide letter **File No. SIA / MH / MIS / 82436 / 2022 dated 26.04.2022 to M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)**	
7	If earlier EC is obtained pl. mention EC Number & Date	Not Applicable since the proposed project is new establishment.	
8	Whether the proposal is a violation case (yes/no)	No	
9	Applicability of CRZ clearance (yes/no)	No	
10	Whether General / Specific Conditions are applicable to the project (Yes/No) If yes pl. give details.	No	
11	Whether Scrutiny fees paid as per SEIAA guidelines (Yes/No); If yes pl give payment details	Yes. 1. Bank Name – Axis Bank 2. Mode of Transaction – By Cheque 3. Cheque Bearing No. – 558402 4. Date of Payment – 19.05.2022 5. Amount paid - Rs. 1,50,000/-	
12	Name of accredited Environmental Consultant & address along with Accreditation No. & Validity.	**Accredited Environmental Consultant**: Equinox Environments India Pvt. Ltd. **Address:** F-11, Namdev Nest, 1160-B, 'E' ward, Sykes Extension, Opp. Kamala College, Kolhapur- 416 001. **Accreditation No.:** NABET/EIA/2124/SA-0177 dated 04.10.2022 valid till 10.10.2024.	
13	Name of layout plan approving Authority	Deputy Engineer & Special Planning Authority MIDC Civil, Sub-Division, Ahmednagar	
14	Estimated cost of Project (in Rs. Lakhs)	Rs. 191 Lakhs	
15	Area of project (in Sq. M.)	4052	
16	Whether 33% green belt is provided (Yes/No)	Since, the proposed project is new establishment, the CBWTF planned to be develop 1381.23 Sq. M Green Belt Area (33% of TPA)	
17	Area of Green Belt & No. of trees in the proposed project in Sq.m. (Pl. provide 2000 trees per hectare of green belt area)	Total GB area to be developed (33% of TPA) – 1381.23 Sq. M. Proposed No. of Trees: 340 Trees (2500 Trees/Ha.)	
18	Width of internal roads and turning radius	Width of internal roads: 6 M Turning Radius: 9 M	
19	Details of proposed construction	**Ground Coverage Area (in Sq. M)**	770.60
		No. of Buildings & its height in meter.	--

Member Secretary

Chairman

20 **List of Raw materials & Storage Details (Pl. add on in the list if necessary)**

Since it is an Establishment of Common Bio-medical waste Treatment & Disposal Facility (CBWTF), BMW is considered as raw material for the treatment on it. The details of source of BMW collection (Coverage Area) under proposed CBWTF as follows –

No.	Location	Hospitals	Beds	Clinic	Labs	Blood Bank	Sanitary Waste Generation (Kg/D)
1	Ahmednagar Taluka	5	729	3	0	0	175
2	Kopergaon	44	607	45	9	1	150
3	Akola	16	105	16	3	0	175
4	Sangamner	81	1613	49	15	1	175
5	Jamkhed	31	298	10	1	0	25
6	Karjat	28	230	15	1	0	10
7	Shrigonda	54	454	18	2	0	150
8	Newasa	47	500	20	1	0	150
9	Pathardi	26	237	13	1	0	160
10	Shevgaon	23	533	8	1	0	150
11	Parner	43	472	14	1	0	180
12	Rahata	33	2197	11	4	1	180
13	Rahuri	44	570	21	3	0	160
14	Shrirampur	52	800	23	3	2	100
	TOTAL	**528**	**9,345**	**266**	**45**	**5**	**1,940**

Remarks:

- **Average BMW generation** = 300 gms / Bed / Day (Source: Directorate of Health Services, Govt. of Maharashtra)
- **BMW generated from HCFs** = 9345 x 300 = 2803.5 Kg/D = **2.80 MT/D**
- **BMW generated from Sanitary Consumables (approx.)** = 1940 Kg/D = **1.9 MT/D**
- **Total BMW generated = 4.7 MT/D**
- **Proposed Incinerator Capacity** = 200 Kg / Hr. (2 Units)
- **Incinerator operational capacity considering 12 Hr. / Day** = 200 x 2x 12 = 4800 Kg/D = **4.8 MT/D**

21 **Production Details**

Since it is an Establishment of Common Bio-medical waste Treatment & Disposal Facility (CBWTF), the facility includes collection, segregation, treatment & disposal of BMW and hence no any manufacturing is carried out under proposed CBWTF

The magnitude of operation under proposed CBWTF as follows-

No.	Equipment	Installed Capacity	Operational Capacity / Day	Number
1	Incinerator	400 Kg / Hr.	18 Hr. / Day	2

Member Secretary

Chairman

			[200 Kg/Hr. (2 Nos)]	(With pre-heating, loading & un-loading)	
	2	Autoclave	100 Kg/Hr.	2 Batch / Day (Each cycle of 60 min.)	1
	3	Shredder	100 Kg/Hr.	2 Batch / Day (Each cycle of 60 min.)	1
	4	Effluent Treatment Plant (ETP)	10 CMD	--	1
	5	Sewage Treatment Plant (STP)	1 CMD	--	1

22 Water Consumption & Effluent generation (All units in CMD)

v. Source & Qty. of water requirement (in CMD): Fresh water is taken from MIDC Water Supply Scheme.

vi. Water supply permission obtained (Yes/~~No~~) & approving Authority: Yes, M/s. Bioclean Systems (India) Pvt. Ltd. has already obtained water permission vide no. DE/ANR/Civil /A75917/2023 dated 01.03.2023 from MIDC.

No.	Description	Water Consumption (CMD)	Effluent Generation (CMD)	Treatment
1.	**Domestic**	**#1.3**	**0.8**	Sewage effluent will be treated in proposed packaged STP of 1 KLD Capacity
2.	**Industrial**			
	a. **Process** (Chiller + Ventury Scrubber + Autoclave + Vehicle Washing)	7.2 (*2 + *2 + #1.2 + #2)	4	Effluent will be treated in proposed ETP of 10 KLD Capacity.
	b. Washing (Lab & Floor Washing)	#1.5	1.5	
	Industrial Total	**8.7 (*4 + #4.7)**	**5.5**	
3.	**Other (Gardening)**	**#7**	**---**	
	Grand Total	**17 (*4 + #13)**	**6.3**	

23	Quantity of sewage generation (in CMD)	0.8 CMD
24	Details of Sewage Treatment and Disposal of treated sewage:	Sewage will be treated in proposed Packaged STP of capacity 1 CMD.

25 **Detail of Effluent Generation (unit CMD)**

Trade effluent generated from proposed CBWTF – 5.5 CMD

Particular	Existing	Proposed	Total
g) Qty. of Effluent generation: (CMD)	0	5.5	5.5
h) Qty. of High TDS/COD effluent: (CMD)	--	--	--
i) Qty. of Low TDS/COD effluent: (CMD)	--	--	--

Member Secretary

Chairman

26	Whether Zero liquid Discharge Effluent Treatment is proposed (Yes/No)	Yes. The trade effluent generated from industrial activities is 5.5 CMD. Same is treated in proposed ETP which will be reused in treatment operations (APCD), thereby achieving Zero Liquid Discharge (ZLD).
27	Brief Description of Effluent Treatment scheme	The effluent generated would be to the tune of 5.5 CMD. Raw effluent passed through Water Collection Tank, Carbon Collection Bag, Equalization Tank, Cooling Tower, Flash Mixer, Primary Tube Settler, Sequencing Batch Reactor (SBR), Filter Feed Tank, Pressure Sand Filter & Activated Carbon Filter. 4 CMD will be reused in treatment operations, thereby achieving ZLD. Sludge will be forwarded to CHWTSDF, Pune.
28	Qty of treated effluent proposed to be sent to CETP (pl. mention Name of CETP and its membership Details)	Not applicable
29	Please mention parameters of treated effluent to be achieved as per EP Rule, 1986 and or stipulated by the SPCB	

Parameter	Inlet Concentration (Mg/L)	Outlet Concentration (Mg/L)
pH	4.5-6.0	6.5-9.0
COD	800-1000	250
BOD (3 days at 27^0)	300-400	30
TSS	400-600	100

30	Brief Note on proposed Rainwater harvesting scheme along with budget allocation:	➢ Runoff from **Rooftop** to be harvested & stored in a Storage Tank. ➢ Rooftop Yield is **165 M^3.** ➢ This yield will be stored in Fresh Water Tank of capacity 200 M^3 ➢ Utilization for Green Belt, Fire Hydrant, Washing & Flushing ➢ Excess RWH Qty. diverted out through Storage Tank outlets to MIDC Drainage
31	**Solid Waste management**	

No.	Type of waste	Qty (MT/M)	Disposal methods	Pl. mention plan to reduce solid waste generation if any
1	Shredded Plastic	5	Authorized Recyclers	--
2	MS Scrap	0.2		
3	Other Waste	0.1		

32 **Hazardous Waste Generation & Disposal (As per HW Rule 2016)**

No.	Category	Particulars	Total Qty. generation (MT/M)	Method & Disposal as per HW Rules 2016
1	37.3 (HW Rules)	Incineration Ash	12	CHWTSDF; Maharashtra Enviro
2	35.3 (HW Rules)	ETP Sludge	0.1	

Member Secretary

Chairman

	3	04 and 07 (BMW Rules)	Other Residues	0.9	Power Ltd. (MEPL), Pune

33 **Fuel Consumption**

No.	Type of Fuel	Consumption Qty. (TPD)			Used for (Boiler / DG/Set etc.)	Ash (%)			Sulphur (%)			Air pollution control/equipment provide (Yes/No)
		Existing	Proposed	Total		Existing	Proposed	Total	Existing	Proposed	Total	
1	HSD	--	80 LPH	80 LPH	Incinerators	--	0.01	0.01	--	0.25	0.25	Chiller, Venturi Scrubber, Cyclone Droplet Separator
2	HSD	--	40 LPH	40 LPH	DG Set	--	0.01	0.01	--	0.25	0.25	Acoustic Enclosure

34 Brief Note on Air Pollution Control equipment's: Air Pollution Control Devices will be provided to Incinerator are Chiller, Venturi Scrubber, Cyclonic Droplet Separator

35 **Stack Details (Also include process vent details)**

No.	Section / Unit	Source pollutions	Stack No.	Height form ground	Internal Diameter (inch)	Temperature of exhaust gas
1	Incinerator Shed	Incinerator (2 No.)	S-1 & 2	30 M (Each)	1200 mm Bottom X 600 mm Top	--
2	DG House	DG Set	S-3	6 M (ARL)	100 mm	--

36 **Energy**

i) Source of power Supply: Maharashtra State Electricity Distribution Company Limited

j) Maximum Demand (KVA): 500 kVA

k) Whether DG sets will be provided (Yes / No): **Yes**

if yes :

No.	No. of DG Sets		Capacity
	Existing	Proposed	
1	--	1	82.5 KVA

l) Please Mention if high tension line is passing through the plot: No

If yes, pl. give details of safety measures adopted:

37 **Details of use of renewable energy with budget allocation: NA**

ix. Total Energy Demand : ---------- KVA

x. Proposed renewable energy source capacity: ---------- KVA

xi. Proposed Budget (in Rs. – Lakhs):

xii. Timeline for implementation:

Member Secretary

Chairman

38 **Details of public hearing (if applicable):** Not Applicable since proposed project location is in notified industrial area.

iii. Place of public hearing : NA

iv. Date of Public hearing : NA

Please fill following details

Sr. No.	Issue raised during public hearing	Applicant plan for its compliance/ implementation	Budget allocation for implementation	Specific time line of compliance

39 EMP (Please mention specific items proposed in EMP along with specific timeline for its implementation)

Construction Phase:

Sr. No.	Attribute	Specific measure	Budget in (Rs. Lakh)	Remark
1	Air	Water tank, pump- motor, piping & sprinkling arrangement for fugitive dust control	2.50	--
2	Water	Safe Drinking water	0.50	--
3	Noise	Barricading of the boundary with MS sheet cladding on MS frame. Rs. 600/-	4.00	--
4	Soil	Appropriate management of fuels, lubricants & constructions- storage	2.25	--
5	Solid waste	Dust bins at strategic points	0.25	--
6	Hazardous waste	Empty containers of primers, paints, construction chemicals- To be stored at Hazardous Waste Storage	2.00	--
7	Fuel & Energy	To be taken from local vendors	1.00	--
8	Safety & health	Provision of PPEs, display of safety instruction, signs & awareness boards. First aid kit & other facilities	0.50	--

Operation Phase

No.	Attributes	Specific measures	Budget in Rs. Lakh	Time line for 1/5 implement	Responsibility	Remarks
1	Air	Installation of Chiller, Venturi Scrubber, Droplet Separator & Stack (30 M height), OCEMS	50	After Procurement of EC	Environmental Management Cell	

Member Secretary

Chairman

	2	Water	ETP (Cap.:10 CMD), OCMS & STP (Cap.:1 CMD)	20			
	3	Noise	Providing various PPEs like earplugs and earmuffs to workers.	3			
	4	Env. Monitoring & Management	--	20			
	5	Occupational Health & Safety Management	Fire fighting System, Fire Extinguishers, PPEs, etc.	10			
	6	Green Belt Development	--	5			
	7	Rain Water Harvesting	--				
	8	Renewable Energy Implementation	--	2			
	9	Odour Management	---	5			
40	Other Relevant Information: (Pl. provide brief note on proposed project)				• Capacity of existing CBWTF operated by BSIPL - 200 Kg/Hr. • Plant operational hrs. - 20-22 Hrs. /day which is insufficient to tackle increasing load of BMW. • Limitations of existing CBWTF - Frequent maintenance of plant & machinery, shut downs leads mismanagement & overburden. Due to which capacity of existing CBWTF is inevitable. • Area allotted for existing CBWTF by Ahmednagar Municipal Corp. (AMC) - 1000 M^2 (insufficient for expansion of existing CBWTF) • BSIPL approaches to Commissioner of AMC for requesting extra area for expansion or NOC to establish one more facility which will cover remaining Talukas of Ahmednagar. • NOC obtained from AMC for establishing another CBWTF. • Location of proposed CBWTF – Shrirampur MIDC.		
41	Details of skill development program within Organization				Training to workers on fire fighting, Safety etc.		

Member Secretary

Chairman

42	Details of environmental Monitoring Cell (Pl. provide organogram with educated Qualification and experience)	EMC Consist of 8 Nos. of persons including Environmental Engineer, Environmental Chemist, Safety Officer, Operators and supporting Staff and Laboratory Attendants.
43	Details of court cases if pending in any Hon'ble court	No any Court case is pending against the project.

Recommendations of SEAC-

After detailed deliberations with the PP and their accredited consultant, SEAC-1 decided to recommend the proposal to the SEIAA for the grant of prior Environmental Clearance subject to following specific conditions

Sr. No	Condition
1.	PP to submit revised lay out plan showing internal roads with six meter width and nine meter turning radius, provision of cul-de-sac at dead ends of the internal roads if any, location of pollution control equipment, parking areas, 33% green belt preferably on the periphery of the plot with minimum width of five meters, rain water harvesting structures (locations with dimensions), storm water drain lines, along with index and area statement showing calculations for each area and cross sections of storm water drain and rain water harvesting pits etc
2.	PP to comply with the standard conditions stipulated for the Bio Medical Waste facility in the Office Memorandum issued by MoEF&CC dated 4th January, 2019
3.	PP to carry out treatability study for reusing the treated ETP water for scrubbing purpose to ensure its efficiency.
4.	PP to adhere to the jurisdiction as granted by the Competent Authority.
5.	PP to prepare and implement action plan for point wise compliance of the Bio Medical Waste Management Rules, 2106 amended from time to time and also to comply with the requirements as mentioned in the Guidelines for Management of Healthcare wastes as per Bio Medical Waste Management Rules, 2106.
6.	PP to submit an affidavit that, the proposed site is notified as industrial zone by the Competent Authority.
7.	PP to achieve 100% Zero Liquid Discharge Effluent Treatment Plant.
8.	PP to ensure to start green belt development along the periphery immediately by planting the trees of 3-4 years age, so as to ensure its use as barrier during operation of the unit.
9.	PP to ensure extensive training and awareness campaign of the workers on site and staff of the member hospitals for segregation and collection of the Biomedical Waste. PP to prepare specific program to monitor safety and health protection of the workers
10.	PP to include Di-oxine , Furan, VOC in their Environmental Monitoring Plan and ensure tis monitoring as per CPCB Guidelines. If any of the parameter exceeds the standard parameter, the facility shall immediately be audited and rectification shall be done immediately.
11.	PP to ensure proper redundancy in operation and units to avoid any long term shutdown and inadequate operations.
12.	PP to submit their plan to ensure continuous operation of the facility; the preventive maintenance schedule shall not affect the operation of the facility which may result in storage of waste without treatment on site.
13.	PP to obtain all necessary NOC's/permission from the local body /Authority before taking any effective step on site.
14.	PP to provide adequate parking within the plot area considering daily vehicular movement; in no case the vehicles be parked on public road outside the premises.
15.	PP to provide at least 12 hours storage of effluent at ETP for further treatment so as to ensure storage of contaminated storm water if any in case of an emergency.

Member Secretary

Chairman

16.	PP to use new and renewable energy for illumination of office buildings, street lights, parking areas and maintain the same regularly.
17.	PP proposes CER of Rs. 54 Lakhs; PP to utilize this fund for strengthening of public infrastructure in the study area with a plan copy submitted to the committee and in consultation with the District Authority.

Deliberation in SEIAA-

Proposal is for Proposed Establishment of Common Bio-Medical Waste Treatment and Disposal Facility (CBWTF) having Capacity of 400 Kg/Hr. (2 Units each having capacity of 200 Kg/ Hr.). Proposal is recommended by SEAC-1 in its 262nd meeting for grant of Environment Clearance.

During the meeting, SEIAA asked PP to provide 500 m buffer zone from the proposed project site as per the guidelines of Central Pollution Control Board. SEIAA decided to defer the proposal for compliance of above point.

SEIAA Decision-

SEIAA decided to defer the proposal

Member Secretary

Chairman

for compliance to the residence time as well as Dioxins and Furans without enhancing the existing treatment capacity).

c) Any expansion or modification in the treatment capacity or relocation of the existing CBWTF (requires compliance to the relevant provisions notified under the Environment (Protection) Act, 1986 by the MoEF & CC

6) Location criteria

In the context of these guidelines, buffer zone represents a separation distance between the source of pollution in CBWTF and the receptor - following the principle that the degree of impact reduces with increased distance. The following parameters may be considered for ascertaining buffer distance on case-to-case basis:

(i) potential for spread of infection from wastes stored in the premises.
(ii) applicable standards for pollution control and the relative efficiency of the existing incinerators and emission control systems,
(iii) potential of fugitive dust emission from incinerators,
(iv) potential for discharge of wastewater
(v) the potential for odour production,
(vi) the potential for noise pollution,
(vii) the risk posed to human health and safety due to exposure to emissions from incinerator,
(viii) the risk of fire and
(ix) Significance of the residual impacts such as bottom ash and fly ash.

As far as possible, the CBWTF shall be located near to its area of operation in order to minimize the transportation distance in waste collection, thus enhancing its operational flexibility as well as for ensuring compliance to the time limit for treatment and disposal of bio-medical waste as stipulated under the BMWM Rules (i.e., within 48 hours). Also, the location of the CBWTF should be in conformity to the CRZ Norms and other provisions notified under the Environment (Protection) Act, 1986. The location shall be decided in consultation with the State Pollution Control Board (SPCB)/ Pollution Control Committee (PCC). The location criteria for development of a CBWTF are as follows:

(a) A CBWTF shall preferably be developed in a notified industrial area without any requirement of buffer zone **(or)**

(b) A CBWTF can be located at a place reasonably far away from notified residential and sensitive areas and should have a buffer distance of preferably 500 m so that it shall

have minimal impact on these areas. In case of non-availability of such a land, the buffer zone distance from the notified residential area may be reduced to less than 500 m by SPCB/PCC without referring the matter to CPCB by prescribing additional control measures such as (i) adoption of best available technologies (BAT) by the proponent of CBWTF; (ii) prescribing stringent standards for operation of the CBWTF by the SPCB/PCC; (iii) adoption of zero liquid discharge by the CBWTF and (iv) in case of any complaints from the public, then CBWTF should prove that the facility is not causing any adverse impact on environment and habitation in the vicinity. If SPCB/PCC is not in a position to resolve the issue relating to buffer zone while selecting the site for CBWTFs, in such a case, SPCBs/PCCs may refer the matter to CPCB.

