BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 750 OF 2024

IN THE MATTER OF:

Ajay Kumar Singh …Applicant

Versus

State Level Environmental Impact
Assessment Authority, Uttar Pradesh & Ors. …Respondents

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RESPONDENT NO. 2
M/S VRBA BIO WASTE SOLUTIONS PVT. LTD.

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 750 OF 2024

IN THE MATTER OF:
Ajay Kumar Singh …Applicant

Versus

State Level Environmental Impact
Assessment Authority, Uttar Pradesh & Ors. …Respondents

REPLY ON BEHALF OF THE RESPONDENT NO. 2/ PROJECT PROPONENT, M/S VRBA BIO WASTE SOLUTIONS PVT. LTD. TO THE APPEAL PREFERED BY THE APPELLANT UNDER SECTION 16 OF THE NATIONAL GREEN TRIBUNAL ACT, 2010

MOST RESPECTFULLY SHEWETH

1. That at the outset, it is submitted that the present Application is an abuse of the process of this Hon'ble Tribunal and the same deserves to be dismissed with heavy costs. It is further submitted that the Appellants have not approached this Hon'ble Tribunal with clean hands and have misrepresented several vital facts before this Hon'ble Tribunal.

PRELIMINARY OBJECTIONS:

2. That he present Original Application is not maintainable as the same is barred by limitation. It is submitted that the Original Application is preferred under Sections 14, 15 and 18(1) of the National Green Tribunal Act, 2010 and the limitation provided

under Section 14(3) of the Act is six months. Section 14(3) reads as under:

Section 14(3): No Application for adjudication of dispute under this section shall be entertained by the tribunal unless it is made within a period of 6 months from the date on which the cause of action for such dispute first arose.

The Applicant has challenged the grant of Consent to Establish dated 16.03.2023 and Environmental Clearance dated 10.11.2023 and the challenge to the same was beyond the limitation when the present Original Application was preferred.

Hence, the present Original Application is barred by limitation and liable to be dismissed on this ground alone.

It is worthwhile to note that no relief is sought under Section 15 of the National Green Tribunal Act, 2010.

3. That the Original Application is not maintainable as the grant of Environmental Clearance can only be challenged in Appeal under Section 16 (h) of the National Green Tribunal Act, 2010.

4. That the present Original Application is not maintainable as the Applicant has not invoked the remedy provided under Rule 16 of the Common Bio-Medical Waste Management Rules, 2016. Rule 16 of the Common Bio-Medical Waste Management Rules, 2016 is reproduced hereinbelow for ready reference:

Rule 16: Appeal –

(1) Any person aggrieved by an order made by the prescribed authority under these rules may, within a period of 30 days from

the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary (Environment) of the State Government or Union Territory administration.

5. That the present Original Application is not maintainable as the Applicant has not shown as to how he falls under Section 18(2) of the National Green Tribunal Act, 2010. It is submitted that the Applicant cannot be said to be an aggrieved person or has sustained any injury, hence, the present Original Application is not maintainable and liable to be dismissed. Section 18(2) of the National Green Tribunal Act, 2010 is reproduced herein below for ready reference:

18. Application or appeal to Tribunal.

Without prejudice to the provisions contained in section 16, an application for grant of relief or compensation or settlement of dispute may be made to the Tribunal by –

(a) the person, who has sustained the injury; or

(b) the owner of the property to which the damage has been caused; or

(c) where death has resulted from the environmental damage, by all or any of the legal representatives of the deceased; or

(d) any agent duly authorised by such person or owner of such property or all or any of the legal representatives of the deceased, as the case may be; or

(e) any person aggrieved, including any representative body or organisation; or

(f) the Central Government or a State Government or a Union territory Administration or the Central Pollution Control Board or a State Pollution Control Board or a

Pollution Control Committee or a local authority, or any environmental authority constituted or established under the Environment (Protection) Act, 1986 or any other law for the time being in force.

6. That the Applicant has deliberately not cited the Para 6 of the Revised Guidelines for Common Bio Medical Waste Treatment facilities, which promotes that the CBMWF should be preferably developed in the notified industrial area without the requirement of the buffer zone. Para 6 of the revised guidelines which provides for the Location Criterion is reproduced herein below:

PARA 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.

This Hon'ble Tribunal in Common Bio Medical Waste Treatment Facility Operators Association Vs. Maharashtra Pollution

Control Board (OA No. 51 of 20222 (WZ) [2023 SCC Online NGT 2022] has held:

> ***"9.*** *During argument made by the learned counsel for the applicant, it appeared that he wanted to communicate that the MPCB should not be allowed to have more than one facility within the coverage area of 75 KM as the same would affect commercial viability of other units. We are not impressed by the said argument made by the learned counsel for the applicants because Rules do not provide that there cannot be more than one CBMWTFs installed within the area of 75 KM. In our opinion, the said criteria appear to have minimum one such facility therefore, if there are more than one facility does not mean that it would amount to violation of the said Rules. It appears that the intention of the legislature is that minimum one CBMWTF should be established within 75 KM area."*

7. That the Applicant has misread the import of definition of Hazardous Waste as defined in Section 2(e) of the Environment Protection Act, 1986.

Section 2(e) of the Environment Protection Act, 1986 is reproduced hereunder for ready reference:

Section 2(e): hazardous substance means any substance or preparation which by reason of its chemical or physio-chemical properties or handling who is liable to cause harm to human beings, other living creatures, plants micro-organism property or the environment;

It is submitted that the definition is to classify the substance which is hazardous in nature for which specific guidelines are stipulated for CBWTF by CPCB which is to be implemented prior to establishment of the CBWTF unit. For the purposes of CBMWTF, the hazard is the bio-waste which is generated by the

healthcare units and the CBWTF facility is engaged into treating such hazardous waste and not the generation of hazardous waste.

8. That it is correct that in the modified directions dated 07.03.2016 by Central Pollution Control Board, the Common Bio-Medical Waste Treatment Facility is placed in Red Category, however, at the same time CBWTF is designated in a special category being part of pollution control facilities:

"ii. *There are specific remarks in respect of some of the industrial sectors. These sectors are either merged with other relevant sectors or deleted due to duplication. The overall details are as follows:*

Sr. No	Original S.No.	Industry / Sector	Original Category	Remarks
1	14	*Common treatment and disposal facilities (CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent / acid recovery plant, MSW sanitary land fill site)*	R	*All such facilities are classified as Red but special category projects as these are parts of pollution control facilities.*

9. That the Applicant has relied upon the Revised Guidelines for Common Bio-Medical Waste Treatment and Disposal Facilities being made by the Central Pollution Control Board. It is

submitted that these guidelines are not mandatory and does not have the force of law but only directory in nature.

The Bio-Medical Waste Management Rules, 2016 were made Central Government in exercise of the powers conferred under Sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986).

It is submitted that Rule 6 casts duty on the authorities (specified in column (2) of Schedule-III) to perform their duties and Rule 9(3) directs the prescribed authorities to comply responsibilities stipulated in Schedule III.

Rules 6 and 9(3) alongwith Sr. No. 3 of Schedule III are reproduced herein below for ready reference:

6. Duties of authorities-

The Authority specified in column (2) of Schedule-III shall perform the duties as specified in column (3) thereof in accordance with the provisions of these rules.

9. Prescribed authority

(3) The prescribed authorities shall comply with the responsibilities as stipulated in Schedule III of these rules.

SCHEDULE III

List of Prescribed Authorities and the Corresponding Duties

S.No.	***Authority***	***Corresponding Duties***
4.	*Central Pollution Control Board*	***(i) Prepare Guidelines on bio-medical waste Management and submit to the Ministry of Environment, Forest and Climate Change.*** ***(ii) Co-ordination of activities of State Pollution Control Boards or***

		Pollution Control Committees on bio-medical waste. *(iii) Conduct training courses for authorities dealing with management of bio-medical waste.* *(iv) Lay down standards for new technologies for treatment and disposal of bio-medical waste (Rule 7) and prescribe specifications for treatment and disposal of bio-medical wastes (Rule 7).* *(v) Lay down Criteria for establishing common bio-medical waste treatment facilities in the Country.* *(vi) Random inspection or monitoring of health care facilities and common bio-medical waste treatment facilities.* *(vii) Review and analysis of data submitted by the State Pollution Control Boards on bio-medical waste and submission of compiled information in the form of annual report along with its observations to Ministry of Environment, Forest and Climate Change.* *(viii) Inspection and monitoring of health care facilities other than Medical Inspection (MI) rooms, sick bays on board ships or submarines, station medical centres and field hospitals in forward locations operated by the*

		Director General, Armed Forces Medical Services (Rule-9). *(ix) Undertake or support research or operational research regarding bio-medical waste.*

Therefore, S. No. 4 of the Schedule III only casts duty upon the Central Pollution Control Board to Prepare Guidelines on bio-medical waste Management and submit to the Ministry of Environment, Forest and Climate Change. It is submitted that such guidelines may be considered by the Central Government and whenever required may implement the same by issuing appropriate notification or rules.

In the present case although the Central Pollution Controls Board has framed the guidelines, but the same are either not sent to the Central Government or not implemented by the Central Government. Hence, the Revised Guidelines for Common Bio-Medical Waste Treatment and Disposal Facilities can only be used for reference purposes only and are not binding.

10. That the contention of the Appellant that the Uttar Pradesh State Industrial Development Corporation Limited (hereinafter referred as "UPSIDC") blatantly violated the Operating Manual Guideline No. 2.05, while allocation of the land in question, is of no consequence and devoid of any merits as Para 2.05 of the Operating Manual uses the word 'may'. It is submitted that the Operating Manual itself has given discretion to UPSIDC for

allocation of plots even for setting up of the hazardous project. Para 2.05 of the Operating Manual is reproduced herein below for ready reference:

*2.05 The application for allotment of plots / sheds **may** be rejected by Regional Manager / Area Manager on the following grounds*

(i) if the proposed project to be set up is hazardous as categorised by Uttar Pradesh pollution Control Board

It is submitted that the said fact can be ascertained from the reply dated 01.04.2024 to the RTI Application preferred by the Appellant before the Respondent No. 7. The relevant portion of the said reply dated 01.04.2024 is reproduced hereunder for ready reference:

> "यूपीसीडा के ऑपरेटिंग मैन्युअल – 2011 व 2023 के अनुसार किसी भी भूखंड का आवंटन/ हस्तांतरण परीक्षण करने के उपरांत ही किया जाता है । ऑपरेटिंग मैन्युअल – 2023 के प्रस्तर 2.05 Rejection of Application के अंतर्गत निहित प्रावधानों में आवेदन निरस्त किया जा सकता है परंतु अनिवार्यता नहीं है।"

11. The Revised Guideline for Common Biomedical Waste Treatment Facility 2016 mentions that in Point 2 (d) "*Alternately, a CBWTF may also be allowed to be established on a land procured by an entrepreneur in accordance with the location criteria suggested under these guidelines*" As compliance to the same the responding Respondent has established the CBWTF Unit with allotment procedure done with the UPSIDC. .

12. That for the efficacious adjudication of the present matter, the vital facts pertaining to the present case are elaborated hereunder as Preliminary Submissions.

PRELIMINARY SUBMISSIONS:

13. That the answering Respondent has established a Common Bio-Medical Waste Treatment Facility (hereinafter referred to as 'CBWTF' for the sake of brevity) as provided for in the Bio-Medical Waste Management Rules, 2016 and aims to render the services for disposal of bio-medical waste in accordance with the Rules made by the Government of India and in consonance with the guidelines formulated by the Central Pollution Control Board.

14. That the CBWTF unit has been developed with an approximate project cost of INR 3.43 Cr and the following equipment have been installed for effective treatment of bio-medical waste: A true copy of the Balance Sheet of FY 2023-24 depicting the investment made by the answering Respondent is annexed herewith and marked as Annexure R/1

S. No.	Equipment	Capacity
1.	Incinerator	300 Kg/Hr
2.	Autoclave	1000 L/Batch
3.	Shredder	150 Kg/Hr

4.	Chemical Disinfection tank	1500 L
5.	ZLD Effluent Treatment Plant (Zero Liquid Discharge)	10 KLD

15. That for the establishment of CBWTF, the answering Respondent preferred an application form no. 21899368 dated 06.07.2023 before the Respondent No. 5 for issuance of Consent to Establish under the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981.

16. That the Respondent No. 5 granted Consent to Establish to the answering Respondent on 08.09.2023 for the period 06.07.2023 to 31.12.2027 vide its letter bearing reference no. 188118/UPPCB/Varanasi(UPPCBRO)/CTE/CHANDAULI/2023.

A true copy of the Consent to Establish dated 08.09.2023 granted by the Respondent No. 5 to the answering Respondent for the period 06.07.2023 to 31.12.2027 is annexed herewith and marked as **ANNEXURE No. R/2.**

17. That for the establishment of CBWTF at Plot No.E-46, Phase - 1, Ramnagar Indutrial Area, Chandauli, Uttar Pradesh, the answering Respondent on 22.08.2022 applied for Terms of Reference (ToR) to the State Expert Appraisal Committee ('SEAC') vide proposal number SIA/UP/MIS/82713/2022.

A true copy of the proposal number SIA/UP/MIS/82713/2022 dated 22.08.2022 for fresh Terms of Reference is annexed herewith and marked as **ANNEXURE No. R/3.**

18. That the Respondent No. 1 on 24.08.2022 issued Terms of Reference to the answering Respondent for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance.

    A true copy of the Terms of Reference dated 24.08.2022 bearing File No. 7222 issued to the answering Respondent is annexed herewith and marked as **ANNEXURE No. R/4**.

19. That the Final Environmental Impact Assessment/ Environment Management Plan Report was prepared by the M/s Environment Management Division of M/s India Glycols Limited, Kashipur and was submitted before the Respondent No. 1 on 06.02.2023. for consideration in grant of Environmental Clearance to the answering Respondent.

    A true copy of the Final Environmental Impact Assessment/ Environment Management Plan Report is annexed herewith and marked as **ANNEXURE No. R/5.**

20. That the case of the answering Respondent was considered by the State Expert Appraisal Committee in its 734th meeting dated 14.03.2023 wherein it directed the answering Respondent to submit the following information:

- Gap analysis report from the Uttar Pradesh Pollution Control Board, Lucknow.
- Certificate/ Letter from the Chief Medical Officer, Chandauli regarding requirement of Common Biomedical waste treatment facility.
- Point-wise reply to the complaint dated 11.03.2023 preferred Sh. Hari Om Sharan Dwivedi, Director, M/s Sangam Mediserve Pvt. Ltd.

21. That the answering Respondent provided the requisite information, as directed, on the online portal and the case of the answering Respondent was again considered by the State Expert Appraisal Committee in its 769th meeting dated 27.06.2023 wherein it again directed to provide the Gap analysis report from UPPCB.

22. That once again the case of the answering Respondent was considered by State Expert Appraisal Committee in its 788th meeting dated 19.09.2023 wherein it recommended grant of environmental clearance to the answering Respondent.

23. That the grant of environmental clearance to the answering Respondent was then considered by the Respondent No. 1 in it's 767th meeting dated 26.10.2023 and the Respondent No. 1 agreed with the recommendations of the State Expert Appraisal Committee for grant of environmental clearance to the answering Respondent.

24. That the Respondent No. 1 on 22.11.2023 granted Environmental Clearance to the answering Respondent bearing EC Identification No. EC23B057UP110406.

A true copy of the environmental clearance dated 22.11.2023 bearing EC Identification No. EC23B057UP110406 issued by the Respondent No. 1 is annexed herewith and marked as **ANNEXURE No. R/6.**

25. That the Respondent No. 5 on 02.04.2024 issued Consent-to-Operate to the answering Respondent vide its letter bearing no. 204130/UPPCB/Varanasi(UPPCBRO)/CTO/both/CHANDAULI/2024 for the period 27.02.2024 to 31.12.2028.

A true copy of the Consent-to-Operate dated 02.04.2024 granted by the Respondent No. 5 to the answering Respondent for the period 27.02.2024 to 31.12.2028 is annexed herewith and marked as **ANNEXURE No. R/7.**

26. That the Respondent No. 5 on 02.04.2024 issued Authorisation for Operating the Facility for Collection, Reception, Treatment, Storage, Transport And Disposal Of Biomedical Wastes to the answering Respondent vide its letter bearing file no. 25090105 for the period 02.04.2024 to 31.12.2028.