(c) The CBWTF can also be developed as an integral part of the Hazardous Waste Treatment Storage and Disposal Facility (TSDF) subject to obtaining of necessary approvals from the authorities concerned including 'environmental clearance' as per Environmental Impact Assessment 2006 and further amendments notified under the Environment (Protection) Act, 1986, provided there is no CBWTF exist within 150 KM distance from the existing TSDF.

7) Land requirement

Sufficient land shall be allocated to the CBWTF to provide all requisite systems which include dedicated space for storage of waste (both treated and untreated), waste treatment equipment, vehicle washing bay, vehicle parking space, ETP, incineration ash storage provision, administrative room, space for DG Set etc.,.

(a) Preferably, a CBWTF shall be set up on a plot size of not less than one acre in all the areas. However, a CBWTF can be developed in adjacent plots but cannot be set up in two or more different plots located in different areas. Separate plots can be permitted only for vehicle parking if located in the close vicinity of the proposed CBWTFs or the existing CBWTFs.

(b) In case of upcoming or new CBWTFs (both in municipal limits with population more than 25 lakhs or in rural areas), the land area requirement may be relaxed (but in any case not less than 0.5 acre) by the SPCB/PCC, with additional control measures such as zero liquid discharge, increase in stack height, stringent emission norms, odour control measures or any other measures felt necessary by the prescribed authority on case-to-case basis, only in consultation with CPCB.

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IN THE HIGH COURT OF GUJARAT AT AHMEDABAD

SPECIAL CIVIL APPLICATION NO. 12235 of 2017

FOR APPROVAL AND SIGNATURE:

HONOURABLE MR.JUSTICE J.B.PARDIWALA

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1	Whether Reporters of Local Papers may be allowed to see the judgment ?	**YES**
2	To be referred to the Reporter or not ?	NO
3	Whether their Lordships wish to see the fair copy of the judgment ?	NO
4	Whether this case involves a substantial question of law as to the interpretation of the Constitution of India or any order made thereunder ?	NO

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UTTARSANDA GRAM PANCHAYAT & 3....Petitioner(s)

Versus

STATE OF GUJARAT & 4....Respondent(s)

==========

Appearance:

MR RR MARSHALL, SENIOR ADVOCATE WITH MR GAURAV CHUDASAMA, ADVOCATE for the Petitioner(s) No. 1 - 4

MR UTKARSH SHARMA, AGP for the Respondent(s) No. 1

MR SATYAM Y CHHAYA, ADVOCATE for the Respondent(s) No. 4 - 5

MR VAIBHAV A VYAS, ADVOCATE for the Respondent(s) No. 3

DS AFF.NOT FILED (N) for the Respondent(s) No. 2

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CORAM: **HONOURABLE MR.JUSTICE J.B.PARDIWALA**

Date : 21/09/2017

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4 Let there be an ad-interim order in terms of para 24[C].

5 On the returnable date, a responsible officer from the Gujarat Pollution Control Board shall remain personally present before this Court and explain whether any consent has been granted to put up a Bio-Medical Waste Treatment Plant. If consent has been granted, then what has been taken into consideration because it appears that there are residential houses in the vicinity of this particular land where the unit is put up by the private respondents.

6 Notify the matter on top of the Board."

36 Thereafter, on 26th July 2017, the following order was passed:

"Draft amendment is allowed. The same shall be carried out at the earliest. A copy of the amended petition be supplied to Mr. Utkarsh Sharma, the learned AGP appearing for the respondent- State; Mr. Vaibhav Vyas, the learned counsel appearing for the G.P.C.B. and Mr. Satyam Chhaya, the learned counsel appearing for the respondents nos.4 and 5.

By order dated 03/07/2017, the ad-interim order in terms of para 24(C) has been granted, the same continues as on date. In the wake of order now passed by the Collector granting the N.A. permission, the amendment has been moved, which has been allowed today. The matter has been heard extensively for the purpose of admission. Till further orders are passed, the Gujarat Pollution Control Board shall not issue Consolidated Consent and Authorization in favour of the respondents nos.4 and 5."

- **FINAL ANALYSIS:**

37 The crux of the matter is the tussle between the eco-environmental maintenance and industrialisation. To answer as to the need of the day for the right to life, viz., whether we should maintain eco-friendly environment or opt for Biomedical Waste Process Unit, which is essential and necessary for disposal of the hazardous medical waste, neither the eco-environment alone nor the industrial growth by itself will meet the human needs in the world today. Then, what is desirable is to maintain a balance, by being resilient, but not rigid; organic, but not static; liberal, but not strict; wider, but not narrow, as to

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both eco-friendly environment and units, like the Biomedical Waste Process Unit, that are to be worked out harmoniously, to meet the challenges and other requirements. The medical care is vital for our life and health, but the waste generated from the medical activities represents a real problem of living nature and human world. Improper management of waste generated in health care facilities causes a direct health impact. There need not be any debate on this issue. Over a period of time, the medical science has progressed like anything. It has its advantages, but as the two sides of the coin, there are disadvantages also. All human activities produce waste. We all know that such waste may be dangerous and needs safe disposal. Industrial waste, sewage and agricultural waste pollutes the water, soil and air. It can also be dangerous to the human beings and environment. Similarly, the hospitals and other health care facilities generate lots of waste, which can transmit infections, more particularly, HIV, Hepatitis B and C, Tetanus, etc., to the people, who handle it or come in contact with it. The biomedical waste management has recently emerged as an issue of major concern, not only to the hospitals, nursing home authorities, but also to the environment. The proper management of biomedical waste has become a worldwide humanitarian topic today. The hospital waste is a potential health hazard to the health care workers, public and flora and fauna of the area. India generates around three million tonnes of medical waste every year and the amount is expected to grow at 8% annually. Such are the reasons why the Biomedical Waste Process Units are the need of the hour today. The surveys carried out by the various agencies show that the health care establishments in India are not giving due attention to their waste management. After the notification of the Bio Medical Waste (Management and Handling) Rules, 1998, these establishments are solely streamlining the process of waste segregation, collection, treatment and disposal.

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38 Article 39 contemplates that the State shall direct its policy towards securing that the operation of the economic system does not result in the concentration of wealth and the means of production to the common detriment. Article 47 refers to the duty of the State to raise the level of nutrition and standard of living and to improve the public health. As per Article 48A of the Constitution of India, the State shall endure to protect and improve the environment and the said Directive Principles of State policy is meant to protect the fundamental right conferred under Articles 14 and 21 of the Constitution of India, viz. Equality before law and Protection of life and personal liberty. Whereas the fundamental duty conferred under Article 51A(g) points out the obligation of the citizen to protect and improve the environment.

39 Articles 39, 47, 48A and 51A(g) of the Constitution of India read as follows:

> *"39. Certain principles of policy to be followed by the State.- The State shall, in particular, direct its policy towards securing-*
> *(a) to (b) ....*
>
> *(c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment;*
>
> *(d) to (f) …*
>
> *47. Duty of the State to raise the level of nutrition and the standard of living and to improve public*
> *health. The State shall regard the raising of the level of nutrition and the standard of living of its*
> *people and the improvement of public health as among its primary duties and, in particular, the*
> *State shall endeavour to bring about prohibition of the consumption except for medicinal purposes*
> *of intoxicating drinks and of drugs which are injurious to health.*
>
> *48-A. Protection and improvement of environment and safeguarding of forests and wildlife. The State shall endeavour to protect and improve the*

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environment and to safeguard the forests and wildlife of the country.

51-A. Fundamental duties.- It shall be the duty of every citizen of India-
(a) to (f) ...

(g) to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.

(h) to (k) ..."

40 Right to healthy environment is the legitimate expectation, an aspect protected under Article 14 of the Constitution of India. Right to healthy environment is also a part of right to life protected under Article 21 of the Constitution of India.

41 The "first generation" rights are generally political rights such as those found in international convention on Civil and Political rights. The "second generation" rights are social and economic rights as found in the International Covenant on Economics, Social and Cultural Rights. The "third generation" rights, in today's emerging jurisprudence, encompass a group of collective rights demanding rights to healthy environment and giving rise to the principle of State's responsibility to protect the environment and this responsibility is clearly enunciated in the United National Conference on the Human Environment, Stockholm 1972 (Stockholm Convention) to which India was a party, vide **Intellectual Forum vs. State of A.P., [(2006) 3 SCC 549].**

42 There is no doubt about the fact that there is a responsibility bestowed upon the Government to protect and preserve the environment, as undoubtedly, hygienic environment is an integral facet of the right to a healthy life and it would be impossible to live without a humane and healthy environment vide **Godavarman v. Thirumal Pad, Tamil Nadu [(2002) 10 SCC 606].**

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43 While the right to clean environment is a guaranteed fundamental right under Articles 14 and 21 of the Constitution of India, the right to development through industrialization equally claims priority under fundamental rights, particularly under Articles 14, 19 and 21 of the Constitution of India. Therefore, there is a necessity for a sustainable development harmonizing both the needs and striking a golden balance between the right to development and right to clean environment. A Concept of Sustainable Development, an integral part of Articles 14 and 21 of the Constitution of India vide **Jayal N D vs. Union of India, [(2004) 9 SCC 362].**

44 Apart from these constitutional mandates under Articles 14, 21 of the fundamental rights, 47, 48A of the directive principles of State Policy and 51A(g) of the Fundamental Duty, to protect and improve the environment there are plenty of post-independence legislations on the subject but more relevant enactments for our purpose are: the Water (Prevention and Control of Pollution) Act, 1974 (the Water Act), the Air (Prevention and Control of Pollution) Act, 1981 (the Air Act) and the Environment (Protection) Act, 1986 (the Environment Act). The Water Act provides for the constitution of the Central Pollution Control Board by the Central Government and the constitution of the State Pollution Control Boards by various State Governments in the country. The Boards function under the control of the Governments concerned. The Water Act prohibits the use of streams and wells for disposal of polluting matters. It also provides for restrictions on outlets and discharge of effluents without obtaining consent from the Board. Prosecution and penalties have been provided which include sentence of imprisonment. The Air Act provides that the Central Pollution Control Board and the State Pollution Control Boards constituted under the Water Act shall also perform the powers and functions under the Air Act. The main function

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of the Boards, under the Air Act, is to improve the quality of the air and to prevent, control and abate air pollution in the country.

45 The Environment (Protection) Act 1986 (The Environment Act), was also enacted for environmental protection, regulation of discharge of environmental pollutants and handling of hazardous substances speedy response in the event of accidents threatening environment and deterrent punishment to those who endanger human environment, safety and health.

46 By exercising the power conferred under Sections 6 and 25 of the Environment (Protection) Act, 1986, the Environment (Protection) Rules, 1986 (The Environment Rules) were made by the Central Government.

47 The Government of India, in exercise of powers conferred upon it, by Sections 5, 8 and 25 of the Environment (Protection) Act, 1986 framed the Bio-Medical Waste (Management and Handling) Rules, 1998. The Central Pollution Control Board, in the year 2003, issued guidelines for the Common Bio-Medical Waste Treatment Facility.

48 According to the Bio-medical Waste Management Rules, 2016, the "bio-medical waste treatment and disposal facility" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment and disposal is carried out, and includes common bio-medical waste treatment facilities and "operator of a common bio-medical waste treatment facility" means a person who owns or controls a Common Bio-medical Waste Treatment and Disposal Facility (CBWTF) for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste. The Bio-medical Waste Management Rules, 2016 restricts occupier for establishment of on-site

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or captive bio-medical waste treatment and disposal facility, if a service of common bio- medical waste treatment and disposal facility is available within a distance of seventy-five kilometer, as installation of individual treatment facility by health care facility (HCF) requires comparatively high capital investment. In addition, it requires separate dedicated and trained skilled manpower and infrastructure development for proper operation and maintenance of treatment systems. The concept of CBWTF is not only addresses such problems but also prevents proliferation of treatment technologies in a particular town or city. In turn, it reduces the monitoring pressure on regulatory agencies. By running the treatment equipment at CBWTF to its full capacity, the cost of treatment of per kilogram bio-medical waste gets significantly reduced. Its considerable advantages have made CBWTF popular and proven concept in most part of the world.

49 I am not impressed by the submission of the learned counsel appearing for the applicants that, as there is an apprehension in the minds of the people at large that the unit will lead to pollution, the private respondents should be asked to shift the unit to some other place. No citizen can assert, as a matter of right, that as he or she does not like the Bio-Medical Waste Process Unit coming in his or her village, the same should not be allowed to be operated. The unit put up by the private respondents is not a movable property. It is a huge unit installed with modern machineries and other technical equipments to process the bio-medical waste. The right to life and live in a clean environment, although may be a basic human life or a fundamental right, yet the same is not absolute. As discussed at length above, the bio-medical waste has got to be processed in accordance with the rules and regulations laid down by the Central Pollution Control Board. If, according to the applicants, operating a Bio-Medical waste Process Unit is an evil, then

ignoring the bio-medical waste and allowing it to be disposed of without being processed, is a greater evil and would lead to more health hazard. The importance of the Bio-Medical waste Process Unit should not be undermined, and in my view, the applicants are unnecessarily hyper in this regard. The private respondents have been put to the strictest of the terms for the purpose of functioning and operation of the unit and they can still be put to certain more terms to ensure that the same does not lead to any pollution. The revised guidelines for the Common Bio-Medical Waste Treatment and Disposal Facility, as issued by the C.P.C.B. itself, provide that the buffer zone distance from the notified residential area may be reduced to less than 500 meters by the State Pollution Control Board or the Pollution Control Committee without referring the matter to the C.P.C.B. by prescribing the additional control measures such as (i) adoption of best available technologies (BAT) by the proponent of CBWTF; (ii) prescribing stringent standards for operation of the CBWTF by the SPCB/PCC; (iii) adoption of zero liquid discharge by the CBWTF and (iv) in case of any complaints from the public, then CBWTF should prove that the facility is not causing any adverse impact on environment and habitation in the vicinity. If SPCB/PCC is not in a position to resolve the issue relating to buffer zone while selecting the site for CBWTFs, in such a case, SPCBs/PCCs may refer the matter to CPCB.

50 The stringent standards prescribed are more or less taken care of in the consent order of the G.P.C.B. and this issue can be looked into further by the G.P.C.B., if need be.

51 It is a settled law that the balance between environmental protection and developmental activities could only be maintained by strictly following the principle of “sustainable development”. This is a

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development strategy that caters to the needs of the present without negotiating the ability of upcoming generations to satisfy their needs. The strict observance of sustainable development will put us on a path that ensures development while protecting the environment, a path that works for all peoples and for all generations. It is a guarantee to the present and a bequeath to the future. All environment-related developmental activities should benefit more people while maintaining the environmental balance. This could be ensured only by strict adherence to sustainable development without which life of the coming generations will be in jeopardy. The adherence to sustainable development principle is a sine qua non for the maintenance of the symbiotic balance between the rights to environment and development. Right to environment is a fundamental right. On the other hand, right to development is also one. Here the right to sustainable development cannot be singled out. Therefore, the concept of sustainable development is to be treated as an integral part of life under Article 21. Weighty concepts like intergenerational equity, public trust doctrine and precautionary principle, which have been declared as inseparable ingredients of our environmental jurisprudence, could only be nurtured by ensuring sustainable development. To ensure sustainable development is one of the goals of the Environment (Protection) Act, 1986 and this is quite necessary to guarantee the right to life under Article 21. If the Act is not armed with the powers to ensure sustainable development, it will become a barren shell. In other words, sustainable development is one of the means to achieve the object and purpose of the Act as well as the protection of life under Article 21. Acknowledgment of this principle will breathe new life into our environmental jurisprudence and constitutional resolve. Sustainable development could be achieved only by strict compliance with the directions under the Act. The object and purpose of the Act: “to provide

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for the protection and improvement of environment" could only be achieved by ensuring strict compliance with its directions. The authorities concerned by exercising their powers under the Act will have to ensure the acquiescence of sustainable development. Therefore, the directions or conditions put forward by the Act need to be strictly complied with. Thus the power under the Act cannot be treated as a power simpliciter, but it is a power coupled with duty. It is the duty of the State to make sure the fulfilment of conditions or direction under the Act. Without strict compliance, right to environment under Article 21 could not be guaranteed and the purpose of the Act will also be defeated. The commitment to the conditions thereof is an obligation both under Article 21 and under the Act [vide ***N.D.Jayal vs. Union of India, (2004) 9 SCC 362***].

52 The learned counsel appearing for the G.P.C.B. has assured this Court that there will be a continuous inspection and monitoring of the unit, and at any point of time, if it is found that the unit is not adhering to the terms and conditions of the consent order or the parameters, as laid down in the rules and regulations are not met with, then immediate steps shall be taken to take care of such a situation. The learned counsel appearing for the G.P.C.B. submitted that his client is an expert body, and after taking into consideration all the relevant aspects of the matter, have granted the consent order to operate the unit. According to the G.P.C.B., there is nothing wrong if such unit is permitted to be operated in the village.

53 I could have rejected this application simply on the ground that the issues raised in this petition are the very same which were raised before the Division Bench of this Court in the public interest litigation,

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and the public interest litigation came to be disposed of recording that the unit shall be made functional only after all the parameters are satisfied. The Division Bench also observed in its order while dismissing the P.I.L. that, the operation of a C.B.W.T.F. is needed within the Kheda district having regard to the proximity with the health care units. The private respondents have undertaken to abide by all the terms and conditions, which have been prescribed in the consent order passed by the G.P.C.B.

54 Instead of rejecting this petition on the short ground of its maintainability, I have thought fit to go into the various issues having regard to the importance of the Bio- Medical Waste Treatment and Disposal Plant and the right to health and live in a clean environment, as envisaged under Article 21 of the Constitution of India.

55 To a certain extent, Mr. Chhaya, the learned counsel appearing for the private respondents is right that this petition is lacking in *bona fide*. There is some external force working behind this petition. However, leaving this issue aside, I have concentrated on the main issues and have reached to the conclusion that there is nothing wrong if the unit is permitted to be operated in the village. If, at any point of time, the villagers find that the unit is causing pollution, then it shall be open for the villagers to bring it to the notice of the G.P.C.B. so that the G.P.C.B. can look into the matter at the earliest.

56 No error much less an error of law can be said to have been committed by the S.S.R.D. in passing the impugned orders. Neither any fault nor any error can be found even with the order granting N.A. permission.

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57 I do not see any violation to the constitutional mandate nor any arbitrary and unreasonable exercise of powers by the authority concerned nor any violation to Articles 14, 19(1)(g) and 21 of the Constitution of India.

58 In the result, this petition fails and is hereby rejected. All the legal hurdles are vacated in executing the Bio-Medical Waste Treatment and Disposal Plant.

59 It shall now be open for the G.P.C.B. to issue the consolidated consent and authorisation in favour of the respondents Nos.4 and 5.

60 Notice stands discharged. The interim relief earlier granted stands vacated.

J.B.PARDIWALA, J.)

chandresh

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/S.S.I **Date: 04/11/2022**
No:- Format1.0/CC/UAN No.0000131298/CE/2211000321

To
BIOCLEAN SYSTEMS (INDIA) PVT. LTD.
Plot No.D-7,Shrirampur MIDC
Tal.Shrirampur, Dist.Ahmednagar,
Ahmednagar-413709

(Operator and Owner of facility)

Grant consent to Establish under the provisions of Water (P & CP) Act, 1974, Air (P & CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016 as amended and Hazardous Waste (M & TM) Rules, 2016.

Ref:
1. Your application for Combine Consent and Bio-Medical Waste Authorization vide No. MPCB-CONSENT-0000131298 dated 07/02/2022
2. Minutes of 6th CC meeting(2022-23) dtd 27/06/2022
3. SCN for refusal vide No. MPCB/PSO/BMW/B-220810-FTS0171 dtd 10/08/2022.
4. Document uploaded on 18/08/2022
5. Minutes of 14th CC meeting dtd 12.09.2022.

After examining the proposal, The Maharashtra Pollution Control Board hereby grant consent to Establish to CBMWTSDF under Section 25 of the Water (P&CP) Act, 1974, Section 21 of the Air (P&CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016, and Authorization under Rule 5 of the Hazardous Wastes (Management & Transboundary Movement) Rules, 2016 respectively, under Environment (Protection) Act, 1986, subject to terms and conditions as specified below and in the **Schedules(I-IV) and Annexures (I-IV)** enclosed in this order.

1. Commissioning of unit or 5 years whichever is earlier

2. Proposed capital investment of the Plant is **₹191.74** Lakhs

3. Plant Area: - Plot Area 4000.00 M^2 with Built-up area 800.00 M^2.

4. The Jurisdiction allocated for waste collection: All Talukas of District A.Nagar excluding Ahemadnagar Municipal Corporation Area.

5. Conditions under the Water (P&CP) Act, 1974:-

1. Quantity of total water consumption shall not exceed 14.00 M^3/day. You shall not use the ground water without obtaining prior permission of Central Ground Water Authority.
2. You shall provide adequate treatment & disposal facility for Sewage & Effluent generated as specified in **Annexure-I**
3. You shall provide water meter at water intake point & at sewage/Effluent disposal point and shall maintain monthly records thereof.

6. Conditions under the Air (P&CP) Act,1981:-

1. You shall use the fuel for DG set and incinerator and provide the adequate air pollution control devices as specified to maintain the emmissions from the stack attached to the incinerator and DG Set as specified in the **Annexure-II**.
2. You shall provide adequate emission control system to DG set and incinerator as specified in **Annexure-II**.
3. You shall strictly observe noise standards applicable for DG set stack emission and ambient noise level as per **Annexure-II**.

7. Conditions under Hazardous and Other Wastes(Management, Handling & Transboundry Movement) Rules, 2016 for treatment and disposal of hazardous waste:-

You shall have valid membership of CHWTSDF and shall dispose the Hazardous waste generated in strict compliance with said rules and maintain record thereof.

Sr No	Type of Waste	HW Category no.	Quantity	UOM	Disposal
1	37.2 Ash from incinerator and flue gas cleaning residue	37.2	7800	Kg/M	Membership of CHWTF

8. Conditions under BMW Management rules 2016:-

You shall operate Treatment plant as below and shall comply with the operational conditions mentioned at Schedule-I.

Sr No	Treatment Technology	Installed Capacity	Operational Capacity/Day	Compliance of Standards
1	Incinerator	200 Kg/Hr	3600 Kg/Day	As per Annexure-II
2	Incinerator	200 Kg/Hr	3600 Kg/Day	As per Annexure-III
3	Autoclave	100 Ltr/Cycle	1600 Lit/Day	Annexure-III
4	Shredder	100 Kg/Hr	1800 Kg/Day	

Responsibility of Bioclean Systems(Operator and Owner of facility) :

I. You shall establish Common BMW Treatment Facility and operate in compliance and strictly abide with the condition stipulated in Schedule- I, II, III. IV, & V of Bio-Medical Waste Management Rules. 2016 as emended.

II. You shall obtain membership of CHWTSDF for disposal of incineration ash and ETP sludge.

III. Yor shall provide Personal Protective Equipment as per norms of Factory Act,1948.

IV. You shall provide dedicated BMW transport vehicles complying with BMWM Rules 2016 and Transport department guidelines for collection, transportation, and disposal of BMW.

V. You shall ensure that fugitive emission from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.

VI. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or additional thereto

VII. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

VIII. You shall monitor treated effluent quality, stack emission and ambient air quality monthly.

IX. You shall strictly comply with the Water (P & CP) Act, 1974 Air (P & CP) Act. 1981 and Environmental Protection Act. 1986 and industry specific standard under EP Rules 1986 which ae available on MPCB website (www.mpcb.govt.in).

X. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waster for any other purpose without obtaining prior written permission of the MPC Board.

XI. You shall create the Environmental cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.

XII. You shall comply with the Hazardous and other Wastes (M & TM) Rules, 2016 and submit the Annal Returns as per Rules 5 (5) & 20 92) of Hazardous and other Waste (M & TM Rules, 2016 for the preceding year April march in Form- IV by 30th June of every year.

XIII. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

XIV. You shall give advance information to the Board about addition, termination or change of Facility Infrastructure and Operator and shall get Common Consent and Authorization (CCA) amended prior the commencement of operation.

9. You shall use only dedicated vehicles as detailed in Annexure-IV for collection and transportation of Bio-Medical waste within allocated Jurisdiction. Vehicles Authorized for BMW Collection shall strictly comply with this BMWM Rules 2016 and CPCB/MPCB guidelines and Motor Vehicles act, 1988 (59 of 1988).
10. You shall collect the BMW Strictly complying with the Provisions of Schedule-I and Treatment & Disposal as specified in Schedule-I of BMWM Rules,2016 as amended.
11. You shall not collect outdated, discarded, unused cytotoxic drugs/waste generated in the Cancer research centers and health care establishments unless they are specifically marked with the symbol of Bio Hazard & Cytotoxic Hazard.
12. You shall collect and dispose-off the Mercury Waste from HCE as per guidelines published by CPCB as detailed in document entitled “Environmentally Sound Management of Mercury Waste in Health Care Facilities” (www.cpcb.nic.in).
13. You shall not undertake Modifications/ Upgrdation in existing facility without obtaining prior Environment Clearance under the Provision of EIA notification, 2006 and Consent to Establish from the MPC Board.
14. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by you shall constitute a breach of this authorization.
15. This Board reserves the right to review, amend, suspend, revoke, or change any of the conditions applicable under this CCA and the same shall be binding upon you.
16. You shall maintain records of MPC board Officers visit and shall obey all the lawful instructions issued by the Board Officers from time to time.

17. Any violation of provisions of BMW Management Rules, 2016 as amended shall attract the penal provisions of Environment (Protection) Act, 1986 and Violations under the provisions of Water (P&CP) Act 1974, Air (P&CP) Act 1981 shall attract provisions of respective act including closure of the facility and prosecution.
18. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
19. You shall not operate the facility till obtaining the 1st Consent to Operate from the Board.
20. You shall obtain Environment clearance from the Competent Authority and submit Bank Guarantee of Rs.5.00 Lakh for not take effective steps without obtaining Environment Clearance.
21. You shall submit compliance of Bank Guarantee condition every six months to Regional Office, Nashik for verification purpose.
22. You shall submit a BG of Rs. 10.00 Llakh as specified in Schedule III to the Regional Officer, MPCB, Nashik within 30 days. Nonsubmission of BG in a specified time shall attract revocation of this CCA without further notice.

This consent is issued as per communication letter dated 03/11/2022 which is approved by competent authority of the board.

Received Consent/Authorization fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	15000.00	TXN2202000828	07/02/2022	Online Payment
2	17500.00	TXN2202000829	07/02/2022	Online Payment

Copy to:

1. Regional Officer, MPCB, Nashik and Sub-Regional Officer, MPCB, Ahmednagar

- - RO ,Nashik directed to ensure the receipt of Bank Guarantee as per the consent conditions.

  SRO , A,Nagar directed to ensure the compliance of the consent conditions and report non compliance if any, forthwith to RO for n.a.

2. Cheif Accounts Officer, MPCB,Sion, Mumbai
3. I/C EIC- for record & website updating purpose.

Annexure – I

Conditions under Water (P & CP), 1974 Act: (Refer Condition No. 5)

A. Water Consumption Details:-

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	1.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	12.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Other such as agriculture, gardening, etc.	1.00

B. Conditions for Sewage & Effluent Generation, Treatment and Disposal:-

Sr. No.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1	Domestic Sewage	1	As per clause 'C'	100% Recycle
2	Trade effluent	10	As per clause 'C'	100% Recycle

C. You shall operate the combined waste water treatment plant of adequate design and capacity to treat the domestic sewage and trade effluent so as to achieve the following standards as prescribed below under E (P) Act, 1986 and Rules made there under and recycle treated effluent after achieving standard prescribed below.

Sr. No.	Parameters	Discharge Standards applicable
		Limiting Concentration in mg/except for pH
1	pH	6.5-9.0
2	Oil & Grease	10
3	BOD (3 days 27°C)	30
4	COD	250
5	Total Suspended Solids	100
6	Bio-Assay Test	90 % survival of fish after 96 hours in 100 % effluent

D. You shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

E. You shall provide Primary/ Secondary/ tertiary treatment system and disinfection facility.

F. The Applicant shall obtain prior consent of the Board to take steps for Expansion/Modification of any treatment and disposal system or an extension or addition thereto.

G. You shall provide Specific Water Pollution control system as per above conditions and conditions of Environmental Clearance, if applicable.

Annexure – II

Terms & conditions for Incinerator(s) and D.G. Set(s) under Air (P & CP) Act, 1981 and Bio Medical waste management Rule, 2016: (Refer Condition No.6)

1. You shall observe following fuel pattern and erect following stack (s):

Sr. No.	Stack Attached to	Fuel Type	Quantity	Stack Height (Mtr)
1	Incinerator	HSD	40.00 Ltr/Hr	30.00

2. You shall provide following Air pollution Control Devices (APCD) as stated at "C" below and shall observe the following operating conditions and emission standards:

a. Operating Standards:-

i. Combustion efficiency (CE) shall be at least 99.00%.

ii. The Combustion efficiency is computed as follows;

$$C.E. = \frac{\%\ CO_2}{\%\ CO_2 + \%\ CO} \times 100$$

iii. The temperature of the primary chamber shall be minimum 8000C, and of the secondary chamber shall be minimum 1050 ± 500 °C.

iv. The secondary chamber gas residence time shall be at least 2 (Two) seconds at 1050 ± 500 °C.

b. Emission Standards:-

Sr.No.	Parameters	Limiting Concentration in mg/Nm3 unless stated
1	Particulate matter	50
2	Nitrogen Oxides	400
3	HCL	50
4	Total Dioxin & Furans	0.1 ngTEQ/Nm3 (at 11% O2)
5	Hg & It's Compounds	0.05

c. Essential Components of Incinerator to Meet emission standards of BMW Management Rules 2016:-

i. Secondary chamber-2 No.s (for 2 second residence time)

ii. Individual burner for primary & secondary chamber.

iii. Venturi scrubber having min. 600mm WC pressure drop with Recirculation pump and recirculation Tank.

iv. Activated carbon dosing for Dioxin removal.

v. ID fan having 900-1000 mm WC pressure drop.

vi. Packed bed for scrubbing for gaseous pollutants with recirculation pump and recirculation tank.

vii. Minimum stack height shall be 30 meters above the ground and shall be attached with the necessary monitoring facilities as per requirement of monitoring of general parameters as notified under the E (P) Act, 1986 and in accordance with the CPCB Guidelines of Emission Regulation Part-III.

viii. Online OCEMS and Temperature recording for primary and secondary chamber with data logger and connectivity to MPCB and CPCB server.

d. General Requirements:-

i. Volatile Organic Compounds in the incineration ash shall not be more than 0.01%.

ii. The Operator shall provide ports in the chimney and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's staff. The chimneys shall be numbered as S-1, S-2 etc and these shall be painted / displayed to facilitate identification.

iii. The operator shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) of above mentioned parameters at least quarterly from the laboratory recognized under the Environment (Protection) Act, 1986 & NABL accredited and record of such analysis results shall be maintained and submitted to the prescribed authority. In case of dioxins and furans, monitoring should be done once in a year.

Note:-

i. Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.

ii. Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.

iii. You shall install continuous emission monitoring system for the parameters as stipulated by Central Pollution Control Board for CO2, CO and O2.

iv. All monitored values shall be corrected to 11% Oxygen on dry basis.

v. Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.

vi. The occupier or operator of a common bio-medical waste incinerator shall use combustion gas analyzer to measure CO2, CO and O2.

3. Conditions for D.G. Set:-

a. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically for control of noise.

b. Acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c. You shall make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f. D.G. Set shall be operated only in case of power failure.

g. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h. The applicant shall comply with the notification of MoEFCC dated 17.05.2002 regarding noise limit for generator sets run with diesel.

i. Provide one stack of height above roof level.

4. You shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

Annexure – III

Standards for Treatment and Disposal of "RED" Category (Autoclavable) Bio-Medical Waste

Standards for Waste Autoclave:

The autoclave should be dedicated for the purposes of disinfecting and treating bio-medical waste.

1. When operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air. The waste shall be subjected to the following.

    i. A temperature of not less than 135º C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes.

2. Medical waste shall not be considered properly treated unless the time, temperature and pressure indicators indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature or pressure indicates that the required temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until the proper temperature, pressure and residence time were achieved.
3. Recording of operational parameters: - Each autoclave shall have graphic or computer recording devices which will automatically and continuously monitor and record dates, time of day, load identification number and operating parameters throughout the entire length of the autoclave cycle.
4. Validation test: Spore Test: – The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be Geobacillus stearothermophilus spores using vials or spore strips, with at least 1x 106 spores per milliliter. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, a temperature less than 121º C or a pressure, less than 15 psi. Test should be conducted at least once in every week & record in this regard shall be maintained.
5. Routine Test: A chemical indicator strip/tape that changes color when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different location to ensure that the inner content of the package has been adequately autoclaved. Test should be conducted during autoclaving of each batch & record in this regard shall be maintained.

Annexure – IV

BMW Collection and Transportation

1. You shall use following dedicated, GPS enabled vehicles having separate compartments for storage as per colour coding, for collection & transportation of BMW. You shall provide login details of Vehicle Tracking system to the respective SRO, MPCB. Vehicle tracking data shall be stored in archive data for minimum period of 3 months.
2. Use of unauthorized vehicles other than mentioned below shall attract penal action. You shall obtain amendment to Authorization for any new addition or Deletion of the vehicles during the period of this CCA.

Sr. No.	Vehicle No.	Make & Model	Capacity (MT)	VTS (ID/IMEI)	Barcode (Yes/No)
NA					

3. Body of the Vehicles used for BMW Transportation must be painted from outside with coloured symbol of BIOHAZARD and CYTOTOXIC as shown below, Label shall be NONWASHABLE and be prominently visible on both side of the vehicle body.

4. Name of CTF, Emergency Contact details and warning for safe handling during accident/spillage must be prominently mentioned on both sides of the vehicle must be mentioned on vehicle and must prominently visible.
5. Driver must have valid Driving license and trained to handle emergency.

SCHEDULE-I

Authorization for Management of Bio-Medical Waste (Category and Quantity)

The authorization is granted for Collection, Transportation, Treatment and disposal of BioMedical Waste (BMW) in waste categories and quantities listed here in below:

Sr. No	Category	Type of Waste	Quantity not to exceed (Kg/Month)	Segregation Colour coding	Treatment & Disposal
1	Yellow	a) Human Anatomical waste	0.00	Yellow coloured non- chlorinated plastic bags.	Incineration
		b) Animal Anatomical Waste	0.00		
		c) Soiled Waste	0.00		
		d) Expired or Discarded Medicines	0.00		
		e) Chemical Waste	0.00		
		f) Chemical Liquid Waste	0.00	Separate collection system leading to effluent treatment system.	
		g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.	0.00	Yellow coloured non - chlorinated plastic bags or suitable packing material.	
		h) Microbiology Biotechnology and other clinical laboratory waste	0.00	Autoclave safe plastic bags or containers.	Pre-treat to sterilize with nonchlorinated chemicals on-site as per National AIDS Control Organisation or World Health Organisation guidelines thereafter sent to BMW-CTF for Incineration.
2	Red	Contaminated waste (Recyclable)	0.00	Red coloured non chlorinated plastic bags or containers.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF
3	White (Translucent)	Waste sharps including Metals	0.00	Puncture proof, Leak proof, tamper proof container.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF
4	Blue	a) Glassware	0.00	Puncture proof, Leak proof with Blue coloured marking.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF
		b) Metallic body implants	0.00		

SCHEDULE-II

Responsibilities of the CTF Operator of the Facility

1. You shall upgrade /Operate Common BMW Treatment Facility, in accordance with BMW Management Rules, 2016 as amended 2018 and CPCB guidelines issued time to time.
2. You shall ensure that all Health Care Establishments and Institutions generating BMW in your jurisdiction shall obtain membership of the Common Facility and CCA from MPCB and each HCE authorised shall hand over the waste to the Facility. Also ensure that records of the members are maintained properly.
3. You shall establish and implement bar code for waste collections and global positioning system enabled for vehicle tracking of bio-medical waste transport vehicle
4. You shall ensure Receipt, Treatment and Disposal of only segregated Bio-Medical Waste in colour coded bags from the HCEs within 48 hours from the generation.
5. You shall Supply non-chlorinated plastic coloured bags to the occupier as per mutual agreement
6. You shall ensure mandatory colour coded bins are used for source segregation of BMW by the HCEs and Institutions generating BMW.
7. You shall fix the charges for providing services to HCEs in consultation with local Medical Association.Any dispute regarding charges shall be resolved at District Advisory Committe under the Chairmanship of District Collector
8. The treated Plastic / Metal Waste shall be handed over to the Recycler authorized by MPCB for recycling of treated Bio Medical Waste,record shall be maintained.
9. You shall provide training to all workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter and maintain record of effectiveness thereof.
10. You shall undertake appropriate medical examination at the time of induction and at least once in a year and immunize all workers involved in handling of bio medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio medical waste and maintain the records for the same.
11. You shall provide PPE as per norms of Factory Act 1948 and ensure use of personal protective Equipment such as Heavy Duty Gloves (Workman's Gloves), Gum Boots or safety shoes for waste collectors, Face mask, Head Cap, Splash Proof Gowns or aprons etc.
12. You shall develop your own website. The website should be uploaded on periodically basis with all the information relating to Bio-Medical waste management including this CCA and other permission and report, as directed time to time.
13. You shall maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation and daily fuel/energy consupmtion.
14. You shall maintain all record for operation of incineration, autoclaving, shredding, hazardous Waste disposed and recyclable disposed for a period of five years and produce whenever asked by MPCB authorities.
15. The owner and operator of a common bio medical waste treatment facility both shall be liable for all the damages caused to the environment or the public due to improper management of bio-medical wastes.
16. You shall ensure submission of Annual Report of BMW for the period Jan to Dec, including category and quantity of BMW collected and Disposed at Facility in Form IV for preceding year before 30th June of every year to the Sub-Regional Office, MPCB, and uploading the same to MPCB website(https://www.mpcb.gov.in/).

SCHEDULE-III

Bank Guarantees

1. Bank Guarantee imposed to ensure timely compliance, to be observed by operator.

Sr.No	Activity / Condition to be Complied	Compliance Timeline (Months)	Bank Guarantee Amount
1A	**Performance**		
1	To Provide PLC based Online Temperature Monitoring System to incinerator	Prior to Commission and operate the said facility	100,000.00
2	To Provide Emergency vent to Secondary Scrubber	Prior to Commission and operate the said facility	50,000.00
3	To Obtain Membership of CHWTSDF and send incineration ash & ETP sludge to CHWTSDF.	Prior to Commission and operate the said facility	50,000.00
4	To provide Graphical Temperature, Pressure & Time recording system to Autoclave	Prior to Commission and operate the said facility	50,000.00
5	To provide BMW transportation vechicle as per Rules6(4)	Prior to Commission and operate the said facility	75,000.00
6	To provide BMW Transportation Vehicles with GPS Tracking System and Barcode facility	Prior to Commission and operate the said facility	100,000.00
7	Not to take effective step at site before obtaining prior EC	Till obtaining Environment clearance from competent authority	500,000.00
8	To provide BMW separate storage facility as per guidelines of CPCB	Continuous	75,000.00
Total			10,00,000.00

Note: You shall extend the previously submitted Bank Guarantee valid upto the validity of this CCA + 4 months additional.