A true copy of the authorisation dated 02.04.2024 granted by the Respondent No. 5 to the answering Respondent for the period 02.04.2024 to 31.12.2028 is annexed herewith and marked as **ANNEXURE No. R/8.**

27. The CBWTF has registerd and on-boarded total 473 Health Care Facilities (HCFs) in which total 276 HCFs are Bedded with total 5600 Beds and unit has also started providing Treatment and Disposal Services to the mentioned HCFs. It is pertinent to mention that the CBWTF is currently functioning since February 2024 and catering to the requirements of 473 HCFs (5600 Beds). A true copy of the list of the Health Care Facilities being handled by the answering Respondent is annexed herewith and marked as **ANNEXURE No. R/9**

A true copy of the incineration log-books of the answering Respondent is annexed herewith and marked as ANNEXURE No. R/10.

28. That the CBWTF is proposed to be established in a notified industrial i.e. the Ramnagar Industrial Area, Chandauli and as such there is no requirement for any buffer zone in terms of the location criteria prescribed under the Revised Guidelines for Common Bio-Medical Waste Treatment Facilities.

The relevant part of the Revised Guidelines for Common Bio-Medical Waste Treatment Facilities is reproduced hereunder for ready reference:

> *"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 for 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 CBWTF."

29. That the CBWTF is being developed on a plot ad-measuring 0.553 acres which is again in accordance with the Revised Guidelines for Common Bio-Medical Waste Treatment Facilities which provides that preferably a CBWTF shall be set up on a plot size of not less than one acre but in case of upcoming or new CBWTF in municipal limits with population more than 25 lakhs or in rural areas, the land requirement may be relaxed but not less than 0.5 acres.

The relevant part of the Revised Guidelines for Common Bio-Medical Waste Treatment Facilities is reproduced hereunder for ready reference:

"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."

30. That the CBWTF is proposed to be developed at E-46, Phase - 1, Ramnagar Indutrial Area, Chandauli which is located in village Patnawa and as per the land requirement prescribed under the Revised Guidelines for Common Bio-Medical Waste Treatment Facilities, the preferable land requirement of 1 acre can be relaxed upto 0.5 acres for CBWTFs located in rural areas. The CBWTF has also complied with additional control measures such as zero liquid discharge, increase in stack height, stringent emission norms, odour control measures.

A true copy of the Certificate of Sale dated 04.08.2022 issued by State Bank of India stating that the property is located within the

Industrial Area at Ramnagar in Village Patnawa Pargana Ramnagar, District Chandauli is annexed herewith and marked as **ANNEXURE No. R/11**.

31. That currently there is only CBWTF namely CPC (Power) India, Ltd. operational in the Varanasi district which has to cater to a total hospital beds of 22998 in Varanasi and Chandauli district for which reason establishment of a CBWTF is indispensable for the district of Chandauli to ensure effective treatment of bio-medical wastes. It is pertinent to mention here that even though CBWTF is classified as a RED category industry, its operations cannot be equated with other RED category industries as it is not a pollution causing industry but a pollution treatment facility. Furthermore, the CPCB in its modified directions dated 07.03.2016 bearing no. B-29012/ESS(CPA)/2015-2016 have remarked CBWTF as special category projects as they are parts of pollution control facilities. It is further pertinent to mention here that the Hon'ble Gujarat High Court in Uttarsanda Gram Panchayat & Ors. Vs. State of Gujarat & Ors., Special Civil Application No. 12235 of 2017 observed as under:

> *"49. ... 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.

…….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 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."*

A true copy information dated 01.07.2023 bearing reference no. 1213/ जन सूचना / 23-24 about the total number of hospital beds in Varanasi and Chandauli districts obtained under RTI by the answering Respondent from the Respondent No. 5 is annexed herewith and marked as **ANNEXURE No. R/12.**

32. That the averments made by the Applicant in the OA are vehemently denied unless otherwise specifically admitted hereinabove.

33. That the Applicant is not entitled for any relief from this Hon'ble Tribunal vis-à-vis the CBWTF Established and in operation from 02/04/2024 by the answering Respondent as also the Environmental Clearance has been granted to it after fulfillment of all the necessary criteria and after due and proper compliance of the applicable rules and regulations.

It is prayed that the OA preferred by the Applicant be dismissed with heavy costs as the same is an abuse of the process of law and is based on vexatious and misleading facts and averments.

RESPONDENT NO. 2
M/S VRBA BIO WASTE SOLUTIONS PVT. LTD.

THROUGH

DEVA SHUKLA
Advocate for the Respondent No. 2
Chamber No. 448, Lawyers' Chambers
District Court Compound
Ghaziabad, Uttar Pradesh
Ph. No. 9999228882; 9999118882
Email: deva.s.shukla@outlook.com

Date: 14.11.2024
Place: New Delhi

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 750 OF 2024

IN THE MATTER OF:
Ajay Kumar Singh ...Applicant

Versus

State Level Environmental Impact Assessment Authority, Uttar Pradesh & Ors. ...Respondents

AFFIDAVIT

I, Ratan Deo Singh S/o Maha Deo Singh aged about 52 years am the Director of M/S VRBA Bio Waste Solution Pvt. Ltd. having its office at Lane No 3, N 1/66-R-25, Shiv Prasad Gupt Colony Lanka, Varanasi, Uttar Pradesh do hereby solemnly affirm and state as under:

1. That I am the Director of Respondent No. 2 in the present matter, well conversant with the facts and circumstances of the entire case and therefore, competent to swear the present Affidavit.

2. That the accompanying Reply to the OA has been drafted by my counsel under my instructions the contents of the same are true and correct as per my knowledge based on record and legal knowledge obtained.

FOR – VRBA Bio Waste Solution Pvt Ltd

R. Deo Singh

Authorized Signatory

DEPONENT

12/11/24

VERIFICATION

Verified at Varanasi on this 12 day of November, 2024 that the contents of above affidavit are true and correct to my knowledge based on records and information received and believed to be true, no part of it is false and nothing material has been concealed therefrom.

FOR – VRBA Bio Waste Solution Pvt Ltd

Authorized Signatory

DEPONENT

NOTARY GOVT. OF INDIA
Reeta Devi
Varanasi Distt. (U.P.)
Regn. No.-4969

SWORN & VERIFIED BEFORE ME
12/11/24
REETA DEVI, Advocate
NOTARY Govt. Of India
Regn. No. 4969 Varanasi

ANNEXURE NO. R/1

VRBA BIO WASTE SOLUTION PRIVATE LIMITED

Regd. Office:N-1/66-R-25, Shiv Prasad Colony, Lanka, Varanasi (U.P.) 221005 India
CIN:U40300UP2020PTC127781, email:rdsingh.rds33@gmail.com, Contact:9839097497

Balance Sheet as at 31st March 2024

	Particulars	Note No.	Amount (Rs. in '00) 31st March,2024	Amount (Rs. in '00) 31st March,2023
A	**EQUITY AND LIABILITIES**			
1	**Shareholders' funds**			
	(a) Share capital	1	10,000.00	10,000.00
	(b) Reserves and surplus	2	-	-
	(c) Money received against share warrants		-	-
			10,000.00	10,000.00
2	**Share application money pending allotment**			
3	**Non-current liabilities**			
	(a) Long-term borrowings	3	-	-
	(b) Deferred tax liabilities (net)			-
	(c) Other long-term liabilities	4	3,00,768.62	2,13,414.60
	(d) Long-term provisions			
			3,00,768.62	2,13,414.60
4	**Current liabilities**			
	(a) Short-term borrowings	5	-	-
	(b) Trade payables	6	51,645.41	-
	(c) Other current liabilities	7	305.00	155.00
	(d) Short-term provisions	8	-	-
			51,950.41	155.00
	(1+2+3+4) GRAND TOTAL		3,62,719.03	2,23,569.60
B	**ASSETS**			
1	**Non-current assets**			
	(a) Fixed assets			
	(i) Tangible assets	20	3,43,615.42	2,20,095.80
	(ii) Intangible assets		-	-
	(iii) Capital work-in-progress		-	-
	(iv) Intangible assets under development		-	-
	(v) Fixed assets held for sale		-	-
			3,43,615.42	2,20,095.80
	(b) Non-current investments		-	-
	(c) Deferred tax assets (net)		-	-
	(d) Long-term loans and advances		-	-
	(e) Other non-current assets		-	-
			3,43,615.42	2,20,095.80
2	**Current assets**			
	(a) Current investments			
	(b) Inventories	9	-	-
	(c) Trade receivables	10	-	-
	(d) Cash and cash equivalents	11	2,154.82	2,064.18
	(e) Short-term loans and advances	12	1,092.02	1,000.00
	(f) Other current assets	13	15,856.77	409.62
			19,103.61	3,473.80
	(1+2) GRAND TOTAL		3,62,719.03	2,23,569.60
	See accompanying notes forming part of the financial statements			

In terms of our report attached.