SCHEDULE-IV

General Conditions

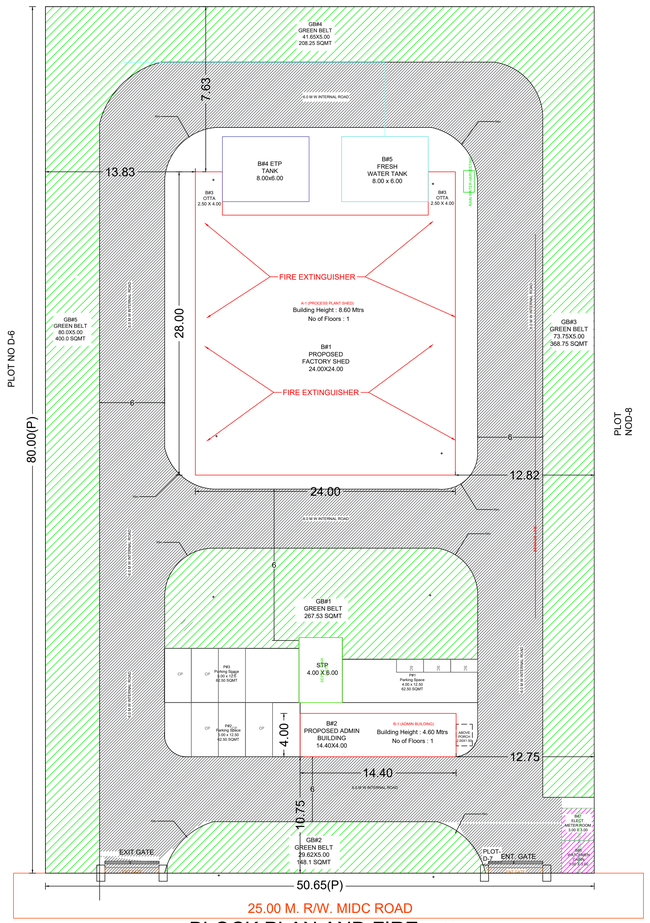
The following general conditions shall apply:-

1. You shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, Executive Engineer MIDC and Local Body. In case of failure of pollution control equipment's, the process connected to it shall be stopped.
3. You shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control operation to abide by terms and conditions of this consent.
4. You shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 15 of the Environment (Protection) (Second Amendment) Rules, 1992.
5. You shall comply with the Hazardous Waste (M, H & TM) Rules, 2016 and submit the Annual Returns as per Rule 20(2) of Hazardous Waste (M, H & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year to Regional Office, Nashik.
6. You shall engage qualified staff/personnel/agency to see the day to day compliance of consent & authorization condition towards Environment Protection.
7. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the Terminal manholes. No effluent shall find its way other than in designed and provided collection system.
8. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the HCE.
9. You shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
10. You should not cause any nuisance in surrounding area. You shall maintain good housekeeping.
11. You shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted.
12. The non-hazardous solid waste arising in the HCE premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
13. You shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification Dated. 16/11/2009 as amended.

14. You shall submit an official e-mail address and any change will be duly informed to the MPCB.
15. You shall observe provisions of E-waste (Management) Rules 2016 & as amended time to time and Batteries (Management and Handling) Amendment Rules, 2010.
16. An inspection book shall be opened and made available to the Board's officers during their visit to the HCE.
17. In case you use/ handle/ generate the cytotoxic waste you shall strictly adhave to the standards/ SOPs applicable and waste shall be labelled specifically as "Cytotoxic Waste" with symbol on waste containers/ bags and shall handover to BMW CTFs.
18. You shall obtain required permissions from competent authority for radio active material user/ handling/ disposal of waste before commencement of such activity.
19. The Energy source for lighting purpose shall preferably be LED based.
20. You shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
21. You shall provide personal protection equipment as per norms of Factory Act 1948
22. You are responsible to submit application for renewal of Combined Consent & Biomedical Waste authorization before 60 days of expiry.

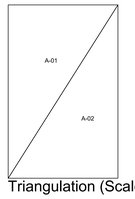
This certificate is digitally & electronically signed.

MIDC LAND OPEN SPACE



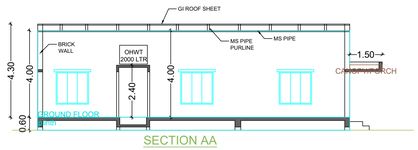
BLOCK PLAN AND FIRE PREVENTION PLAN
SCAL 1:200

N

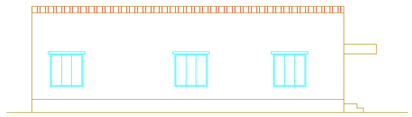


Triangulation (Scale - 1:1000)

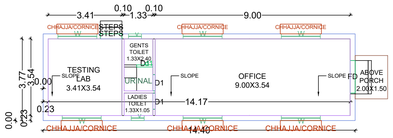
Triangle	Area
A-01	2026.00
A-02	2026.00
Total (PLOT- D-7)	4052.00



SECTION AA



FRONTELEVATION



PROPOSED GROUND FLOOR ADMIN BUILDING PLAN
SCALE 1:100

BUILDING WISE FSI STATEMENT

BUILDING	PROPOSED FSI AREA				EXISTING FSI AREA				DOUBLE HT FSI AREA	BALCONY			PASS.	LIFT LOBBY	STAIR LOBBY	STAIR	LIFT	TERR.	TNMTS.	TOTAL FSI AREA
	COMM.	RESI.	IND.	SPEC.	COMM.	RESI.	IND.	SPEC.		PERM.	PROP.	EXCESS								
A-1 (PROCESS PLANT SHED)	0.00	0.00	596.00	0.00	0.00	0.00	0.00	0.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000.00	0	894.00
B-1 (ADMIN BUILDING)	0.00	0.00	57.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000.00	0	57.60
Total	0.00	0.00	653.60	0.00	0.00	0.00	0.00	0.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000.00	0	951.60

FLOOR WISE FSI STATEMENT: A (PROCESS PLANT SHED)

FLOORS	PROPOSED FSI AREA				EXISTING FSI AREA				DOUBLE HT FSI AREA	BALCONY			PASS.	LIFT LOBBY	STAIR LOBBY	STAIR	LIFT	TERR.	TNMTS.	TOTAL FSI AREA
	COMM.	RESI.	IND.	SPEC.	COMM.	RESI.	IND.	SPEC.		PERM.	PROP.	EXCESS								
GROUND FLOOR	0.00	0.00	596.00	0.00	0.00	0.00	0.00	0.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000.00	0	894.00
Total	0.00	0.00	596.00	0.00	0.00	0.00	0.00	0.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000.00	0	894.00

SCHEDULE OF OPENING: A (PROCESS PLANT SHED)

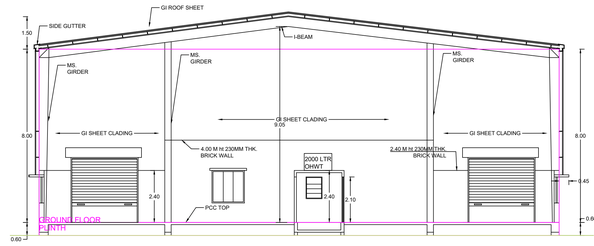
NAME	WIDTH	HEIGHT	NOS.
D1	0.75	2.10	01
D	1.50	2.10	01
RS2	1.50	2.10	01
RS1	4.00	2.10	02
RS	4.50	2.10	02

SCHEDULE OF OPENING: A (PROCESS PLANT SHED)

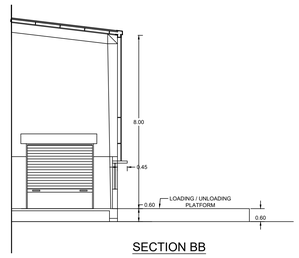
NAME	WIDTH	HEIGHT	NOS.
V	0.60	0.75	01
W	1.80	1.20	07

WATER REQUIREMENT

TANK		OCCUPANT LOAD (NOS.)			CONSUMPTION PER DAY (LIT)	REQUIRED CAPACITY (LIT)	PROPOSED CAPACITY (LIT)
		TNMTS/AREA	FACTOR				
OHWT	Hazardous/Chemical	-NA-	0.10	-NA-	30.00	-NA-	
	- - - -	00.00	00.00	00.00	00.00	00.00	
	FIRE REQUIREMENT					0.00	
	TOTAL					-NA-	0.00
UGWT	FIRE REQUIREMENT		1.5			-NA-	
						0.00	
	TOTAL					-NA-	52970.16



SECTION AA



SECTION BB

STAMP OF APPROVAL
IFMS NO: B73141 DATED 19 / 05 / 2022

Deputy Engineer & Special Planning Authority MIDC Civil Sub- Division Ahmednagar

A) AREA STATEMENT		SQ.M.
1. AREA OF PLOT		4052.00
2. DEDUCTIONS (FROM GROSS PLOT AREA)		
(a) ROAD SET-BACK (R/W)		0.00
(b) PROPOSED ROAD (DP)		0.00
(c) ANY RESERVATION		0.00
(d) CHEMICAL STORAGE AREA		0.00
(e) OTHERS		000.00
TOTAL (a+b+c+d+e)		0.00
3. BALANCE AREA OF PLOT (1-2) :	(A)	4052.00
4. DEDUCTIONS (FROM BALANCE PLOT AREA)		
(a) RECREATIONAL GROUND AREA		0.00
(b) AMENITY AREA		0.00
5. NET BALANCE PLOT AREA OF PLOT :	(B)	4052.00
6. ADDITION FOR F.S.I.		
(a) ROAD-1 SET-BACK	000.00	000.00
(b) ROAD-2 SET-BACK	000.00	000.00
(c) ROAD-3 SET-BACK	000.00	000.00
(d) ROAD-4 SET-BACK	000.00	000.00
(e) PROPOSED ROAD (DP)		0.00
(f) AMENITY SPACE		0.00
TOTAL (a+b+c+d+e+f)		0.00
7. NET PLOT AREA (4+5) :	(C)	4052.00
8. FLOOR SPACE INDEX PERMISSIBLE		1.0000
PERMISSIBLE FLOOR AREA (6 X 7)		4052.00
9. SPECIAL CASES FSI		0.00
10. TOTAL PERM. BUILT UP AREA (7+8)		4052.00
11. PROPOSED AREAS		
(a) PROPOSED RESIDENTIAL AREA		0.00
(b) PROPOSED COMMERCIAL AREA		0.00
(c) PROPOSED INDUSTRIAL AREA		653.60
(d) PROPOSED SPECIAL USE AREA		0.00
(e) PROPOSED DOUBLE HEIGHT AREA		298.00
TOTAL PROPOSED AREA (a+b+c+d+e)		951.60
12. SUB STRUCTURE AREA ADDITION (FOR FSI)		0.00
13. SUB STRUCTURE AREA DEDUCTION (FOR FSI)		0.00
14. EXCESS BALCONY AREA TAKEN IN F.S.I.		0.00
15. STORAGE AREA		0.00
16. EXISTING BUILT UP AREA (Approved/Not Approved)		0.00
17. DEMOLISHED AREA		0.00
18. TOTAL B/UP AREA (11+12+13+14+15)		951.60
19. CONSUMED FSI (Factor)		0.235
20. CONSUMED FSI (Factor) As Per Permissible FSI		000.00
B) BALCONY STATEMENT		
(i) PERMISSIBLE BALCONY AREA		0.00
(ii) PROPOSED BALCONY AREA		0.00
(iii) EXCESS BALCONY AREA (TOTAL)		0.00

C) PARKING STATEMENT	CAR-A	CAR-B	VISITORS
(i) PARKING REQUIRED BY RULE	-NA-	-NA-	-NA-
(ii) PARKING PROVIDED	-NA-	-NA-	-NA-
(v) TOTAL PARKING PROPOSED	-NA-	-NA-	00

D) TRANSPORT VEHICLES PARKING	
(a) TOTAL NO. OF TRANSPORT VEHICLES PARKING PROVIDED	-NA-
(b) TOTAL NO. OF LOADING / UNLOADING PARKING PROVIDED	-NA-

SPECIFICATIONS

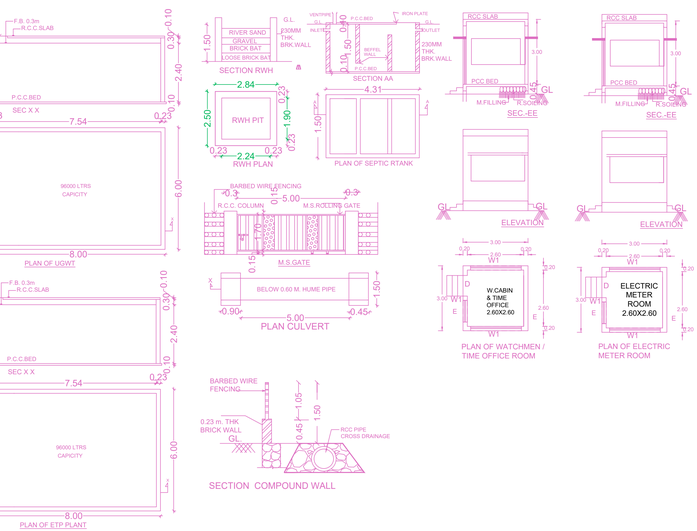
CERTIFICATE OF AREA

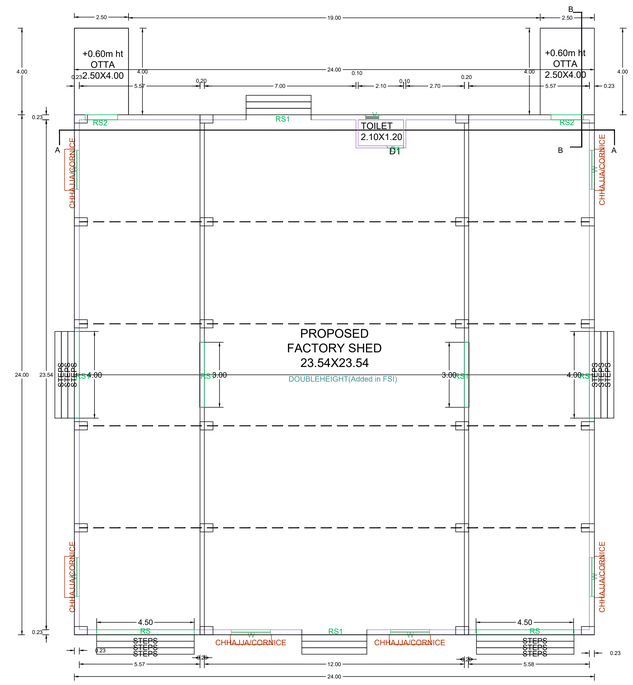
CERTIFIED THAT I HAVE SURVEYED THE PLOT UNDER REFERENCE ON AND THAT THE DIMENTIONS OF THE SIDES, ETC. OF THE PLOT STATED ON THE PLAN ARE AS MEASURED ON THE SITE AND THE AREA SO WORKED OUT IS SQUARE METRES AND TALLIES WITH THE AREA STATED IN THE DOCUMENT OF OWNERSHIP / TOWN PLANNING SCHEME RECORDS.

SIGN OF ARCHITECT

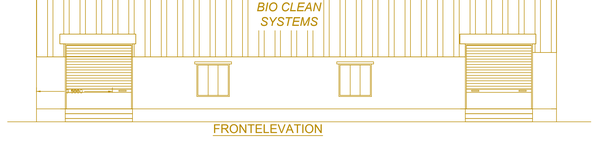
LEGEND

PLOT BOUNDARY SHOWN THICK BLACK	
PROPOSED WORK SHOWN RED	
DRAINAGE & SEWAGE WORK SHOWN RED DOTTED	
WATER SUPPLY WORK SHOWN BLACK DOTTED	
EXISTING WORK SHOWN BLUE	
DEMOLISHON SHOWN HATCHED YELLOW	
EXISTING STREET SHOWN GREEN	
FUTURE STREET SHOWN GREEN DOTTED	
PERMISSIBLE BUILDING LINE THICK DOTTED	
OPEN SPACE NO COLOUR	
RECREATION GROUND SHOWN GREEN WASH	
GAS SUPPLY LINE SHOWN VIOLET DOTTED	
WATER BASED FIRE PROTECTION SYSTEMS BLUE DOTTED	



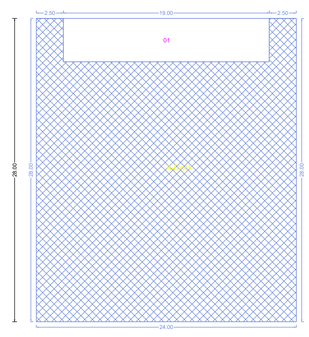


PROPOSED GROUND FLOOR PLAN
SCALE 1:100



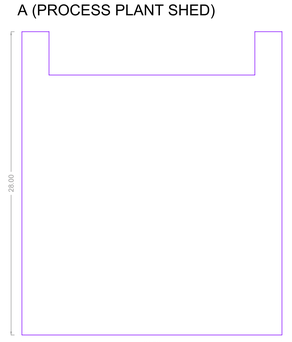
FRONTELEVATION

GROUND FLOOR PLAN

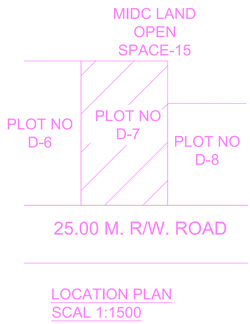


Polygon	Area
A-Block	672.00
01	76.00
Total	596.00

A (PROCESS PLANT SHED)



Poly	Area
Coverage	596.00



LOCATION PLAN
SCAL 1:1500

OWNER'S NAME:	OWNER'S SIGN:
Bioclean systems (INDIA) pvt ltd ...	
PROJECT:	
Plot No. : D-7 Survey No. : 0	
Ward : Ahmednagar Village : -	
INDUSTRIAL AREA : Shrirampur	
ARCHITECT:	ARCHITECTS SIGN
HEMANT GORAKHNATH DAHATONDE Urban Bank Colny,Vasant Tekadi,savedi,Ahmednagar	

JOB NO.	DRG.NO.	SCALE	DRAWN BY	CHECKED BY
		1:100		
INWARD NO.	SWC/08/521/2020/8/826286	DATE	27-04-2022	
KEY NO.	>§	SHEET NO.	1 / 1	

MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION
(A Government Of Maharashtra Undertaking)

No./ DE /ANR/Civil/ **B73141** /2022,
Office Of the Deputy Engineer,
MIDC, Civil Sub-Division,
Ahmednagar. Ph. (0241) 2777970
Date: - **19 / 05 / 2022.**

To,
M/s Bioclean Systems (INDIA) Pvt. Ltd.,
Plot No. D-7,
Shrirampur Industrial Area.

Sub: - Shrirampur Industrial Area……
Additional Approval of building plans for Industrial Building on plot no. D-7 of D block.
Ref: - **1) Your letter No. SWC/58/521/826286 dated 09.04.2022.**

Dear Sir,

With reference to Architect / your application No. **SWC/58/521/826286** Date 09.04.2022 for grant of sanction of commencement certificate to carry out development work on the building permit under section A 45 of MR & TP Act, 1966 to erect Industrial building for**, M/s Bioclean Systems (INDIA) Pvt. Ltd.** of D block in Shrirampur Industrial Area. The commencement building permission is granted subject to the following conditions.

1) The land vacated in consequence of the enforcement of the set back rule part of the public street.

2) No new building or part thereof shall be occupied or allowed to be occupied for used or permitted to be used by the person until occupancy permission has been granted.

3) The commencement certificate / building permit shall remain valid for period of one year commencing from the date of its issue.

4) This permission does not entitle you to develop the land, which does not vest in you.

5) Minimum two trees in plots having area of 200 sqm. And such number of trees at the rate of one tree per 100 sqm. For plot more than 200 sqm in area shall be planted and protected.

6) In case of group housing/minimum two trees per tenement shall be planted and protected.

7) You have submitted building plans and drawings for **951.60 Sqm**. With ground coverage over plot area of **4052.00 Sqm** and at present this office has approved building plans for **596.00 Sqm** ground coverage submitted by you. This office has approved building plans for **951.60 Sqm**. of built up area on all floors. This office has approved only 01No. of drawings, details of which are attached in the accompanied statement.

In case of approval to the revised plans the original approval to the drawings granted vides this office letter no. **NIL** Dated **NIL** from the office of the Deputy Engineer, MIDC, Sub-Dn (C) Ahmednagar is treated as cancelled &

the drawing approved now superseded to the previously approved drawings. You are requested to return the above cancelled drawings to this office for records and cancellation.

8) As the drawings submitted are for the new structures which were not approved previously, present approval along with the previously plans vide letter No. DE /ANR / C / plan / dated by the office of the Deputy Engineer, MIDC, Civil Sub Division, Ahmednagar to be treated as combined approval for building.

10) The building plans need to be got approved from following authorities:

i) Department of Explosives of Government of Maharashtra.

ii) Factory Inspector Department of State Government.

You should submit the certified copies of the letter of approval in triplicate from the above authorities to the Deputy Engineer–In-Charge before any work is started.

11) For the sanitary block overhead water storage tank shall be provided for at Least 900 Liters per WC and 180 Liters Per urinals.

12) Necessary approach road to the plot from the edge of MIDC road shall be provided with a cross drainage work of RCC pipes in minimum of 600 mm. dia or slab drain as may be approved by the Deputy Engineer, MIDC (C), Sub-Dn. Ahmednagar. The surface water from plot should not enter on MIDC road.

13) Temporary structures shall not be allowed except during construction period (after obtaining prior approved from the Deputy Engineer, MIDC (C), Sub-Dn. Ahmednagar) and the same shall be demolished immediately after the completion of construction as per approved plan.

14) During the period of construction, stacking of the material shall be done only in the area of plot allotted. In no case materials be stacked along MIDC's land, road, open space without approval from the Deputy Engineer, MIDC (C), Sub-Dn. Ahmednagar.

15) The boundary marks demarcating the boundary of plot shall be properly pre-served and kept in good conditions and shown to the Departmental staff as and when required.

16) No tube well, bore well or the plot holders shall construct open dug well without prior written permission from the competent authority.

17) The building plans for any future additional, alterations & extensions will have to be got approved from this office as well as the department competent to do so.

18) The present approval to the building plans does not pertain to the approval to the structural designs & RCC members, foundations, etc. It is only locational approval to the structures with reference to the plot for chemical &

pharmaceutical u nits separate approval to drainage plans shall be obtained from this office as well as the department competent to do.

19) In case any power lines are passing through the plot, the plot holder should approach to the M.S.E.B. & obtain a letter specifying the vertical & horizontal clearances to be left & should plan the proposed structures accordingly.

20) Wherever a compound wall or fencing & gate is constructed the gate should open inside the plot. If the plot is facing on two roads then the gate shall be located, at least 9.0 mtr from the corner of junction of roads or as specified by D.C. rules.

21) The waste effluent from the treatment work should be soaked in a soak pit if sewer lines are not available in the area. In case if sewage system of MIDC is functioning, effluent should be connected to drainage manhole after gating the drawing approved. Storm water flow from rain water pipe is not to be connected to MIDC sewerage system.

Further any waste effluent to be let out in MIDC's sewerage system shall be pre-treated to confirm to standards laid by Maharashtra Pollution Control Board of Maharashtra Government after obtaining their consent under section 25/26 of the Act.

22) Plot holder should make his own arrangements for 24 hours storage of water by Constructing underground water storage tank of required capacity as uninterrupted Water supply cannot be guaranteed by the department.

23) In case, if water streams are blowing through the plot allotted, the plot holder has to ensure that the maximum quantity of rain water that flow at the point of entry of stream be allowed to flow uninterrupted through the plot and the point of out flow of the original stream. The detailed plans, sections & designs for allowing minimum expected discharge of rain water through the plot has to be furnished to this office & no work of filling of plot &diversions of Nalla should be under taken.

24) Permission stands cancelled if no construction work is started within 12 months from the date of issue of this letter. The date of starting construction work & date of completion should be informed to Deputy Engineer, MIDC (C) Sub-Dn. Ahmednagar.

25) The breach of any of these stipulations shall tender the plot holder liable for action as provided in MIDC act. 1961 (III) of 1962 & Regulations made there under & also terms of these &schedule of penalties prescribed for by the corporation for the purpose.

26) Department has got power to add amend or rescind any provision or regulations from to time as it may deem fit & plot holder has to abide by the rules & regulations.

27) As soon as the building work is completed the plot holder should approach the Deputy Engineer, MIDC (C), Sub-Dn. Ahmednagar & got the work

verified & building should not be occupied unless completion certificate is obtained from this office

28) This approval is subject to permission of competent authority under Urban Land (Ceiling & Regulations) Act. (c) 1956.

29) On completion up to plinth level, party should invariably approach the concerned Deputy Engineer, MIDC (C), Sub-Dn. Ahmednagar to check & issue plinth-checking certificate. Any construction processed without plinth checking will be illegal & will have to be removed.

30) The plot holders shall obtain prior Environment Clearance Certificate before Commencement of any construction activities, if applicable to their project as per the notification issued by MoEF, Govt. of India vide notification issued by MoEF, New Delhi dtd. 14.09.2006 and its subsequent amendments.

31) If applicable subject to condition that The Hon. High Court, Aurangabad order in respect of PIL No. 68/2013 filed in the subject matter will be binding to the Licensees of the said plot and Licensees will have to abide by the final decision of Ho. High Court, Aurangabad in this matter.

32) As per MIDC's circular of Chief Fire Officer & Fire Advisor MIDC, Mumbai 93 A-04499 Dated 05/01/2015. You should provide one DCP Fire Extinguisher (ABC Type) of minimum 5 kg capacity for 100 Sqmt of built up area .

33) As per MIDC Circular **C-05579 Dated 21.06.2019** plot holder should consume minimum FSI of 40% at the time of BCC. In this regards MIDC has issued Circular wide no. **D-86653 dated 27.11.2019** if plot holder had obtained Occupancy Certificate prior 21.06.2019 and gone into production then above circular is not applicable.

D.A.: One copies of
Building plan.

Deputy Engineer & Special
Planning Authority MIDC Civil
Sub- Division Ahmednagar.

- Copy submitted to Regional Officer, MIDC Udyog Bhavan, Satpur, Nashik for favour of information please.
- Copy to FWC's to the Deputy Engineer, MIDC Maintenance Sub-Division, Ahmednagar.
- Copy to FWC's to the Area Manager, MIDC, Ahmednagar.

Accompaniment to letter no. **B73141 Dated – 19 / 05 / 2022** issued by

The Deputy Engineer, MIDC, Civil Sub Division, Ahmednagar Addressed to

M/s Bioclean Systems (INDIA) Pvt. Ltd., Plot No. D-7 of **Shrirampur** Industrial Area.

Sr. No.	No. of Drawi-ngs	Name & Address of Architect or Licensed Surveyor	Name of unit & Reference	Floor	Built up area Approved floor wise & Total of all such Area approved
1	2	3	4	5	6
1	01	Hemant G. Dahatonde, Engineer	Factory Shed, Toilet, Etc……	GF	596.00 Sqm.
			Testing Lab, Office & Toilets	F.F.	57.60 Sqm
				S.F.	0.00 Sqm
				Mezz.	0.00 Sqm.
		Lic. No. LE00031		Ex.Ht.	298.00 Sqm.
				Total	---------- 951.60 Sqm.

ABSTRACT:

1) Existing Built/up area approved on all floor. 0.00 Sqm.

2) Area to be demolished. 0.00 Sqm.

3) Existing Built/up area to be retained. 0.00 Sqm.

4) Total Built/up area approved now on all floors… **951.60 Sqm.**

5) Total up to date Built/up area approved on the floors. **951.60 Sqm**.

6) Total up to date FAR consumed. **All Floors** **0.235**

Deputy Engineer & Special Planning Authority MIDC Civil Sub- Division Ahmednagar.

MAHARASHTRA INDUSTRIAL DEVELPMENT CORPORATION
(A Government of Maharashtra Undertaking)

By RPAD

No. MIDC/RON/SRM/~~C-82~~ D-7/A-63250/2022

Office of the Area Manager,
MIDC , CFC Building,
Ahmednagar,
Date – 22/02/2022

CORRIGENDUM

Subject – Shrirampur Industrial Area.
Plot No. D-7 Change in Plot Area.
Reff. –1. Allotment order no C-7564 dt. 31/12/2013
2. This Office Letter No. C-83696 Dt. 30/06/2021

ORDER – Due to change in plot Area the above referred allotment order at sr. No. (1) and differential Premium at sr. No.(2) is modified as under

A)

Sr. no.	Particulars	Read as	Instead of
1	Plot No	D-7	D-7
2	Area in Sq. Mtrs.	4052 sq.mtrs	4000 sq.mtrs.
3	Land Premium Rate	a)4000 m2 x Rs. 315 = Rs.1260000/- b)increase area 52 m2 x 671 =Rs. 34892/-	Rs. 315/-
4	5 % road charges	a) 63000/-	63000/-
	(increase area 52 m2)	b) 1750/-	
5	Land Premium Amount Paid	a)1323000/-	1323000/-
6	Total Land Premium Amount	1359650/-	1323000/-
7	Balance amount of the Premium	Rs. 36650/-	

B) Differential Premium Difference –

Sr. no.	Particulars	Read as	Instead of
1	**Differential land Premium**	**Rs. 473550**	**Rs. 467500**
2	**Balance Differntial Premium**	**Rs. 6050/-**	

Balance Payment- A+B = Rs. 36,650/- + Rs. 6050 = Rs.42700/-

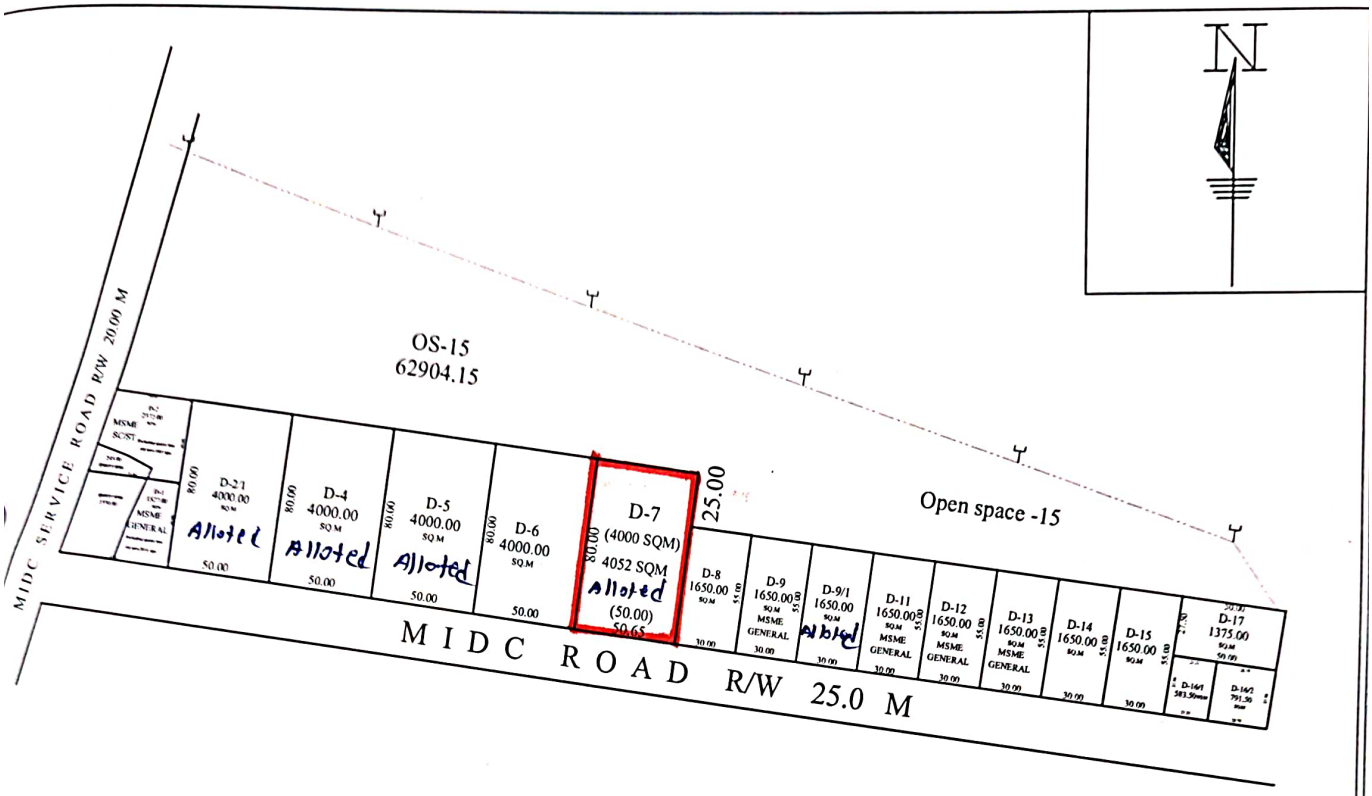
You have to pay BOP for increase plot area 52 sqm. And differential premium difference Rs. 42,700/- (Rupees Fourty Two Thousand Seven Hundred Only) Within 15 days. By way of RTGS in the account of Excutive Engineer, MIDC Satpur Nashik A/c No. 20109303107 – Bank of Maharashtra IFSC Code – MAHB000166 & then submit Recipet of RTGS in this office for record purpose.

The other terms and conditions of the above refereed order are remain unchanged.

Area Manager,
MIDC, Ahmednagar.

To,
M/s. Bioclean systems (India) Pvt. Ltd.
Plot no. D-7, MIDC, Shrirampur,
Dist. – Ahmednagar.

SHRIRAMPUR INDUSTRIAL AREA
VILL- KHANDALA,TAL-SHRIRAMPUR,
DIST-AHMEDNAGAR.



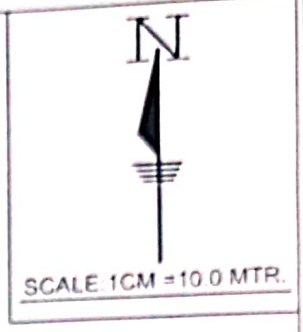
PREPARED BY:

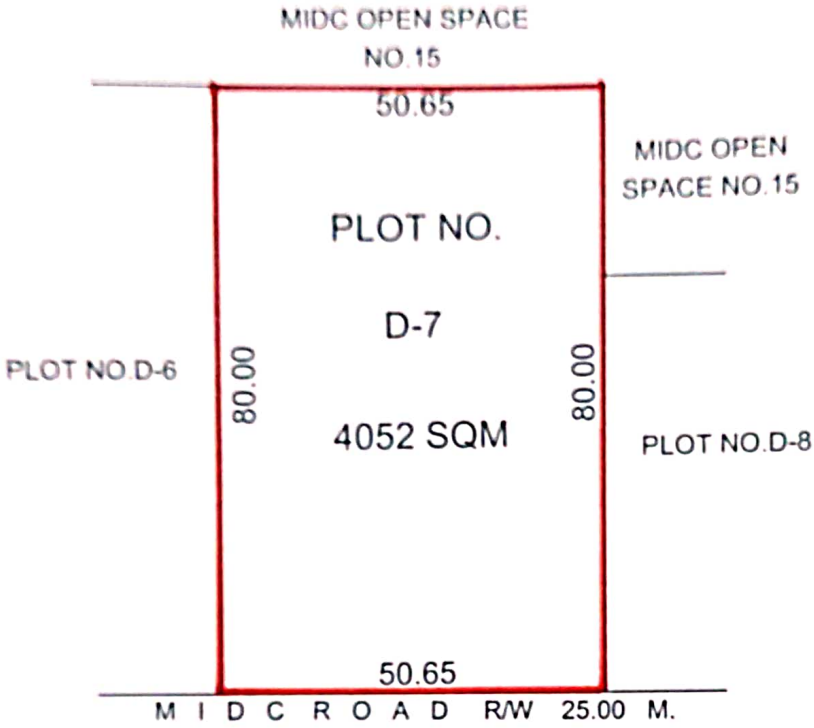
08/Jan/2022

(R.B.BELHEKAR)
HEAD SURVEYOR,
MIDC, AHMEDNAGAR.

SHRIRAMPUR INDUSTRIAL AREA
VILL- KHANDALA,TAL-SHRIRAMPUR,
DIST-AHMEDNAGAR.

REVISED PLAN





COPY PREPARED BY:

29/03/2022

(R.B.BELHEKAR)
HEAD SURVEYOR,
MIDC, AHMEDNAGAR.

Maharashtra Industrial Development Corporation

(A Government Of Maharashtra Undertaking)

Tel: (0253) 2364011, 2353489
Fax: 2352706
E-mail: ronashik@midcindia.org

REGIONAL OFFICE,NASHIK
UDYOG BHAVAN 2ND FLOOR, NEAR I.T.I. TRIMBAK ROAD, SATPUR, NASHIK - 422007

Letter No.:MIDC/RO(NSK)/SRP/LMS-368/ 7508 Date: 31-DEC-2013

Subject :- **SHRIRAMPUR INDUSTRIAL AREA**
Plot No. **D-7**
Allotment of Land

:ORDER:

Sanction is hereby accorded to the allotment of land admeasuring **4000 Sq. Mts. at the rate of Rs. 315/- per Sq. Mts.** Comprising of Plot No. **D-7** in **SHRIRAMPUR INDUSTRIAL AREA** to **Shri Sunny Dilip Sanap** trading as a Proprietor under the firm name and style of **M/s.Shri.Sai Bricks Works** and having his/her office at for setting up your industrial unit for manufacturing of **Others for FLY ASH BRICKS** subject to the payment of the premium of **1323000/- (Rs.Thirteen Lakh Twenty Three Thousand)** (including **5%** additional charge for road having **20-30** M road width i.e. **1260000* 5% = Rs.63000** as additional charges) and subject to the following conditions.

1. The amount of earnest money received with the application will be appropriated towards the amount of premium. The allottee shall pay the sum of **Rs. 693000/- (Rs. Six Lakh Ninty Three Thousand Only)** balance amount of the premium within a period of 30 days from the date of receipt of this order, by DD, drawn in favor of **MIDC, NASHIK** Payable at **NASHIK**

2. In case the allottee fails to pay the balance amount of premium within the period mentioned above, the allotment shall be liable to cancelled without further notice.

3. In the event of the allotment being cancelled as foresaid the corporation will be entitled to forfeit the whole of the earnest money received with the application.