For S D MISHRA & CO
Chartered Accountants

(S. D. Mishra)
Partner
UDIN:24079822BKCMUI4285
Place : Varanasi
Date :27.09.2024

For VRBA Bio Waste Sloution Private Limited

Ratan Deo Singh
Director
DIN : 07553095

Bimlesh Kumar Singh
Director
DIN : 08718685

FOR – VRBA Bio Waste Solution Pvt Ltd

Authorized Signatory

ANNEXURE NO. R/2

UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

Validity Period :06/07/2023 To 31/12/2027

Ref No. - 188118/UPPCB/Varanasi(UPPCBRO)/CTE/CHANDAULI/2023 **Dated:- 08/09/2023**

To ,

Shri RATAN DEO SINGH
M/s V R B A BIO WASTE SOLUTIONS PVT LTD
E-46, PHASE-1 AND KHASRA NO- 148/5 SINDHITALI, PHASE-2, RAMNAGAR INDUSTRIAL AREA, CHANDAULI,CHANDAULI,221110
CHANDAULI

Sub : Consent to Establish for New Unit/Expansion/Diversification under the provisions of Water (Prevention and control of pollution) Act, 1974 as amended and Air (Prevention and control of Polution) Act, 1981 as amended.

Please refer to your Application Form No.- 21899368 dated - 06/07/2023. After examining the application with respect to pollution angle, Consent to Establish (CTE) is granted subject to the compliance of following conditions :

1. Consent to Establish is being issued for following specific details :

A- Site along with geo-coordinates : Latitude 25.247476, Longitude 85.059611

B- Main Raw Material :

Main Raw Material Details		
Name of Raw Material	**Raw Material Unit Name**	**Raw Material Quantity**
BIO-MEDICAL WASTE	Metric Tonnes/Day	5

C- Product with capacity :

Product Detail	
Name of Product	**Product Quantity**
Bio-Medical Waste	5

D- By-Product if any with capacity :

By Product Detail			
Name of By Product	**Unit Name**	**Licence Product Capacity**	**Install Product Capacity**
ASH	Metric Tonnes/Month	0.5	0.5

2. Water Requirement (in KLD) and its Source :

Source of Water Details		
Source Type	**Name of Source**	**Quantity (KL/D)**
Ground Water (within premises)	BOREWELL	10.0

3. Quantity of effluent (ln KLD) :

Effluent Details	
Source Consumption	**Quantity (KL/D)**
Domestic	2.0
Industrial	5.0
Others(Washing)	1.0
Others(Plantation)	1.0

4. Fuel used in the equipment/machinery Name and Quantity (per day) :

Fuel Consumption Details		
Fuel	**Consumption(tpd/kld)**	**Use**
Diesel	0.05	FOR INCINERATOR RUNNING
Diesel	0.02	FOR DIESEL GENERATOR

5 For any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.

For any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.

2. You are directed to furnish the progress of Establishment of plant and machinery, green belt, Effluent Treatment Plant and Air pollution control devices, by 10th day of completion of subsequent quarter in the Board.
3. Copy of the work order/purchase order, regarding instruction and supply of proposed Effluent Treatment Plant/Sewerage Treatment Plant /Air Pollution control System shall be submitted by the industry till 31/12/2027 to the Board.
4. Industry will not start its operation, unless CTO is obtained under water (Prevention and control of Pollution) Act, I974 and Air (Prevention and control of Pollution)Act, 1981 from the Board.
5. It is mandatory to submit Air and Water consent Application,complete in all respect, four months before start of operation, to the U.P. Pollution Control Board.
6. Legal action under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act,1981 may be initiated against the industry With out any prior information,in case of non compliance of above conditions.

Specific Conditions:

1. This CTE is valid for establishment of Common Bio Medical Waste Treatment Facility (CBWTF) at E-46, Phase-1 (Area-1771 Sqmt) and Development of Office, Parking for Vehicles at Khasra No-148/5 Sindhitali, Phase-2 (Area-250.8241 Sqmt), Ramnagar Industrial Area, Block-Chakiya, District - Chandauli, Uttar Pradesh, Pin No.- 221110 by M/s VRBA Bio Waste Solution Private Limited.

2. The Earlier CTE issued by UPPCB vide office letter dated 27.09.2022 is stand canceled from the issuance of this CTE and this CTE shall be effective.

3. This CTE is valid for common facility for Bio medical waste treatment through double chambered incinerators of capacity 300 Kg/Hr, Autoclave 1000 liter/batch, Shredder 150 Kg/Hr as proposed.

4. The CTE shall only be valid with the effect from the date on which the proponent obtained Environmental Clearance (EC) from SIEAA, UP.

5. The proponent could not start construction activities before obtaining Environmental Clearance (EC) from SIEAA, UP, failing which this CTE would deemed void.

6. The proponent shall submit adequacy of proposed Water Pollution Control System and Air Pollution Control System done by reputed technical Institution like IIT/NPC etc.

7. CBWTF shall strictly comply with the CPCB guidelines dated 21.12.2016 for setting up the Common Bio Medical Waste Treatment Facility.

8. CBWTF shall install ETP of capacity-10.0 KLD for treatment of industrial effluent.

9. CBWTF shall provide the arrangement for storage of incinerator ash as per CPCB guidelines and shall obtain membership of Common TSDF for disposal of incineration ash.

10. CBWTF shall comply with the emission Standard for treatment and disposal of Biomedical Waste by incineration as per Schedule-II of BMW Rules 2016.

11. Transportation and handling of Bio-medical Wastes shall be as per the Biomedical Waste (Management and Handling) Rules, 2016.

12. Record w.r.t. operational parameter of autoclave such as temperature pressure etc. as well as records for validation test conducted to check efficiency of autoclave shall be maintained.

13. Incinerator shall be operated in accordance with Bio-Medical Waste Management Rules, 2016 w.r.t. maintenance of Temperature for primary and secondary chamber of incinerator.

14. Incinerator Ash shall be disposed through TSDF and Log books/records shall be maintained properly for generation and disposal of incinerator Ash.

15. The water generated from scrubbing system of incinerator shall be treated through ETP and treated water shall be recycled for scrubbing purpose and for irrigation in the premises. No effluent shall be discharged directly or indirectly outside the premises.

16. Discarded medicine shall be disposed in incinerator as per BMW Rule, 2016 and sharp pit shall be provided for disposal of waste sharp as per CPCB Guidelines.

17. The CBWTF shall comply with the Bio Medical Waste Management Rules 2016 and annual report shall be submitted.

18. The CBWTF shall comply with the provisions of Hazardous and Other waste (Management and Trans boundary Movement) Rules, 2016.

19. The facility shall ensure bar coding system to be adopted by member of healthcare facility in accordance with Bio Medical Waste Management Rules 2016.

20. The CBWTF shall obtain the State Ground Water Department permission for withdrawal of ground water and also comply with the CGWA guidelines for recharging of ground water.

21. The Facility shall develop and maintain green belt as per the guidelines issued by the Board vide

office order dated 16/02/2018, which is available on Board's Website- www.uppcb.com.

22. Separate space for untreated Bio Medical Waste shall be provided by facility as per CPCB guidelines/Bio Medical Waste Management Rules 2016.

23. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.

24. CBWTF shall install Online Continuous Emission Monitoring System and Online Continuous Effluent Monitoring System with data connectivity to CPCB server before commissioning of the plant.