4. The terms & conditions of allotment of land will be those contained in the standard form of Agreement to Lease and the lease annexed thereto & in substance are as follows.

a) The allottee shall enter into an Agreement to Lease in the form prescribed by Corporation & on performance of the conditions will be entitled to lease for the term of ninety five (95) years to be computed from the date of execution of the Agreement to Lease and renewable for one further term of 95 years on payment of premium and on such terms and conditions as may be determined by the Corporation at the time of renewal.

b) The annual ground rate rent of Rupee 1/- per annum is payable in respect of the plot of land allotted.

c) The allottee shall get the plan and specification of the proposed factory building duly approved from the Executive Engineer of the said Industrial area and complete the said building in accordance with approved plans and shall obtain a Building Completion Certificate (B.C.C) from the Executive Engineer of the said industrial area within a prescribed period.

d) The allottee shall not directly or indirectly transfer or assign the benefits of interest in the Agreement to Lease or part with possession of the land or any part there of without previous consent of the Corporation who may refuse or grant it subject to such condition as the Corporation may think fit including a condition for payment of additional premium.

e) The allottee shall be entitled to use land for the purpose of a factory but not for the purpose of a factory for any of the obnoxious industries specified in the annexure set out in for any other purpose and not for the purpose of any factory which may be obnoxious, offensive by reason of emission of odor, liquid effluvia, dust, smoke, gas, nuisance, vibration or fire hazards.

f) The other terms and conditions of allotment shall be those contained in the prescribed form of Agreement to Lease and the Lease.

g) The stamp duty in respect of preparation & execution of the Agreement to Lease & its duplication as also the Lease & its duplication in respect of the allotted plot of land as also the legal costs for the preparation and execution of these documents including the registration fees shall be borne and paid by the allottee alone.

h) If there any encroachment on the plot the same should be removed by you, at your own risk and cost.

i) Please note that if MSEB's line is passing through your plot, you will have to shift the line at your own cost and risk, also concern with MSEB and Telephone Department.

j) In case any changes after final measurement of plot area and if the area is found to be increased the charges towards excess area, shall be recovered as per prevailing rate at that time.

k) The infrastructure of water supply is provided by MIDC, considering the water requirement of your plot at the rate of the 25 m3 per hect. Per day. For the requirement in excess of 25 m3 per Hect. Per day of your plot, you will be required to pay the capital contribution at rate of Rs.15,000/- per m3 or the actual rate of capital contribution of water supply scheme of the industrial area whichever in more.

The allottee may submit his application to the concern telephone & electricity authority immediately, after taking over the possession of the plot. This will enable the concern authorities to build up a waiting list & ensure proper planning to provide timely telephone & electric connection to the industrial units in the area. Please note that, MIDC is not responsible for supplying electricity. Hence, you should ensure the availability of such infrastructure with concerned MSEDCL authorities.

Please also note that AtoL will be signed with you within 30 days from the date of handing over of possession of plot.

The allotment of plot will be made on "as is where is basis"

Yours faithfully,

Area Manager,
MIDC,NASHIK.

To,
Shri Sunny Dilip Sanap
M/s.Shri.Sai Bricks Works
Ashwini Colony , Ward No.6
Shrirampur Tal.Shrirampur
Dist.Ahmednagar413709

Copy submitted to:
1. THE REGIONAL OFFICER, M.I.D.C. SATPUR, NASHIK, FOR INFORMATION.
2. THE G.M. D.I.C., AHEMEDNAGAR, FOR INFORMATION.

73

Copy with compliments to:

1. SHRI A.M. ABNAVE SURVEYOR, MIDC, AHMEDNAGAR, FOR INFORMATION ..

Copy f.w.cs. to:

1. THE DEYPUT ENGINEER & S.P.A., WORKS SUB DIVISION AHMEDNAGAR, FOR INFORMATION.

TRUE COPY
ADVOCATE

BIOCLEAN
SYSTEMS (INDIA) PVT. LTD.
A ISO 9001 - 2015 COMPANY

ANNEXURE-R-3

Ref. No. AMD/378

Date: 18.08.2023

To,
The Member Secretary
State Expert Appraisal Committee
15th Floor, New Admin Building;
Madam Cama Road, Mantralaya,
Mumbai-400032

Sub. : Submission of compliance in respect of Additional Details Sought (ADS) during the SEAC-1 Meeting held on 28.04.2023 for grant of Environmental Clearance (EC) for Proposed Establishment of Common Bio-Medical Waste Treatment and Disposal Facility (CBWTF) having capacity of 400 Kg/Hr. (2 Units each having capacity of 200 Kg/ Hr.) by **'M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)'** at Plot No. D- 7, MIDC Shrirampur, Dist.: Ahmednagar

Ref. : Proposal Considered in 247th SEAC-1 Meeting (S. No. 3) held on 28.04.2023 and subsequent MoM published on portal.

Proposal No.: SIA/MH/IND/416512

Dear Sir,

This has reference to the deliberations during SEAC-1 Meeting held on 28.04.2023 in which our case was considered for grant EC. Subsequently certain ADS has been sought by the SEAC-I. Accordingly, we hereunder are furnishing requisite details -

Point No.1: PP to submit detailed study on the air pollution control equipment adequacy and assessment and submit report along with its design and capacity to meet the standard parameters stipulated by the Competent Authority.

Compliance: Detailed report about study on the Air Pollution Control Equipment adequacy and assessment is procured from Indian Institute of Technology Bombay, (IIT); Mumbai. Copy of same is attached at **Annexure – I.**

Suggestions given in the said report will be adopted.

Point No.2: PP to submit detailed management plan prepared to control stench/odour.

Compliance: Plan on Odour Control and its Management is presented as follows-

The odor management is one of the important aspect in CBWTSDF. The main aim is to minimize the number of sources of odor generation.

Odor is generally generated from the biomedical waste if stored for long time. Odour control plan outlines the methods by which odorous emissions are systematically assess, reduce and prevent potentially from the unit.

It will be ensured that the total time taken from generation of bio-medical waste to its treatment, which also includes collection and transportation time, will not exceed 48 hours. During transportation, the containers will be covered to prevent exposure of public to odors and contamination.

Ahmednagar Office :
Nilayam Housing Society,
Near John Deere Tractors Showroom,
Nagar-Pune Road,
Ahmednagar - 414 001.
Mob. : 9970988390, 9225322576,

Solapur Office :
Plot No.OD, Uma Sahakari
Gruhnirman Sanstha Maryadit,
Solapur, T.P. Scheme No. 4,
Final Plot No. 125/2, Juni Mill Compound,
Murarji Peth, Solapur-1.
Phone : (0217) 6451070, 2324289

Pune Office :
Building No. A-10,
Flat No. 6, Meeranagar,
Koregaon Park,
Pune - 411001 (M.H.),

During transportation, the containers will be covered to prevent exposure of public to odors and contamination.

- Closed cabin vehicles will be used for the collection and transportation of biomedical wastes.
- Company will wash waste collecting vehicles, containers and storerooms frequently (Once in a day).
- Dilution of odor concentration by spraying organic and biodegradable chemical around odor generation areas at regular intervals.
- ETP sludge will be disposed by supplying it to Common Hazardous Waste Treatment Facility (CHWTF).
- Proper PPE's will be provided to workers while handling of waste at any stage of treatment process
- Housekeeping will maintain in good hygiene condition.
- Greenbelt will be maintained around the site to restore the aesthetic value.

Point No.3: PP to make necessary changes in the EMP considering compliance of above points.

Compliance:

Table No. 1 Revised EMP

No.	Description	Cost (In Rs. Lakhs / Yr.)	
		Capital	O & M
1	APC System: Chiller, Venturi Scrubber, Cyclonic Droplet Separator, 30 M Stack height, OCMS	50	5
2	WPC: ETP (Capacity - 10 CMD), OCMS, STP (Capacity - 1 CMD)	20	5
3	Noise: Insulation, Isolation, Attenuation Infrastructure & PPEs	3	2
4	Environmental Monitoring & Management	20	10
5	Occupational Health and Safety	15	3
6	Green Belt Development & Rain Water Harvesting	5	1
8	Renewable Energy Implementation	2	0.5
	Total	**115**	**26.5**

Sir, we hope that our above submission is in accordance with requirements at your end. Please do the needful and grant EC at the earliest.

Thanking you,

Yours faithfully,

BIOCLEAN SYSTEMS (I) PVT. LTD.

Mr. Shrikant S. Khaire.
(Managing Director)
M/s. Bioclean Systems (India) Pvt. Ltd. (BSIPL)

Annexure - I

Air Pollution Control Equipment Adequacy Report

भारतीय प्रौधोगिकी संस्थान मुंबई
पवई, मुंबई-४०० ०७६, भारत
Indian Institute of Technology Bombay
Powai, Mumbai-400 076, India

दूरभाष/Phone : (+91-22) 2572 2545
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IIT Bombay

Dr Anil K. Dikshit
HAG Professor & In-charge
Environmental Infrastructure & Clean Teach (EICT) Laboratory &
GIS Laboratory for Environmental Management & Simulation (GEMS)
Environmental Science & Engineering (ESE) Department

Phone: + 91-22 -2576-7862
Email: dikshit@iitb.ac.in

August 7, 2023

To,
Mr. Shrikant Khaire,
Director,
Bioclean Systems (India) Pvt. Ltd.,
Plot No. D-7, Shrirampur MIDC,
Dist. Ahmednagar (Maharashtra) 413709

SUB: Recommendations from Assessment of Air Pollution Control Devices Study

Dear Mr. Khaire,

This is to bring your notice that Assessment of Air Pollution Control Devices study for Bioclean industry was conducted by SINE-IIT Bombay Company (EMERGY Enviro Private Limited), Mumbai under my guidance and supervision. For the assessment of the adequacy of Air Pollution Control Devices (APCDs) and auxiliary drives attached with Incinerators, theoretical calculations were performed. The adequacy was performed as per the CPCB 2017 Guidelines for Common Bio-medical Waste Treatment Facility. I have gone through the enclosed final report critically. Inferences, conclusions and recommendations are as follows:

Incinerator

- The total quantity of air required (considering 150% of excess oxygen) for incinerating 200 kg/h of waste in incinerator was estimated as 2060.71 m^3/h.
- The flue gases generated from incineration of 200 kg/h of waste were estimated to be 4215.55 m^3/h
- The volume provided for secondary chamber (9.05 m^3) will be adequate to achieve the minimum residence time of 2 sec as per CPCB guidelines. The theoretical residence time of flue gases in secondary chamber was estimated to be 2.88 sec at 200 kg/h of load.

Forced Draft (FD) Fan

- The combined required capacity of two FD fans was estimated to be 2909.23 m^3/h (considering 85% of fan efficiency and 20% of safety factor on theoretical value). Thus, the proposed FD fan of 2040 m^3/h was found to be under size and inadequate to provide fresh air for complete incineration of 200 kg/h of waste.

Minimum Fuel Requirement

- The minimum theoretical fuel (diesel) requirement in incinerator was estimated to be 10.8 L/h to incinerate 200 kg/h of waste. The proposed fuel quantity (15 L) seems to be adequate as it is higher than the minimum theoretical required fuel.

Quencher/Chiller

- The proposed quencher will be inadequate for cooling the flue gases, as the required working temperature for quencher/chiller should be less than 220^{o}C as per CPCB guidelines. Whereas the proposed quencher/chiller had 300^{o}C-400^{o}C working temperature.

Venturi Scrubber

- The proposed venturi scrubber had 350 mm W.C. of pressure drop, so to maintain the design pressure drop for the flue gases generator from burning of 200 kg/h of waste in incinerator, 155 LPM (9.3 m^3/h) of scrubbing media flow was estimated.
- For 155 LMP flow rate, the theoretical pump capacity required was estimated as 218 LPM (considering 85% efficiency and 20% safety factor), thus the proposed pump of 120 LPM is under size and inadequate for the venturi scrubber.

Stack

- The proposed height of 30 m will be adequate for stack, as per CPCB guidelines which suggests minimum 30 m of height of stack for Common Bio-medical Waste Treatment Facility.

Induced Draft (ID) Fan

- The proposed ID fan seems to be adequate as the proposed capacity of 4608 m^3/h was higher than the theoretical required capacity of 4382 m^3/h, considering 85% efficiency and 20% safety factor.

Regulatory Compliance

The proposed Air Pollution Control Devices can handle the maximum PM, NOx, HCl concentrations of 1667, 593, 667 mg/Nm3, respectively and will achieve stack emissions in compliance to the stipulated emission standards with their average efficiency. To achieve the design/average efficiency of the proposed APCD and auxiliary drives, they shall be re-designed as per recommendations and should be operated properly.

As per the protocol issued by (CPCB, 2017) to control emission of flue gases generated in incinerator, the specific temperature should be maintained in primary (800 +/-50°C) and secondary (1000 +/-50°C) chamber. To monitor these temperatures during operation the facility should install temperature sensors in primary and secondary chamber and connect it with continuous emission monitoring system (CEMS).

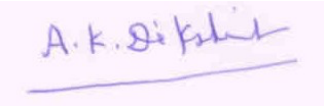
Based on the comprehensive assessment of Air Pollution Control Devices and attached drives with Incinerator, the facility should adopt the following recommendations to meet stack emissions in compliance to the stipulated emission standards (as per CPCB 2017 guidelines for CBMWTF). The facility should increase the combined capacity of two forced draft (FD) fans from 2040 m3/h to 2909.23 m3/h (say 2900 m3/h), to cater the excess air required for proper combustion in incinerator.

Recommendations:

- ***The proposed quencher/chiller should maintain less than 220^{o}C of working temperature***, to ensure there is no reformation of dioxins in flue gases. ***It is also recommended to install a temperature sensor at the outlet of quencher/chiller*** to monitor proper operation of quencher/chiller
- ***The facility should increase the capacity of recirculation pump for venturi scrubber from 120 LPM to 218 LPM (say 220 LPM)***, to maintain the design pressure drop of 350 mm W.C. for burning 200 kg/h of waste
- ***The facility should install pH meter to monitor pH of recirculating media used in venturi scrubber*** as it is required to maintain pH between 7 to 8.5 in scrubbing media (as per CPCB guidelines)
- ***The facility should not incinerate bio-medical waste containing mercury and its compounds as per CPCB 2017 guidelines to avoid generation of mercury and its compounds in flue gases. In case mercury waste is to be incinerated, specific treatment such as injection of activated carbon should be ensured.***

Hope, the report is in line with your requirements. Please feel free to contact us in case of any query.

Yours sincerely



(A.K. Dikshit)

Assessment of Air Pollution Control Devices for Bioclean Systems (India) Private Limited

By:

EMERGY

SINE IIT Bombay Company (EEPL)

7th floor, SINE, Rahul Bajaj Building, IIT Bombay Powai,

Mumbai, Maharashtra 400076

August 2023

Executive Summary

Biomedical waste (BMW), which is also known as medical waste, is generated during various medical activities, including diagnosis, treatment, or immunization of human or animal research activities. The waste can be in form of infection materials, pathological waste, glassware, sharps, and any other contaminated waste. Thus, it is essential to establish a Common Bio-Medical Waste Treatment Facility (CBMWTF) for proper treatment and disposal of all biomedical waste. CBMWTF is a centralized facility where biomedical waste generated from several healthcare facilities, is provided necessary treatment to minimize risks to public health and environment (Ministry of Environment and Forests, 2016). The treated recyclable waste may finally be sent for recycling purposes or for disposal in a secured landfill.

With due consideration to all the above facts, the Bioclean Systems (India) Pvt. Ltd. (BSIPL) would be established on Plot No. D-7, MIDC Shrirampur, Ahmednagar, Maharashtra. The proposed plant could handle 4.7 MT/d of waste with two incinerators installed of capacity 200 kg/h each.

The State Level Expert Appraisal Committee (SEAC) had asked the facility to provide a report on the assessment study of their proposed air pollution control devices (APCDs), as well as its design and capacity to meet the stipulated standard parameters by the Competent Authority. Thus, Bioclean has engaged SINE IIT BOMBAY Company (EEPL) for the vetting of proposed APCDs.

Objective of the Study

The objective was to assess the adequacy of proposed Air Pollution Control Devices (APCDs) and auxiliary drives attached with Incinerator and submit the report along with its design and capacity to meet the standard guidelines stipulated by CPCB.

Proposed Incinerator and Air Pollution Control Devices

Bioclean System (India) Pvt. Ltd. has proposed two incinerator of capacity 200 kg/h each, to treat incinerable waste. The proposed Air Pollution Control Devices (APCDs) attached with incinerators shall include four forced draft fans (2 in each incinerator), four burners (2 in each incinerator), two quencher/chiller (1 with each incinerator), venturi scrubber and droplet separator (1 with each incinerator), two recirculation pumps (1 in each venturi scrubber), two induced draft fans (1 with each incinerator) and two stacks (1 with each incinerator).

The flue gases generated will consist of particulate matter (PM), carbon dioxide (CO_2), hydrogen chloride (HCl), oxides of nitrogen (NOx), mercury & its compounds as well as dioxins and furans.

Pollution Load Calculation

Theoretical pollution load was estimated in form of flue gases generated from incineration of waste. The approximate composition of incinerable waste is presented in following table.

Incinerable Waste Composition	Percentage Composition	Feed Rate in Incinerator (kg/h)
Tissue	30%	60.00
Cellulose	25%	50.00
PCV	5%	10.00
Disinfectants & Alcohol	5%	9.00
Plastics (Polyethylene)	3%	6.00
Water in Waste	33%	65.00
Total	**100%**	**200**

Considering above composition of incinerable waste and 10 L/h of diesel consumption in incinerator (as provided by the vendor), the theoretical oxygen requirement which was estimated as 259.72 kg/h (8.1 k-mole/h), considering some combustion equation. It was assumed that for complete combustion of incinerable waste (≥99%), 150% of excess oxygen (air) would be required. The theoretical air requirement for incineration of 200 kg/h waste is mentioned in table below.

Gases	Theoretical Air		Air Requirement for Incinerator (considering 150% excess oxygen)		
	kg/h	k-mole/h	kg/h	k-mole/h	m^3/h
Oxygen (O_2)	259.72	8.10	649.31	20.24	453.30
Nitrogen (N_2)	920.84	28.70	2302.11	71.76	1607.41
Total	**1180.56**	**36.80**	**2951.42**	**92.00**	**2060.71**

The total quantity of air required (considering 150% of excess oxygen) for incinerating 200 kg/h of waste in incinerator was estimated as 2060.71 m^3/h.

The quantification of flue gases exiting from incinerator and quantity of water vapour carried with flue gases after their treatment in quencher/chill is represented in table below.

Gases	Flue Gases from Incinerator	Water Vapour Formed	Total Inlet to Venturi Scrubber
	m^3/h	m^3/h	m^3/h
Oxygen (O_2)	491.51	337.17	828.68
Nitrogen (N_2)	2904.38	2161.66	5066.04
Water from air	146.4	119.28	265.68
Water from waste burning	400.05	326.34	726.39
Carbon Dioxide (CO_2)	266.74	293.83	560.57
Hydrochloride (HCl)	6.48	3.92	10.4
Total	**4215.55**	**3242.2**	**7457.75**

The total quantity of gases that will be treated in venturi scrubber was estimated as 7457.75 (4215.55+3242.20) m^3/h. To treat this quantity of gas, the theoretical flowrate of scrubbing media required in the proposed venturi scrubber was estimated to be 155 LPM (9.3 m^3/h) at 350 mm W.C. of pressure drop in venturi scrubber.

Adequacy Study of Air pollution Control Devices

The adequacy study was carried out for the proposed incinerator, attached APCDs and auxiliary drives. The adequacy study was performed for various design specifications (like residence time for secondary chamber, capacity of forced draft fan and fuel requirement etc.) and the subsequent adequacy status is shown in following table.

Sr. No.	Equipment	Description	Unit	Proposed	Theoretical Requirement	Required as per CPCB	Adequacy Check
1	Incinerator	Residence Time in Secondary Chamber	Sec	Minimum 2	2.88	Minimum 2	Adequate
2		Force Draft (FD) Fan Capacity (combined)	m^3/h	2040	2909.23	-	Inadequate
3		Fuel (Diesel) Consumption	L/h	15	10.8	-	Adequate
4	Air Pollution Control Devices	Working Temperature in Quencher/Chiller	°C	300-400	-	Less than 220	Inadequate
5		Recirculation Pump Capacity in Venturi Scrubber	LPM	120	218	-	Inadequate
6		Stack Height	m	30	-	Minimum 30	Adequate
7		Induced Draft (ID) Fan Capacity	m^3/h	4608	4382	-	Adequate

The following inference were drawn regarding adequacy of incinerator and Air Pollution Control Devices:

- ***The size of secondary chamber (i.e., 9.05 m^3) seems to be adequate as the theoretically calculated residence time (2.88 sec) satisfy the minimum residence time criteria in accordance with the CPCB guidelines. Thus, the design of incinerator seems to be adequate for 200 kg/h of waste.***
- ***The proposed combined capacity of FD fans i.e., 2040 m^3/h (1020 m^3/h each) was found to be less than the theoretically required capacity of fans i.e., 2909.23 m^3/h. Thus, the capacity of FD fans in the proposed design seems to be inadequate. The required capacity includes 85% of pump efficiency and 20% of safety factor.***
- ***The combined fuel (diesel) consumption in both the burners was estimated as 10.8 L/h to incinerate 200 kg/h of wate. The estimated fuel consumption will also maintain the recommended temperature in primary and secondary chambers. Thus, the proposed fuel quantity seems to be adequate as it is higher than the minimum theoretical required fuel.***
- ***The proposed working temperature of quencher as per design was 300°C – 400°C, which is higher than maximum working temperature (i.e., 220°C) as per CPCB guidelines, thus the proposed design of quencher seems to be inadequate. As per*** (CPCB, 2017) ***guidelines, it is required to maintain 7 to 8.5 pH for scrubbing media used in venturi scrubber.***
- ***The proposed combined capacity of recirculation pumps i.e., 120 LPM (7.2 m^3/h) was found to be less than the theoretically required capacity of pumps i.e., 218 LPM (13.08 m^3/h). Thus, the***

capacity of recirculation pump in the proposed design seems to be inadequate. The required capacity includes 85% of pump efficiency and 20% of safety factor.

- ***The height of stack (30m), proposed by facility is adequate as per the guidelines issued by CPCB.***
- ***The theoretically required capacity of ID fan was estimated as 4382 m^3/h, which was found to be lower than the proposed capacity of ID fan. Thus, the proposed design of ID fan seems to be adequate. The estimation also accounted 85% fan efficiency and 20% safety factor.***

Regulatory Compliance

The maximum inlet concentration of pollutants/gases that can be handled by the proposed venturi scrubber/droplet separator are shown in below table.

Sr. No.	Parameters	Standard (mg/Nm^3 unless stated)	Average Efficiency	Maximum Inlet Concentration (mg/Nm^3 unless stated)	Maximum Outlet Concentration (mg/Nm^3 unless stated)
1	Particulate Matter	50	97%	1667	50
2	Nitrogen Oxides (NO/NO_2)	400	32.5%#	593	400
3	HCl	50	92.5%	667	50
4	Total Dioxins and Furans	0.1ngTEQ/Nm^3 (at 11% O2)	*	-	-
5	Hg and its compounds	0.05	**	-	-

Note- Design efficiency of proposed venturi scrubber for particulate matter, NO_x and HCl are 95-99%, 30%-35%, and 90%-95% respectively.

 # In (CPCB, 2017)***, it is stated that NO_x generally complies by the biomedical waste incinerator with the conventional air pollution control systems.***

**** As per*** (CPCB, 2017) ***guidelines, to reduce the formation of Dioxins & Furans, it is required to ensure proper combustion in secondary chamber by maintaining minimum temperature of about 1050 +/- 50°C and a residence time of at least 2 seconds. In addition, to prevent the reformation of dioxins, rapidly cooling of flue gases from 1050° C to less than 220° C by adopting rapid quencher or heat exchanger system. So, to avoid these emissions, the facility should maintain the respective temperature profile in secondary chamber and quencher.***

***** As per*** (CPCB, 2017) ***guidelines, the chances of mercury and its compounds emissions are very rare. The emission of these gases is only observed in case BMW containing mercury and its compounds is incinerated. To avoid these emissions, BMW containing mercury and its compounds should not be incinerated. In case mercury waste is incinerated, injection of activated carbon will be required.***

The proposed Air Pollution Control Devices can handle the maximum PM, NO_x, HCl concentrations of 1667, 593, 667 mg/Nm^3, respectively and will achieve stack emissions in compliance to the stipulated emission standards with their average efficiency. To achieve the design/average efficiency of the proposed APCD and auxiliary drives, they shall be re-designed as per recommendations and should be operated properly.

As per the protocol issued by (CPCB, 2017) ***to control emission of flue gases generated in incinerator, the specific temperature should be maintained in primary (800 +/-50°C) and secondary (1000 +/-50°C) chamber. To monitor these temperatures during operation the facility should install temperature sensors in primary and secondary chamber and connect it with continuous emission monitoring system (CEMS).***

Recommendation

Based on the assessment of Air Pollution Control Devices and attached drives with Incinerator, the facility should adopt the following recommendations to meet stack emissions in compliance to the emission standards (as per CPCB 2017 guidelines for CBMWTF).

- ***The facility should increase the combined capacity of two forced draft (FD) fans from 2040 m^3/h to 2909.23 m^3/h (say 2900 m^3/h),*** to cater the excess air required for proper combustion in incinerator.
- ***The proposed quencher/chiller should maintain less than 220°C of working temperature instead of 300 °C -400 °C***, to ensure there is no reformation of dioxins and furans in flue gases. ***It is also recommended to install a temperature sensor at the outlet of quencher/chiller*** to monitor proper operation of quencher/chiller.
- ***The facility should increase the capacity of recirculation pump for venturi scrubber from 120 LPM to 218 LPM (say 220 LPM)***, to maintain the design pressure drop of 350 mm W.C. for burning 200 kg/h of waste.
- ***The facility should install pH meter to monitor pH of recirculating media used in venturi scrubber*** as it is required to maintain pH between 7 to 8.5 in scrubbing media (as per CPCB guidelines).
- ***The facility should not incinerate bio-medical waste containing mercury and its compounds as per CPCB 2017 guidelines to avoid generation of mercury and its compounds in flue gases. In case mercury waste is incinerated, specific treatment such as injection of activated carbon will be required.***

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Units

MT/D	Metric tonne per day
kg/h	Kilogram per hour
K-mole/h	Kilo mole per hour
m^3/h	Meter cube per hour
Kcal/h	Kilocalorie per hour
L/h	Liter per hour
LPM	Liter per minute
°C	Degree Celsius
mm W.C.	Millimetre per water column
mm	Millimetre
sec	Second
hp	Horsepower

Abbreviations

HSD	High Speed Diesel
APCD	Air Pollution Control Device
ID	Induced Draft
FD	Forced Draft
CPCB	Central Pollution Control Board

1 Introduction

1.1 Background

Biomedical waste (BMW) is defined as any waste generated during the medical activities, including diagnosis, treatment, or immunization of human or animal research activities. This waste can be in various forms such as sharps, glassware, pathological waste, infectious materials, and any other contaminated waste. For proper treatment and disposal of biomedical waste, establishment of a Common Bio-Medical Waste Treatment Facility (CBMWTF) is essential. CBMWTF is a centralized facility where biomedical waste generated from several healthcare facilities, is provided necessary treatment to minimize risks to public health and environment (Ministry of Environment and Forests, 2016). The treated recyclable waste may finally be send for recycling purposes or for disposal in a secured landfill. In order to set up a CBMWTF, certain aspects like appropriate technology, area, locality for CBMWTF facility, proper transportation system, etc. should be considered.

With due consideration to all the above facts, the Bioclean Systems (India) Pvt. Ltd. (BSIPL) would be established on Plot No. D-7, MIDC Shrirampur, Ahmednagar, Maharashtra. The proposed Common Bio-medical Waste Treatment Facility will treat the biomedical waste from various healthcare establishment. The facility would comprise of incinerators, autoclave, shredder, associated utilities, and amenities. The proposed plant could handle 4.7 MT/d of waste with two incinerators installed of capacity 200 kg/h each.

The State Level Expert Appraisal Committee (SEAC) had asked the facility to submit a detailed study on the air pollution control devices (APCDs) adequacy and assessment along with its design and capacity to meet the stipulated standard parameters by the Competent Authority. Thus, Bioclean has engaged SINE IIT BOMBAY Company (EEPL) for the vetting of proposed APCDs.

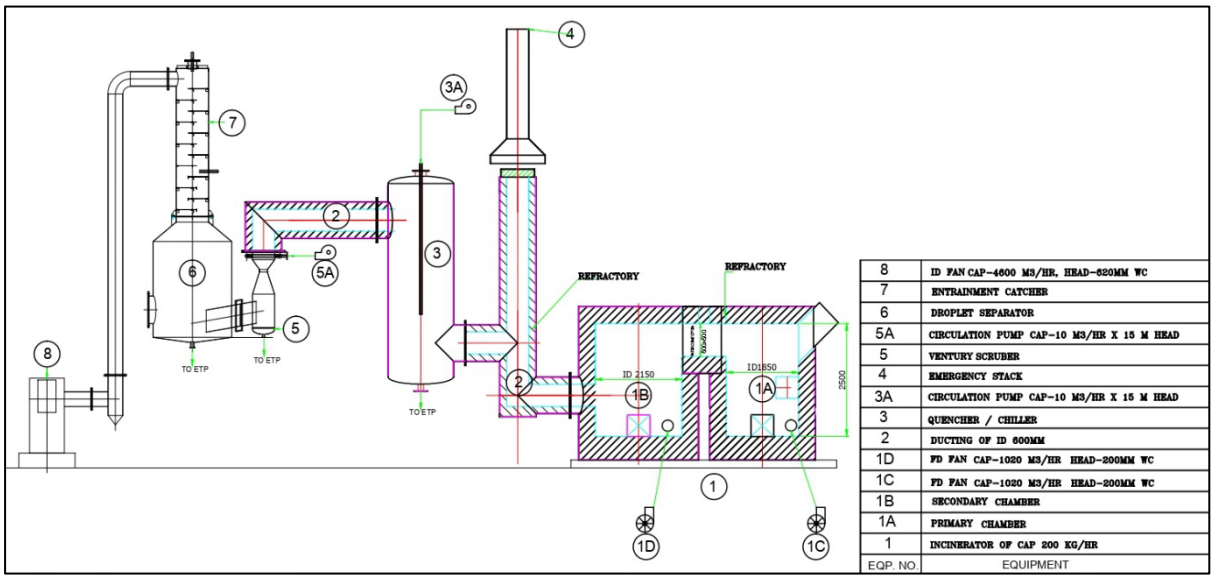
1.2 Objective of the Study

The objective of the study was to assess the adequacy of Air Pollution Control Devices (APCDs) and auxiliary drives attached with Incinerator and submit the report along with its design and capacity to meet the standard guidelines stipulated by CPCB.

2 Proposed Incinerator and Air Pollution Control Devices

Bioclean System (India) Pvt. Ltd. has proposed two incinerator 200 kg/h each to treat incinerable waste. The proposed Air Pollution Control Devices (APCDs) attached with incinerators shall include four forced draft fans (2 in each incinerator), four burners (2 in each incinerator), two quencher/chiller (1 with each incinerator), venturi scrubber and droplet separator (1 with each incinerator), two recirculation pumps (1 in each venturi scrubber), two induced draft fans (1 with each incinerator) and two stacks (1 with each incinerator). The detailed schematic of one incinerator and attached air pollution control devices is shown in Figure 2-1. Incinerator and attached APCD are discussed further in this section.

Figure 2-1: Schematic of incinerator (200 kg/h) with attached APCD



2.1 Incinerator

Two sets of incinerators are proposed to treat 200 kg/h of incinerable waste per incinerator. As per the design and data provided by the facility, each incinerator shall comprise of primary and secondary chamber. The purpose of primary chamber would be to incinerate the waste materials into safe product (ash), by achieving 800°C +/- 50°C temperature. Whereas the secondary chamber would burn off flue gases and prevent the formation of dioxins, achieving 1050°C +/- 50°C temperature. Each chamber would be attached with one FD fan and one burner to ensure adequate air supply and to maintain required temperature respectively. All the flue gases generated, and excess air would be then treated in attached APCDs.

2.2 Air Pollution Control Devices

The flue gases generated will consist of particulate matter (PM), carbon dioxide (CO_2), hydrogen chloride (HCl), oxides of nitrogen (NOx), mercury & its compounds as well as dioxins and furans. So, per BMW Rules 2016, suitable APCDs should be installed to treat the flue gases to comply with the prescribed guidelines. The suggested APCD scheme as per CPCB guidelines 2017 comprises of quencher/chiller, followed by venturi scrubber and droplet separator. The proposed treatment of flue gases is discussed in section below.

2.2.1 Quencher/Chiller

In secondary chamber, the flue gases will burn off at 1050°C +/- 50°C temperature and prevent the formation of dioxins and furans. Quencher/Chiller would cool down the flue gases, to prevent reformation of dioxins and furans. The exit gas from secondary chamber should be reduced to less than 220°C in minimum possible time by adopting rapid quench. An alkaline cooling media would be used to neutralize gases and trap pollutants. After cooling the flue gases, it would then be treated in venturi scrubber and droplet separator, and the scrubbed media would be sent to Effluent Treatment Plant (ETP).

2.2.2 Venturi Scrubber and Droplet Separator

Venturi scrubber along with droplet separator is proposed to capture particulate matter (PM) and scrub gaseous pollutants (HCl). The scrubbing media would be alkaline in nature, which neutralize gases and trap pollutants. The droplet separator will eliminate mist in stack emissions. The treated flue gases would then be vented in atmosphere though stack.

2.2.3 Stack

The treated flue gases would be sucked from venturi scrubber and droplet separator through ID fan, and then it would be vented in atmosphere through stack. The proposed stack would be fabricated with platform at bottom and ladder, along with sampling ports.

3 Pollution Load Calculation

Theoretical pollution load was estimated to perform the adequacy check of incinerator, APCDs and their auxiliary drives (like forced draft fan (FD), induced draft (ID) and recirculation pump). The correct sizing of these equipment and auxiliary drives will ensure the proper working of incinerator and APCD (venturi scrubber). All the pollution load calculation was done for one set of incinerators and APCD and discussed further in detail in this section.

3.1 Estimation of Air Requirement and Flue Gases Generated

The theoretical air requirement was calculated for complete combustion of incinerable waste in an incinerator (primary and secondary chamber). To maintain the required temperature in primary chamber and secondary chamber, auxiliary fuel (diesel) is fired in combination with BMW. The following assumptions and bases were considered while calculating air requirement.

Assumption and Bases:

1. Complete combustion of incinerable waste (≥99%).
2. Air composition considered as 22% oxygen and 78% nitrogen by weight.
3. 150 % of excess oxygen would be required for complete incineration of waste.
4. The composition of incinerable waste fed to incinerator (200 kg/h) is shown in Table 3-1.

Table 3-1: Incinerable waste composition

Incinerable Waste Composition	Percentage Composition	Feed Rate in Incinerator (kg/h)
Tissue	30%	60.00
Cellulose	25%	50.00
PCV	5%	10.00
Disinfectants & Alcohol	5%	9.00
Plastics (Polyethylene)	3%	6.00
Water in Waste	33%	65.00
Total	**100%**	**200**

The combustion of various components of incinerable waste and diesel, takes place according to the following reactions:

Tissue

$$C_5H_{10}O_3 + 6O_2 = 5CO_2 + 5H_2O \quad (1)$$

Cellulose

$$C_6H_{10}O_5 + 6O_2 = 6CO_2 + 5H_2O \quad (2)$$

PVC (Polyvinyl Chloride)

$$2(C_5H_{10}O_3)_x + 5O_2 = 4CO_2 + 2H_2O + 2HCl \quad (3)$$

Disinfectants/Alcohol

$$C_2H_5OH + 3O_2 = 2CO_2 + 3H_2O \quad (4)$$

Polyethylene

$$(C_2H_4)_x + 3O_2 = 6CO_2 + 5H_2O \quad (5)$$

Diesel

$$4C_{12}H_{23} + 71O_2 = 48CO_2 + 46H_2O \quad (6)$$

Considering above composition of incinerable waste (refer Table 3-1) and 10 L/h of diesel consumption in incinerator (as provided by the vendor), the quantification of theoretical oxygen was done from reactions (1) to (6). The quantification of flue gases from incinerator is shown in Table 3-2.

Table 3-2: Quantification of theoretical oxygen for incinerable waste and diesel

Incinerator Feed (Primary Chamber)		Percentage Composition	Quantity		Theoretical O_2 Required		Theoretical CO_2 Generated		Theoretical H_2O Generated		Theoretical HCl Generated	
			kg/h	k-mole/h	kg/h	k-mole/h	kg/h	k-mole/h	kg/h	k-mole/h	kg/h	k-mole/h
Incinerable Waste Component	Tissue	30%	60	0.51	97.8	3.05	111.6	2.54	45.6	2.54	-	-
	Cellulose	25%	50	0.31	59.5	1.85	81.5	1.85	28	1.54	-	-
	PCV	5%	10	0.16	12.8	0.4	16.3	0.32	2.9	0.16	5.8	0.16
	Disinfectants & Alcohol	5%	9	0.2	18.78	0.59	17.22	0.39	10.57	0.59	-	-
	Plastics (Polyethylene)	3%	6	0.21	20.58	0.64	18.84	0.43	7.74	0.43	-	-
	Water in Waste	33%	65	3.61	-	-	-	-	65	3.61	-	-
	Sub Total	**100%**	**200**	**5**	**209.46**	**6.53**	**245.46**	**5.53**	**159.81**	**8.87**	**5.8**	**0.16**
Diesel	-	-	8.41	0.09	50.26	1.57	46.73	1.06	18.32	1.02	-	-
Total		**-**	**200**	**0**	**259.72**	**8.10**	**292.19**	**6.59**	**178.13**	**9.88**	**5.8**	**0.16**

Based on assumed incinerable waste composition and diesel consumption, theoretical oxygen required was estimated as 259.72 kg/h (8.10 k-mole/h). The theoretical CO_2, H_2O and HCl produced was estimated as 292.19 kg/h (6.59 K-mole/h), 178.13 kg/h (9.88 K-mole/h) and 5.80 kg/h (0.16 K-mole/h), respectively.

Air requirement for complete combustion of incinerable waste was estimated considering 150% of excess oxygen. The quantification of air fed to incinerator through FD fan and correspondingly generation of flue gases coming from incinerator is mentioned in Table 3-3. The volume of gases coming out of secondary chamber were estimated at 1050°C.

Table 3-3: Estimation of flue gases exiting from incinerator

Gases	Theoretical Air		Air Requirement for Incinerator (considering 150% excess oxygen)			Flue Gases from Incinerator		
	kg/h	k-mole/h	kg/h	k-mole/h	m^3/h	kg/h	k-mole/h	m^3/h
Oxygen (O_2)	259.72	8.10	649.31	20.24	453.30	389.59	12.14	491.51
Nitrogen (N_2)	920.84	28.70	2302.11	71.76	1607.41	2302.11	71.76	2904.38
Water from air	-	-	65.11	3.62	-	65.11	3.62	146.40
Water from waste burning	-	-	-	-	-	178.13	9.88	400.05
Carbon Dioxide (CO_2)	-	-	-	-	-	292.19	6.59	266.74
Hydrochloride (HCl)	-	-	-	-	-	5.80	0.16	6.48
Total	**1180.57**	**36.80**	**3016.53**	**95.61**	**2060.71**	**3232.92**	**104.15**	**4215.55**

It can be observed from above table that for incineration of 200 kg/h waste, 2060.71 m^3/h of air will be required and as a result, it will generate 4215.55 m^3/h of flue gases from incinerator.

The gases from incinerator will be further treated in quencher/chiller and as per (CPCB, 2017) Rule, the temperature of flue gases should be reduced from 1050°C to 220°C. In reducing the temperature, some quantity of water used in quencher/chiller will get carried with gases in form of vapour. The estimation of water vapour was done by considering the energy liberated by gas during cooling process.