25. Onsite emergency plan approved by the competent authority shall be submitted to board.

26. Project shall install at least 0.5 meter from roof level along with acoustic enclosures on DG set of capacity 62.5 KVA for use of backup power.

27. The dust emission from the construction sites will be completely controlled and all precautions will be taken as per the provisions of Construction & Demolition Waste Management Rules 2016.

28. CBWTF shall comply the provisions of Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended. CBWTF shall operate the plant after taking CTO under the provisions of Water Act 1974 and Air Act 1981 from the Board.

29. Project shall comply with the provisions of SWM Rules 2016 and provide facility for safe disposal of generated solid waste in housing project area.

30. Construction Work/installation of plant and machinery for the establishment of CBWTF shall be started after obtaining the Environmental Clearance under the Environment (Protection) Act, 1986.

31. The CBWTF shall comply with the Guideline of CPCB and shall only cater to beds which are in addition to 10,000 beds admissible to pre-existing CBWTFs located within 75 km radius.

32. CBWTF shall comply with the relevant provisions of Environmental Laws.

33. To ensure the compliance of CTE condition from 1 to 32 a Bank Guarantee of Rupees 1,00,000/- (One Lacs only) in the prescribed format shall be submitted to the Board within 15 days, failing which this CTE would deemed void.

34. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this CTE and attract action under the provisions of Law.

Please note that consent to Establish will be revoked, in case of, non compliance ot any of the above mentioned conditions. Board reserves its right for amendment or cancellation of any of the conditions specified above. Industry is directed to submit its first compliance report regarding above mentioned specific and general conditions till 08/10/2023 in this office. Ensure to submit the regular compliance report otherwise this Consent to Establish will be revoked.

Chief Environmental Officer, Cirlce-6

Dated:- 08/09/2023

Copy To -

Regional Officer, U.P. Pollution Control Board, Varanasi for information and necessary action.

मिशन LiFE - पर्यावरण के लिए जीवन शैली

(Lifestyle For Environment)

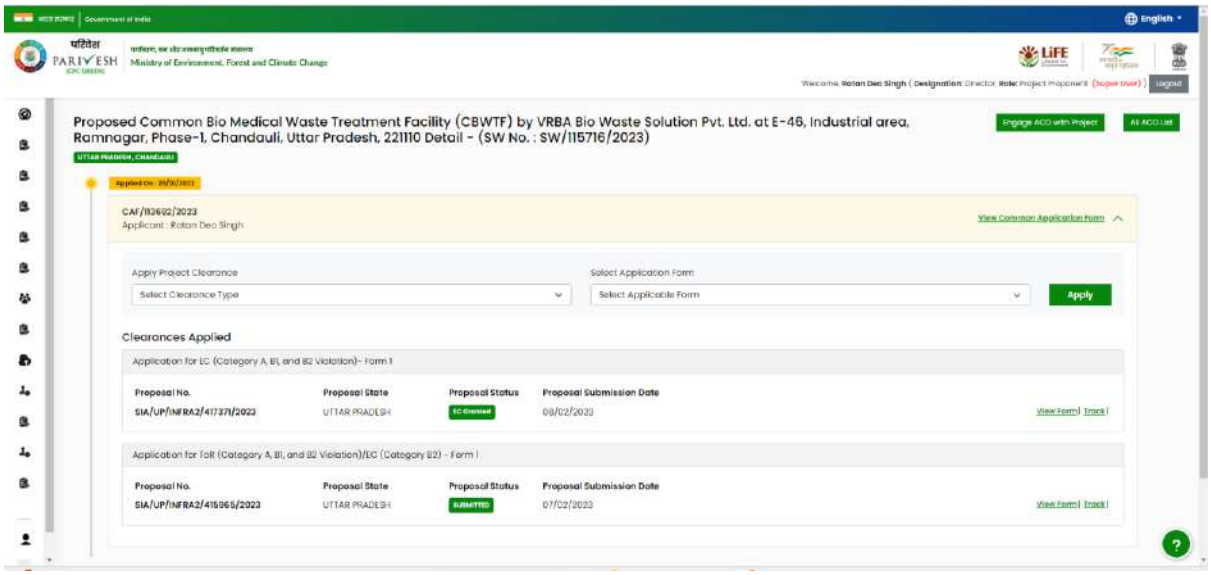
जनसहभागिता का सन्देश

- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

ANNEXURE NO. R/3

33



Common Application Form

Project Details

1. Details of Project

1.1. Name of the Project	Proposed Common Bio Medical Waste Treatment Facility (CBWTF) by VRBA Bio Waste Solution Pvt. Ltd. at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110
1.2. Project Proposal For	New
1.3. Project ID (Single Window Number)	SW/15716/2023
1.4. Description of Project	The proposed project of CBWTF falls under Category B, schedule 7d(A) as per the EIA notification 14th Sep, 2006 and subsequent amendments dated 1st December, 2009 & 17th April, 2015. This facility is located about 4.15 km (aerial) away from Ramnagar in Uttar Pradesh state & located at E-46 Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110. This state-of-the-art facility is dedicated for Common Bio-medical Waste Treatment Facility for treatment of 300 kg per hourbased bio medical incineration project, includes Incinerator, Autoclave, Shredder, Storage ETP (Capacity- 10.0 KLD).

2. Details of the Company/Organization/User Agency making application

2.1. Legal Status of the Company/Organization/User Agency	Private Limited
2.2. Name of the Company/ Organization/User agency	VRBA BIO WASTE SOLUTION PRIVATE LIMITED

Registered address

2.3. Address	LaneNo- 3, N1/56-R-25 Shiv Prasad Gupt Colony Lanka
2.4. Village /Town / City	Varanasi
2.5. State	UTTAR PRADESH
2.6. District	CHANDAULI
2.7. Pin Code	221015
2.8. E-mail address	ratandeo72@gmail.com
2.9. Mobile number	9839097497

3. Details of the person making application

3.1. Name	Ratan Deo Singh
3.2. Designation	Director

Correspondence address

3.3. Address	LaneNo- 3, N1/56-R-25 Shiv Prasad Gupt Colony Lanka
3.4. Village /Town / City	Varanasi
3.5. State	UTTAR PRADESH
3.6. District	VARANASI
3.7. Pin Code	221015
3.8. E-mail address	ratandeo72@gmail.com
3.9. Mobile number	9839097497

Project Location

4. Location of the Project or Activity

4.1. Upload KML	VRBA KML.kml
4.2. Whether the project/activity falling in the state/UT sharing international borders	NO
5. Shape of the Project	Non - Linear

Location Details

Toposheet No	State/UT	District	Sub District	Village	Plot/Survey/Khasra No.
G44R4	UTTAR PRADESH	Varanasi	Sadar	Ramnagar	Khasra No.23

Remarks

Project site falls in Chandauli district

6. Land Requirement (in Ha) of the project or activity

6.1. Nature of Land Involved	
6.2. Non-Forest Land [A]	0.1711
6.3. Forest Land [B]	0
6.4. Total Land [A+B]	0.1711

Project Activity Cost

6. Project/Activity Cost

6.1. Total Cost of the Project at current price level (in Lakhs)	27800 Amount in Words : **Twenty Seven Thousand Eight Hundred Lakh(s) Only**

7. Employment likely to be generated

7.1. During construction phase

Permanent employment

7.1.1. No. of permanent employment (No.s) [A]	5
7.1.2. Period of employment (No. of days) [B]	90
7.1.3. No. of man-days [X]=[A]*[B]	450

Temporary employment

7.1.4. Temporary / Contractual employment (No. of Man days) [Y]	35
7.1.5. Total [X] +[Y]	485

7.2. During operational phase

Permanent employment

7.2.1. No. of permanent employment (No.s) [A]	25
7.2.2. Period of employment (No. of days) [B]	1800
7.2.3. No. of man-days [X]=[A]*[B]	45000

Temporary employment

7.2.4. Temporary / Contractual employment (No. of Man days) [Y]	50
7.2.5. Total [X] +[Y]	45050

Others

8. Whether Rehabilitation and Resettlement (R&R) involved?	NO
9. Whether project area involves shifting of watercourse/road/rail/Transmission line/water pipeline, etc. required?	NO
10. Whether any alternative site(s) examined or part thereof for the non-site-specific component?	NO
10.1. Reason thereof	Notified Industrial Area
11. Whether there is any Government Order or Policy/ Court order relevant or restricting to the site?	NO
12. Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up?	NO
13. Whether the proposal involves violation of Act/Rule/Regulation/Notification of Central/State Government?	NO

Application for ToR (Category A, B1, and B2 Volation)/EC (Category B2) - Form 1

Basic Information

1. Category of the Project/Activity

1.1. Whether multiple items (Components) as per the notification involved in the proposal?	No	
1.1.1. Item No. as per schedule to EIA Notification, 2006	7(da) Bio-Medical Waste Treatment Facilities	NA
Capacity	1800	TPA
2. Whether project/activity attracts the General Condition specified in the Schedule of EIA Notification?	No	
3. Whether located proximity to Protected Area Notified Under the Wild Life (Protection) Act, 1972?	N/A	
4. Whether located proximity to Critically Polluted area as identified by the CPCB from time to time?	N/A	
5. Whether located proximity to Notified Eco-Sensitive area notified under Environmental (Protection) Act, 1986?	N/A	
6. Whether located proximity to Inter-State Boundaries and International Boundaries?	N/A	
7. Whether located proximity to Severely polluted areas as identified by the CPCB from time to time?	N/A	
8. Category of the Project as per EIA Notification, 2006	B1	
8.1. Whether proposal is required to be appraised at Central level?	No	
9. Whether Proposal has interlinked / interdependent projects or activities?	No	
9.1. Reason thereof	Category B	
10. Whether any Forest Land involved in the project or part thereof	No	
11. Whether NBWL recommendation is required?	No	

Project Details

12. Details of CTE

12.1. Whether consent under Air & Water Act has been obtained from SPCB / UTPCC?	No
12.1.1. Reason thereof	In process
13. Whether the project/activity located in Notified Industrial Area?	Yes
13.1. Type of Industrial Area	Industrial Area
13.2. Name of the Notified Industrial Area	Ramnagar Industrial Area, Chandauli
13.3. Year of notification of the Industrial area	Before 14th September 2006
13.4. Copy of Notification of Industrial area	E-46Land paper.pdf
13.5. Whether Prior Environmental Clearance available for Notified Industrial Area?	No
13.5.1. Reason thereof	Established before 2006 notification
14. Whether the project/activity located in CRZ or ICRZ area?	No
15. Whether the project proposed to be located in Territorial waters (Off-shore)	No
16. Whether project/activity attracts the Specific Condition specified in the Schedule of EIA Notification?	No
17. Whether project/activity located in the Eco-sensitive Zone notified/proposed to be notified under Environment (Protection) Act, 1986	No

Product Details

18. Details of Products & By-products

Name of Product	Product / By Product	Quantity / Capacity	Unit	Mode of Transport / Transmission	Remarks
Common Bio-Medical Waste Treatment Facility	By-Product	1800	Tons per Annum (TPA)	Road	This is not the product nor by product as this is a CBWTF project

19. Whether any other Environmental Sensitive area exists within 10 Km from the project/activity boundary?	Yes

19.1. Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	
19.2. Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes	
Name	Shorest distance from the project boundary in Km	Remarks
Ganga River	2.99	West
19.3. Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	No	
19.4. Inland, coastal, marine or underground waters	No	
19.5. Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	
19.6. Defence installations	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Varanasi Cantonment	13.5	North West
19.7. Densely populated or built-up area	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Hamidpur	1.09	West
19.8. Areas occupied by sensitive man-made land uses	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Asha Medicare & Hospital, Ramnagar industrial area, Hamidpur	0.8	South west
19.9. Areas containing important, high quality or scarce resources	No	
19.10. Areas susceptible to natural hazards which could cause the project to present environmental problems similar effects	No	
20. Status of collection of baseline data	Already collected	
Period of baseline data collection		
20.1. From	01/10/2022	
20.2. To	31/12/2022	
21. Seasons of collection	Post monsoon	
22. Number of Monitoring locations for		
22.1. Meteorology (Nos.)	1	
22.2. Ambient Air Quality (Nos.)	8	
22.3. Surface Water Quality (Nos.)	0	
22.4. Ground Water Quality (Nos.)	8	
22.5. Ground water level (Nos.)	1	
22.6. Noise Level (Nos.)	8	
22.7. Soil Quality (Nos.)	8	
22.8. Summary on the baseline situation	Monitoring locations VRBA.pdf	
22.9. Map showing the monitoring locations	Monitoring locations VRBA.pdf	

Consultant Details

21. Whether QCI/NABET Accredited EIA Consultant engaged?	Yes
21.1. Accreditation No. / Organization Id	ORG100721
21.2. Name of the EIA Consultant Organization	Environmental Management Division of India Glycols Limited
21.3. Address	A- 1 Industrial Area, Bazpur Road, Kashipur
21.4. Mobile No.	9855405264
21.5. E-mail Id	iglendk@gmail.com
21.6. Category of Accreditation (Eligible for Category A / Eligible for Category B)	B
21.7. Sector(s) of Accreditation	4,21,22,1,32A,38
21.8. Validity of Accreditation	17/06/2024

Application for ToR (Category A, B1, and B2 Violation)/EC (Category B2) - Form 1

Project Details

1. Introduction of Project or Activity

1.1. Need for the project or activity and its importance to the country/region	Morethan 39000 beds biomedical waste is in 75 KM area	
1.2. Demand - Supply Gap and Domestic and export markets, if any	Demand are very high for CBWTF for in 75 KM area	

2. Social Infrastructure

2.1. Readily available	The proposed location is in industrial area all the facilites are available	
2.2. Proposed to be developed	CBWTF and alied ficilites within project site	

3. Connectivity to the project or activity

3.1. Nearest railway station and its distance (in Km)	Jeonathpur Railway Station	1.68
3.2. Nearest Airport and its distance (in Km)	Lal Bahadur Shastri International Airport	30.15
3.3. Nearest Town/City/District head quarter and its distance (in Km)	Ramnagar	4.15
4. Soil classification	The soils were classified in two broad groups, alluvial and residual, representing the different stages of soil development resulting from a sub-humid to a humid climate and the physical and chemical weathering of the soils	
5. Distance from the HFL of the river in m, if any	2900	

6. Benefits of the project

6.1. Social benefits of project or activity	opportunity for employment and better management of the BMW
6.2. Financial benefits of project or activity	Financial benefit to the state
7. Project/ Activity Construction Status	To be Started
7.1. Likely date of start of construction activity (start of mining operations in case of mining proposals)	01/05/2023
7.2. Likely date of completion of construction activity (end of mining operations in case of mining proposals)	31/07/2023

Construction Details

2. Use of resources for construction or operation of the project

2.1. Whether requirement of water involved in the project?	Yes

Details of Water requirement during Construction stage

Source	Quantity in KLD Present	Quantity in KLD with Expansion	Method of water withdrawal	Distance from Source in mtr	Mode of Transport	Details of Permission
Tanker Water Supply	5	0	Tanker	1000	Tankers	Try to explore the posibility for treated water

Details of Water requirement during Operational stage

Source	Quantity in KLD Present	Quantity in KLD with Expansion	Method of water withdrawal	Distance from Source in mtr	Mode of Transport	Details of Permission
Ground Water	8	0	Tube well	0	Pipeline	Ground water NOC is exempted

2.2. Other information, if any	NA
2.3. Whether requirement of Minerals and/or fuels involved in the project?	Yes

Details thereof

Name of Minerals / Fuel	Quantity per annum in MT	Source	Mode of transport	Distance from source in Km	Details of linkage / supply agreement
HSD	65	Open Market	Road	10	NA

2.4. Other information, if any	None
2.5. Construction material	Yes

Construction material	Quantity in MT	Source	Mode of transport	Distance from source in Km
Cement	7	Open Market	Road	10

2.6. Timber	No
2.7. Electric Power:	Yes
2.7.1. Total Electricity requirement (MW):	0.63
2.7.2. Main Source:	UPCL
2.7.3. Renewable energy proposed to install (KW):	1