Table 3-4: Estimation of water vapour generated from quenching

Gases	Inlet to Quencher/Chiller	Energy Dissipated	Water Vapour Formed
	kg/h	kCal/h	m^3/h
Oxygen (O_2)	389.59	94694.27	337.17
Nitrogen (N_2)	2302.11	607094.64	2161.66
Water from air	65.11	33499.48	119.28
Water from waste burning	178.13	91650.74	326.34
Carbon Dioxide (CO_2)	292.19	82521.80	293.83
Hydrochloride (HCl)	5.80	1101.86	3.92
Total	**3232.92**	**910562.79**	**3242.20**

The water vapour generated in quenching process was estimated as 3242.20 m^3/h

The total quantity of gases that will be treated in venturi scrubber was estimated as 7457.75 (4215.55+3242.20) m^3/h.

3.2 Estimation of Flowrate of Scrubbing Medium

The proposed venturi scrubber was designed to operate at 350mm W.C. of pressure drop. So, the minimum required flow of scrubbing media in venturi scrubber was estimated, considering the design specification of venturi scrubber (like throat length, throat diameter, duct diameter and pressure drop) and is shown in Table 3-5.

Table 3-5: Estimation of minimum flow requirement of scrubbing media in venturi scrubber

Venturi Desing Parameters	Units	Values
Pressure Drop	mm W.C.	350
Throat Diameter	mm	200
Duct Diameter	mm	608
Throat Length	mm	75
Minimum Requirement		
Scrubbing Media Flow Rate	LPM	155

The minimum flow for scrubbing media in venturi scrubber was estimated as 155 LPM (9.3 m^3/h).

4 Adequacy Study of Incinerator and attached Air Pollution Control Devices

The adequacy study was carried out for the proposed design specifications of various equipment and auxiliary drives and are discussed in detailed in further sub section.

4.1 Incinerator

The proposed technical specification of incinerator (capacity 200 kg/h) is shown in Table 4-1. Adequacy check of proposed design was performed as per (CPCB, 2017) guidelines, which states that the size of the secondary chamber should facilitate minimum two seconds of residence time to ensure combustion of the gases, unburnt material such as volatiles, smoke and soot. Thus, the residence time was calculated for proposed volume of secondary chamber by considering the theoretically calculated flow rate of flue gases i.e., 11312.73 m^3/h (at 1050°C).

Table 4-1 Design specification (as per EIA report) and adequacy check for incinerator

Sr. No.	Description	Technical Specification	Units
Incinerator			
1	Type of Waste	Bio-medical waste (As per Govt. Gazette)	-
2	Capacity	200	kg/h
3	Type of Burner operation	Automatic	-
Primary Combustion Chamber			
4	Type	Vertical Cylindrical	-
5	Volume	6.7	m^3
6	Operating Temperature	800 +/- 50	°C
Secondary Combustion Chamber			
7	Type	Vertical Cylindrical	-
8	Volume	9.05	m^3
9	Operating Temperature	1050 +/- 50	°C
Comparative Analysis			
Residence Time of Flue Gases Calculated in Secondary Chamber (Based on volume)		2.88	sec
Residence Time of Flue Gases Required in Secondary Chamber (as per CPCB guidelines)		Minimum 2	sec
Adequacy Check		**Adequate**	-

It can be observed that the size of secondary chamber (i.e., 9.05 m^3) seems to be adequate as the theoretically calculated residence time (2.88 sec) satisfy the minimum residence time criteria in accordance with the CPCB guidelines. Thus, the design of incinerator seems to be adequate for 200 kg/h of waste.

4.1.1 Forced Draft Fan

The proposed auxiliary drives with incinerator were two forced draft fans (FD Fan). The technical specifications of these auxiliary drives are mentioned in Table 4-2. Adequacy check for proposed FD fan was performed to ensure 99% combustion efficiency as per CPCB guidelines. To achieve 99% of combustion efficiency, 150% of excess oxygen was considered in estimating air requirement from FD

fans, which was estimated as 2060.71 m^3/h. The required design capacity of FD fans (combined) was then estimated, considered 85 % fan performance efficiency and 20% safety factor.

Table 4-2: Design specification (as per EIA report) and adequacy check for forced draft (FD) fan

Sr. No.	Description	Technical Specification	Units
1	Type	Centrifugal type FD fan	-
2	Quantity	Two (One in primary chamber & one in secondary chamber)	-
3	Capacity (each)	1020	m^3/h
4	Motor Power	1.5	hp
Comparative Analysis			
Proposed Capacity of FD fan (combined)		2040	m^3/h
Required Total Capacity of FD (considering 85% efficiency and 20% safety factor on theoretical calculated value)		2909.23	m^3/h
Adequacy Check		**Inadequate**	-

The proposed combined capacity of FD fans i.e., 2040 m^3/h (1020 m^3/h each) was found to be less than the theoretically required capacity of fans i.e., 2909.23 m^3/h. Thus, the capacity of FD fans in the proposed design seems to be inadequate. The required capacity includes 85% of pump efficiency and 20% of safety factor.

4.1.2 Minimum Fuel requirement

The other auxiliary part of the proposed incinerator was two burners. The burners will ensure 99% of incineration and will help in maintaining the minimum recommended temperature of 800°C in primary chamber and 1050°C in secondary chamber as per (CPCB, 2017) guidelines. The proposed technical specification of burner and adequacy check for minimum fuel requirement in incinerator is mentioned in Table 4-3.

Table 4-3: Design specification (as per EIA report) of burner and adequacy check for minimum fuel requirement

Sr. No.	Description	Technical Specification	Units
1	Type	Monoblock	-
2	Quantity	Two	-
3	Fuel Used	High speed Diesel (HSD)	-
4	Fuel Consumption	15	L/h
5	Fuel Pump	Sunreck	-
Comparative Analysis			
Proposed Fuel Consumption		15	L/h
Minimum Theoretical Required Fuel		10.8	L/h
Adequacy Check		**Adequate**	-

The combined fuel (diesel) consumption in both the burners was estimated as 10.8 L/h to incinerate 200 kg/h of wate. The estimated fuel consumption will also maintain the recommended temperature in primary and secondary chambers. Thus, the proposed fuel quantity seems to be adequate as it is higher than the minimum theoretical required fuel.

4.2 Air Pollution Control Devices

The proposed incinerators are attached to air pollution control devices to treat flue gases. The details of proposed design specification and its adequacy check are discussed in further sub section.

4.2.1 Quencher/Chiller

The flue gases from incinerator will be treated in quencher/chiller as per the proposed design. As per (CPCB, 2017) guidelines, the flue gases from secondary chamber must be rapidly cooled down to 220°C to prevent reformation of dioxins in flue gases. The proposed design details and adequacy check are shown in Table 4-4.

Table 4-4: Design specification (as per EIA report) and adequacy check for quencher/chiller

Sr. No.	Description	Technical Specification	Units
1	Type	Upward flow type direct contact heat exchanger	-
2	Application	To quench flue gases from 1050 to 400	°C
3	Temperature Drop	700	°C
4	Working temperature limit	300 - 400	°C
5	Quenching / Chilling media	Water with 5 % Caustic	
Comparative Analysis			
Proposed Working Temperature (or Temperature Drop)		300 - 400 (or temperature drop of 700)	°C
Required Working Temperature (or Temperature Drop) as per CPCB Guidelines		Less than 220 (or temperature drop of minimum 830)	°C
Adequacy Check		**Inadequate**	-

The proposed working temperature of quencher as per design was 300°C – 400°C, which is higher than maximum working temperature (i.e., 220°C) as per CPCB guidelines, thus the proposed design of quencher seems to be inadequate. As per (CPCB, 2017) ***guidelines, it is required to maintain 7 to 8.5 pH for scrubbing media used in venturi scrubber.***

4.2.2 Venturi Scrubber/Droplet Separator

The venturi scrubber was installed after the flue gases were quenched. The proposed technical specification and adequacy check for the recirculation pump are shown in Table 4-5. For the proposed venturi scrubber, it was theoretically estimated that 155 LPM of recirculation rate would be required to maintain the pressure drop of 350 mm W.C. Based on this, the required capacity of recirculation pump was then estimated, considering 85 % of pump efficiency and 20 % of safety factor.

Table 4-5: Design specification (as per EIA report) and adequacy check for recirculation pump in venturi scrubber

Sr. No.	Description	Technical Specification	Units
	Venturi Scrubber		
1	Type	Typical venturi scrubber	-
2	Pressure Drop	350	mm W.C.
3	Temperature	85 – 90	°C
4	Scrubbing Media	Water with 5 % Caustic	-
	Recirculation Pump		
1	Type	Submersible	-
2	Capacity	120	LPM
3	Motor Power	2	hp
Comparative Analysis			
Proposed Capacity of Recirculation Pump		120	LPM
Required Capacity of Recirculation Pump (considering 85% efficiency and 20% safety factor on theoretical calculated value)		218	LPM
Adequacy Check		**Inadequate**	-

The proposed combined capacity of recirculation pumps i.e., 120 LPM (7.2 m^3/h) was found to be less than the theoretically required capacity of pumps i.e., 218 LPM (13.08 m^3/h). Thus, the capacity of recirculation pump in the proposed design seems to be inadequate. The required capacity includes 85% of pump efficiency and 20% of safety factor.

4.2.3 Stack

The flue gases from droplet separator were proposed to vent in atmosphere through stack. The proposed design specification of stack and its adequacy check is shown in Table 4-6. As per (CPCB, 2017), the stack height should not be less than 30 meters above the ground as stipulated.

Table 4-6: Design specification of stack (as per EIA report)

Sr. No.	Description	Technical Specification	Units
1	Attached To	Incinerator	-
2	Shape	Round	-
3	Height	30	m
4	Diameter/Size	1200 (bottom) X 600 (top)	mm
Comparative Analysis			
Proposed Height of Stack		30	m
Required Heigh of Stack as per CPCB Guidelines		Minimum 30	m
Adequacy Check		**Adequate**	-

4.2.3.1 Induced Draft Fan

The stack is attached with induced draft (ID) fan, which create negative pressure and suck flue gases through quencher and venturi scrubber, and discharge it through stack. The proposed technical specification of ID fan and its adequacy check are shown in Table 4-7. The required capacity of ID fan was estimated, considering the quantity of flue gases generated in incinerator. The performance efficiency of 85% and safety factor of 20% was also considered while estimating the required capacity of ID fan.

Table 4-7: Design specification (as per EIA report) and adequacy check for Induced draft (ID) fan

Sr. No.	Description	Technical Specification	Units
1	Type	Centrifugal	-
2	Capacity	4608	m^3/h
3	Moto Power	15	hp
Comparative Analysis			
Proposed Capacity of ID fan		4608	m^3/h
Required Capacity of ID fan (considering 85% efficiency and 20% safety factor on theoretical calculated value)		4382	m^3/h
Adequacy Check		**Adequate**	-

The theoretically required capacity of ID fan was estimated as 4382 m^3/h, which was found to be lower than the proposed capacity of ID fan. Thus, the proposed design of ID fan seems to be adequate. The estimation also accounted 85% fan efficiency and 20% safety factor.

4.3 Regulatory Compliance

The maximum inlet concentration of pollutants/gases that can be handled by the proposed venturi scrubber/droplet separator are shown in Table 4-8.

Table 4-8: Maximum inlet and outlet concentration of pollutant/gases at APCDs

Sr. No.	Parameters	Standard (mg/Nm^3 unless stated)	Average Efficiency	Maximum Inlet Concentration (mg/Nm^3 unless stated)	Maximum Outlet Concentration (mg/Nm^3 unless stated)
1	Particulate Matter	50	97%	1667	50
2	Nitrogen Oxides (NO/NO_2)	400	32.5%#	593	400
3	HCl	50	92.5%	667	50
4	Total Dioxins and Furans	0.1ngTEQ/Nm^3 (at 11% O2)	*	-	-
5	Hg and its compounds	0.05	**	-	-

Note- Design efficiency of proposed venturi scrubber for particulate matter, NO_x and HCl are 95-99%, 30%-35%, and 90%-95% respectively.

 # In (CPCB, 2017)***, it is stated that NOx generally complies by the biomedical waste incinerator with the conventional air pollution control systems.***

**** As per*** (CPCB, 2017) ***guidelines, to reduce the formation of Dioxins & Furans, it is required to ensure proper combustion in secondary chamber by maintaining minimum temperature of about 1050 +/- 50°C and a residence time of at least 2 seconds. In addition, to prevent the reformation of dioxins, rapidly cooling of flue gases from 1050° C to less than 220° C by adopting rapid quencher or heat exchanger system. So, to avoid these emissions, the facility should maintain the respective temperature profile in secondary chamber and quencher.***

***** As per*** (CPCB, 2017) ***guidelines, the chances of mercury and its compounds emissions are very rare. The emission of these gases is only observed in case BMW containing mercury and its compounds is incinerated. To avoid these emissions, BMW containing mercury and its compounds should not be incinerated. In case mercury waste is incinerated, injection of activated carbon will be required.***

The proposed Air Pollution Control Devices can handle the maximum PM, NOx, HCl concentrations of 1667, 593, 667 mg/Nm^3, respectively and will achieve stack emissions in compliance to the stipulated emission standards with their average efficiency. To achieve the design/average

efficiency of the proposed APCD and auxiliary drives, they shall be re-designed as per recommendations and should be operated properly.

As per the protocol issued by (CPCB, 2017) ***to control emission of flue gases generated in incinerator, the specific temperature should be maintained in primary (800 +/-50°C) and secondary (1000 +/-50°C) chamber. To monitor these temperatures during operation the facility should install temperature sensors in primary and secondary chamber and connect it with continuous emission monitoring system (CEMS).***

5 Conclusion

For the assessment of the adequacy of Air Pollution Control Devices (APCDs) and auxiliary drives attached with Incinerator, theoretical calculations were performed. The adequacy was performed as per the (CPCB, 2017) guidelines for Common Bio-medical Waste Treatment Facility. Based on the study, the following inferences can be drawn of various equipment and their supporting auxiliary drives:

Incinerator

- The total quantity of air required (considering 150% of excess oxygen) for incinerating 200 kg/h of waste in incinerator was estimated as 2060.71 m^3/h.
- The flue gases generated from incineration of 200 kg/h of waste estimated to be 4215.55 m^3/h
- The volume provided for secondary chamber (9.05 m^3) will be adequate to achieve the minimum residence time of 2 sec as per CPCB guidelines. The theoretical residence time of flue gases in secondary chamber was estimated to be 2.88 sec at 200 kg/h of load.

Forced Draft (FD) Fan

- The combined required capacity of two FD fans was estimated to be 2909.23 m^3/h (considering 85% of fan efficiency and 20% of safety factor on theoretical value). Thus, the proposed FD fan of 2040 m^3/h was found to be under size and is inadequate to provide fresh air for complete incineration of 200 kg/h of waste.

Minimum Fuel requirement

- The minimum theoretical fuel (diesel) requirement in incinerator was estimated to be 10.8 L/h to incinerate 200 kg/h of waste. The proposed fuel quantity (15 L) seems to be adequate as it is higher than the minimum theoretical required fuel.

Quencher/Chiller

- The proposed quencher will be inadequate for cooling the flue gases, as the required working temperature for quencher/chiller should be less than 220°C as per CPCB guidelines. Whereas the proposed quencher/chiller had 300°C-400°C working temperature.

Venturi Scrubber

- The proposed venturi scrubber had 350 mm W.C. of pressure drop, so to maintain the design pressure drop for the flue gases generator from burning of 200 kg/h of waste in incinerator, 155 LPM (9.3 m^3/h) of scrubbing media flow was estimated.
- For 155 LMP flow rate the theoretical pump capacity required was estimated as 218 LPM (considering 85% efficiency and 20% safety factor), thus the proposed pump of 120 LPM is under size and is inadequate for the venturi scrubber.

Stack

- The proposed height of 30 m will be adequate for stack, as per CPCB guidelines which suggest minimum 30 m of height of stack for Common Bio-medical Waste Treatment Facility.

Induced Draft (ID) Fan

- The proposed ID fan seems to be adequate as the proposed capacity of 4608 m^3/h was higher than the theoretical required capacity of 4382 m^3/h, considering 85% efficiency and 20% safety factor.

Regulatory Compliance

The proposed Air Pollution Control Devices can handle the maximum PM, NOx, HCl concentrations of 1667, 593, 667 mg/Nm^3, respectively and will achieve stack emissions in compliance to the stipulated emission standards with their average efficiency. To achieve the design/average efficiency of the proposed APCD and auxiliary drives, they shall be re-designed as per recommendations and should be operated properly.

As per the protocol issued by (CPCB, 2017) to control emission of flue gases generated in incinerator, the specific temperature should be maintained in primary (800 +/-50°C) and secondary (1000 +/-50°C) chamber. To monitor these temperatures during operation the facility should install temperature sensors in primary and secondary chamber and connect it with continuous emission monitoring system (CEMS).

6 Recommendations

Based on the comprehensive assessment of Air Pollution Control Devices and attached drives with Incinerator, the facility should adopt the following recommendations in order to meet stack emissions in compliance to the stipulated emission standards (as per CPCB 2017 guidelines for CBMWTF). The following recommendation are based on theoretical calculation and CPCB guidelines.

- ***The facility should increase the combined capacity of two forced draft (FD) fans from 2040 m^3/h to 2909.23 m^3/h (say 2900 m^3/h),*** to cater the excess air required for proper combustion in incinerator.
- ***The proposed quencher/chiller should maintain less than 220^oC of working temperature***, to ensure there is no reformation of dioxins in flue gases. ***It is also recommended to install a temperature sensor at the outlet of quencher/chiller*** to monitor proper operation of quencher/chiller.
- ***The facility should increase the capacity of recirculation pump for venturi scrubber from 120 LPM to 218 LPM (say 220 LPM)***, to maintain the design pressure drop of 350 mm W.C. for burning 200 kg/h of waste.
- ***The facility should install pH meter to monitor pH of recirculating media used in venturi scrubber*** as it is required to maintain pH between 7 to 8.5 in scrubbing media (as per CPCB guidelines).
- ***The facility should not incinerate bio-medical waste containing mercury and its compounds as per CPCB 2017 guidelines to avoid generation of mercury and its compounds in flue gases. In case mercury waste is incinerated, specific treatment such as injection of activated carbon will be required.***

ANNEXURE-R-4

Proposal No.: 3: **SIA/MH/IND/416512**	Type: **EC**

INTRODUCTION:

This has reference to your online application vide proposal No. 416512 for prior Environmental Clearance for their Biomedical Waste Treatment Facility under category 7 (da) B1, Biomedical Waste Treatment as per provisions of the EIA Notification, 2006 amended from time to time and appraised in the SEAC-1 committee.

PROJECT DETAILS:

Environmental clearance for Proposed Establishment of Common Bio-Medical Waste Treatment and Disposal Facility(CBWTF) having Capacity of 400 Kg/Hr. (2 Units each having capacity of 200 Kg/ Hr.) at Plot No. D-7, mIDC Srirampur, District Ahmednagar by 'M/s. Bioclean Systems(India) Pvt. Ltd. (BSIPL).

Details of earlier EC if any: No.

DELIBERATIONS IN SEAC:

Representative of PP was present during the meeting along with Accredited Environmental consultant M/s. Equinox Env. India Pvt. Ltd.

Standard Terms of Reference (ToR) issued by State Level Environment Impact Assessment Authority (SEIAA); Govt. of Maharashtra vide letter File No. SIA / MH / MIS / 82436 / 2022 dated 26.04.202.

The Maharashtra Pollution Control Board had issued Consents to Establish to the company after meeting the location criteria as per prevailing rules on 04.22.2022.

During deliberations, following points were observed,

1. PP to submit detailed study on the air pollution control equipment adequacy and assessment and submit report along with its design and capacity to meet the standard parameters stipulated by the Competent Authority.
2. PP to submit detailed management plan prepared to control stench/odour.
3. PP to make necessary changes in the EMP considering compliance of above points

RECOMMENDATIONS OF SEAC:

After detailed deliberations with the PP and their accredited consultant, SEAC-1 decided to defer the proposal till submission of information on above points.

CONCLUSION: Deferred