2.7.3. Renewable energy proposed to install (KW):	1
2.7.4. Percentage contribution of renewable energy:	2
2.7.5. Standby arrangements (details of DG Sets):	Yes £2.5 KVA (01 No. DG set
2.7.6. Stack height in m (DG set):	10
2.7.7. Energy conservation measures:	Solar
2.8. Whether any other natural resources / other raw materials required?:	No
2.9. Whether any use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies) required?	No
2.10. Whether any resource efficiency / optimization / recycling and reuse envisaged in the project?	No

Physical Changes

3. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality:

3.1. Whether any permanent or temporary change in land use, land cover or topography due to project activity?	No
3.2. Whether any clearance of existing vegetation due to project activity?	No
3.3. Whether any loss of native species or genetic diversity?	No
3.4. Whether any demolition works involved in project activity?	No
3.5. Whether any linear structures proposed for diversion or demolition due to project activity? (e.g. roads, transmission lines, rail line, pipeline, conveyor, etc.)	No
3.6. Whether any closure or diversion of existing transport routes or infrastructure due to project leading to changes in traffic movements?	No
3.7. Whether any closure or diversion of water bodies present in project area or realignment of water courses passing through project area?	No
3.8. Whether any dismantling or decommissioning or restoration works or reclamation works (Long-term/ short-term)?	No
3.9. Whether any construction works for temporary use for project activity?	Yes

Details	No.s	Built up area	Remarks
Industrial Sheds and office building	1	2500	NA

	Total No.s	Total Built up area in Sq.m
Total	1	2500

3.10. Whether any cut and fill excavations proposed for the project activity?	No
3.11. Whether any underground works including tunnelling?	No
3.12. Whether any dredging involved in project?	No
3.13. Whether any offshore structures involved in project?	No
3.14. Whether any new road, rail, sea, airports, helipad, etc. during construction or operation?	No
3.15. Whether any construction of new linear structures? (e.g. transmission lines, pipelines, etc.)	No
3.16. Whether any Facilities for storage of goods or raw materials?	No
3.17. Whether any Facilities for long term/ permanent housing of operational workers/ staff?	No
3.18. Whether any impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No
3.19. Whether any Stream crossings, temporary and permanent?	No
3.20. Whether any influx of people to an area in either temporarily or permanently?	Yes
3.20.1. No. of people likely to influx to an area temporarily	50
3.20.2. No. of people likely to influx to an area Permanently	25
3.20.3. Other information, if any	NA
3.21. Whether any other information would like to submit?	No

Pollution Details

4. Release of pollutants to Air and Mitigation measures

4.1. Whether any probable air pollutants generated?	Yes

Air Pollution Source	Probable Pollutants	Mitigation Measures
Others	PM, SO2 NOx dioxins and furans	Venturi and wet Scrubber, Cyclone separator and Mist eliminator

4.2. Other information, if any	NA

4.3. Generation of Noise & Vibration and mitigation measures

4.3.1. Whether any probable generation of Noise and vibration from the proposed project?	No
4.3.2. Whether any probable generation of Light and Heat?	No

4.4. Discharge of pollutants to water and mitigation measures

4.4.1. Whether any probable water pollutants generated?	No
4.5. Probable sources of water pollutant	No

Details of reuse / recycle of wastewater

Details	Qty / Capacity
4.6. Quantity of waste water generation per day (KLD)	4.75
4.7. Quantity of treated water proposed to use per day (KLD)	3.90
4.8. Quantity of treated water proposed to discharge outside the premises (KLD)	0
4.9. Purpose for which treated water is proposed to use	Green belt,Process (Scrubbing) Steam Generation (Autoclaving) Miscellaneous i.e., Floor washing, Vehide washing etc.
4.10. Whether it is proposed to opt/avail common off-site Sewage Treatment Plant (CSTP)/Effluent Treatment Plant (CETP) facility?	No
4.11. Whether it is proposed to setup on-site Sewage Treatment Plant (STP)/Effluent Treatment Plant (ETP) facility?	Yes
4.11.1. Whether 100% of the waste water generated will be treated?	Yes
4.12. Type of treatment plant false	ETP
4.13. ETP/STP Capacity	STP
	N/A KLD
	ETP
	10 N/A
4.14. ETP/STP Technology	STP ETP
	TP may have treatment unit operations comprising collection tank, O & G trap, chemical N/A
4.15. Whether the adequacy of the Sewage Treatment Plant (STP) or Effluent Treatment Plant certified by an independent expert?	No
4.15.1. Reasons thereof	At the time of CTO
4.16. Whether any other mitigation measures proposed?	No
4.17. Whether Dual Plumbing System proposed to be implemented?	No
4.17.1. Reasons thereof	ETP is proposed
4.18. Whether any discharge of treated effluent involved?	No

Water Requirements

7. Ground water intersection and water conservation measures:

7.1. Whether ground water table intersection involved in the project activities?	No
7.2. Area category from Groundwater availability perspective?	Safe
7.3. Whether Rainwater harvesting proposed	No
7.4. Whether any other water conservation measures proposed?	No
7.5. Whether the ZLD is proposed?	Yes
7.5.1. Details of ZLD	Waste water will be reused

8. Greenbelt

8.1. Area proposed for green belt (in Ha)	0.06

8.1. Area proposed for green belt (in Ha)	0.06
8.2. Width of green belt (in m) along the boundaryof the project or activity	3.5
8.3. Percentage of the total area covered under green belt	33
8.4. Details of the species proposed for plantation	Loca, Native and fast growing
8.5. No. of tree saplings to be planted	25
8.6. Funds allocated for plantation in Lakhs.	2.5

Waste Generation

9. Production of wastes during construction or operation or decommissioning

9.1. Whether any generation of Solid waste (domestic wastes)?	Yes

Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Domestic waste	Office staff and others	1440	Domestic wastes are segregatedat source, collected in bins and composted.	Road

9.2. Whether any generation of plastic waste?	Yes

Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Plastic waste	BMW & Domestic	100	Authorized vender	Road

9.3. Whether any generation of e-waste?	Yes

Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Electronic waste	Domestic	50	Authorized vender	Road

9.4. Whether any generation of batteries waste?	No

9.5. Whether any generation of Bio-medical waste?	Yes

Name of the waste	Source	Qty (T?A)	Mode of disposal	Mode of Transport
This is CBWTF site	Hospitals in coverage area	1800	CBWTF	All

9.6. Whether any generation of hazardous wastes (as per Hazardous Waste Management Rules)?	Yes

Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Ash from incinerator and flue gas cleaning residue	Ash from incinerator and flue gas cleaning residue	5	Send to TSDF / Co processing industries	Road
Spent Oil from DG set	Spent Oil from DG set	5	Handed over to authorized recyclers/re-processors	Road
Discarded Containers /Barrels	Discarded Containers /Barrels	100	Handed over to authorized recyclers/re-processors	Road
Sludge from Wet Scrubbers	Sludge from Wet Scrubbers	1	Send to TSDF / Co processing industries.	Road

9.7. Whether any generation of construction or demolition wastes?	No
9.8. Whether any generation of other wastes?	No
9.9. Whether any generation of surplus products?	No
9.10. Whether measures for waste minimization proposed?	No

Risk Assessment

10. Whether any risks associated with project activities which could affect human health or the environment, -

10.1. From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances?	No
10.2. From any other causes?	No
10.3. Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No
10.4. Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No
10.5. Could project adversely affect the wellbeing of people in project area e.g. by changing living conditions?	No
10.6. Vulnerable groups of people who could be adversely affected by the project e.g. hospital patients, children, the elderly etc.	No
10.7. Risk Management Plan	No
10.8. Whether any likely impacts of the proposed activity on the existing facilities adjacent to the proposed site due to generation of dust, smoke, odorous fumes or other hazardous gases?	No

11. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality	
11.1. Whether lead to development of supportive facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: Supportive infrastructure (roads, power supply, waste or waste water treatment, etc.); housing development; industries in supply chain and downstream; any other?	No
11.2. Whether lead to after-use of the site, which could have an impact on the environment? (e.g. mine void, dump sites, etc.)	No
11.3. Whether set a precedent for later developments?	No
11.4. Have cumulative effects due to proximity to other existing or planned projects with similar effects?	No
11.5. Whether lead to growth of alien species, if any?	No
11.6. Is there any threat of the project to the biodiversity (including displacement of fauna-both terrestrial and aquatic and avi-fauna or creation of barriers for their movement)?	No
11.7. Will the proposed project in any way result in the obstruction of a view, scenic amenity or landscapes?	No
11.8. Is there any impact on anthropological or archaeological sites or any important site feature in the vicinity of the proposed site have been considered?	No
11.9. Will the proposed project result in any changes to the demographic structure of local population?	No
11.10. Will the project cause adverse effect on local communities, disturbance to sacred sites or other cultural values?	No

12. CBWTF Proposals

Project configuration	
12.1. Project components	Incinerator (02 No.) standby Autoclave Shredder Chemical Disinfection Tank: ETP
12.2. Any other details	NA
12.3. Nearest operational CBWTF details	20
12.4. Details of wastes to be handled	3900 beds waste as per PCB data in Chandauli district only
12.5. Details of member units	3900
12.6. Mode of transportation of wastes to CBWTF	Road
12.7. Land area distribution for proposed activities in Ha	0.20

Enclosures

13. Layout Plan showing the components of the project and green belt proposed; general location and specific location of the project along with coordinates	LAYOUT.pdf
14. Schematic representation of the feasibility drawings which give information for EIA purpose	Schematic representation of the feasibility drawings which give information for EIA purpose.pdf

15. Additional Information

S. No.	Document Name	Remark	Document
1	Cover letter	Cover letter	Cover Letter vrba seiaa.pdf
2	Standard ToR	Standard ToR	Proposed TOR.pdf

Undertaking

16. ☑ I hereby give undertaking that the data and information given in the application and enclosures aretrue to be best of my knowledge and belief and I am aware that if any part of the data and information is found to be false or misleading at any stage, the project will be rejected and clearance given if any to the project will be revoked at our risk and cost. In addition to the above, I hearby give undertaking that no activity/construction/expansion has been taken up

16.1. Name	Ratan Deo Singh
16.2. Designation	Director
16.3. Company	VRBA BIO WASTE SOLUTION PRIVATE LIMITED
16.4. Address	Lane No- 3, NI/66-R-25 Shiv Prasad Gupt Colony Lanka
16.5. Date	07/02/2023

ANNEXURE NO. R/4

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File No.7222

Goverment of India

State Level Environment Impact Assessment Authority

Uttar Pradesh

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To,

M/s VRBA BIO WASTE SOLUTION PRIVATE LIMITED
Lane No- 3, N1/66-R-25 Shiv Prasad Gupt Colony Lanka,
Varanasi-221005
Uttar Pradesh

Tel.No.--1; Email:ratandeo72@gmail.com

Sub. Terms of Reference to the Proposed Common Bio Medical Waste Treatment Facility (CBWTF) VRBA Bio Waste Solution Pvt. Ltd. E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, Lane No- 3, N1/66-R-25 Shiv Prasad Gupt Colony Lanka

Dear Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1) along with a Pre-feasibility Report. The details of the proposal are given below:

1. Proposal No.:	SIA/UP/MIS/82713/2022
2. Name of the Proposal:	Proposed Common Bio Medical Waste Treatment Facility (CBWTF) VRBA Bio Waste Solution Pvt. Ltd. E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh
3. Category of the Proposal:	INFRA-2
4. Project/Activity applied for:	7(d)(a)Common Bio-Medical Waste Treatment Facility
5. Date of submission for TOR:	22 Aug 2022

Date : 24-08-2022

Member Secretary
(Member-Secretary, SEIAA)

Office : **Uttar Pradesh Pollution Control Board**
Phone No : **-1** Mobile : **9839097497**
Email id : **msseiaaup@gmail.com**

Note : This is auto tor granted letter.

In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

7(da): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR BIO-MEDICAL WASTE TREATMENT FACILITIES AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

I. Project Details

i. Importance and benefits of the project.

ii. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.

iii. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

iv. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.

v. List of waste to be handled and their characteristics. Details of temporary storage facility for storage of Bio-medical waste at project site.

vi. Other chemicals and materials required with quantities and storage capacities.

vii. Detailed design of pre-treatment and waste stabilization facility of *Bio-medical waste.*

viii. *Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the "* Bio-Medical Waste Management Rules, 2016 *", notified by the MoEF&CC on 28th March, 2016.*

ix. Process description along with major equipment and machineries, process flow sheet (quantitative) from *Bio-Medical waste* material to disposal to be provided.

x. Details of man-power requirement (regular and contract).

xi. A detailed layout of the project site indicating all the project components.

II. Road and Traffic

xii. Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures

xiii. Examine the details of transportation of Bio-Medical wastes, and its safety in handling.

III. Land Environment

xiv. Detailed soil analysis of the site including its permeability, water holding capacity be included.

xv. Submit the present land use and permission required for any conversion such as forest, agriculture etc.

xvi. Specify the land area and space allotted for each activity proposed within the facility. The area requirements for each activity shall be calculated as per the CPCB guidelines for the specified activity.

xvii. Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xviii. The EIA would address to the conformity of site to the stipulations as made in the Bio-Medical Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules. NOC shall be obtained from State Pollution Control Board/Committee (SPCB/SPCC) regarding site suitability for establishment of Bio-Medical Waste Treatment Facilities.

xix. Post project reclamation management program with financial allocation.

IV. Environmental Monitoring and Management

xx. Examine and submit the details of on line pollutant monitoring.

xxi. Project proponent must ensure Good Combustion Practice (GCP) to reduce the possibilities of formation of 'Total dioxins and furans'. In addition, GCP must be coupled with appropriate End-of-the-pipe treatment at low temperature to reduce the emission of 'Total dioxins and furans' below the standards. Further, the project proponent must provide detailed Standard operating procedure (SOPs) for sampling and monitoring of 'Total dioxins and furans'.

xxii. Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour control

xxiii. Water quality around the landfill site shall be monitored regularly to examine the impact on the ground water.

xxiv. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

xxv. Air Quality Index shall be calculated for base level air quality.

xxvi. Baseline data on Ground water quality is required.

xxvii. Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

V. Waste Management

xxviii. Examine and submit details of the proposed odour control measures.

xxix. The storage and handling of Bio-Medical wastes shall be as per the Bio-Medical Waste Management Rules, 2016.

xxx. Details of storage and disposal of pre-processing and post-processing rejects/inerts and products. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.

xxxi. Details of hazardous/solid waste generation and their management.

VI. Water Environment

xxxii. Detailed hydro-geological studies and possible impact if any accidental contamination occurs shall be included.

xxxiii. Examine and submit details of monitoring of water quality around the landfill site.

xxxiv. Examine and submit details of impact on water body and mitigative measures during rainy season.

xxxv. Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on

peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.

VII. Water Management

xxxvi. Details of effluent treatment and recycling process.

xxxvii. A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

VIII. Energy Management

xxxviii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.

IX. Disaster Management Plan

xxxix. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

xl. Hazard identification and proposed mitigation measures.

X. Green Belt

xli. A detailed Plan for green belt development.

XI. Socioeconomic Environment

xlii. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

xliii. The project proponents shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.

XII. Court Cases

xliv. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

XIII. Miscellaneous

xlv. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Incinerator

****

VRBA
BIO WASTE SOLUTION
PVT. LTD.
GSTIN No. : 09AAHCV3492R1ZB, PAN No. : AAHCV3492R

To

The Member Secretary, SEIAA,
Directorate of Environment, Vineet Khand-1,
Gomti Nagar, Lucknow-226010

Subject: Environment Clearance for Proposed Common Bio Medical Waste Treatment Facility (CBWTF) by VRBA Bio Waste Solution Pvt. Ltd. at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110.

Ref: Auto Generated Standard TOR, File No.7222, Proposal No. SIA/UP/MIS/82713/2022

Sir

We are hereby submitting the Final EIA & EMP report along with relevant annexures of the Proposed Common Bio Medical Waste Treatment Facility (CBWTF) at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110. The project falls under category 7(da) of EIA Notification 2006.

We hereby request to SEIAA to kindly consider our proposal for grant of EC at the earliest.

Thanks & Regards

Authorized Signatory
VRBA Bio Waste Solution Pvt. Ltd

ADDRESS : E-46, INDUSTRIAL AREA,RAMNAGAR,PHASE-1,CHANDAULI,U.P. 221110
Office Address : Lane No.3,N1/66-R-25,Shiv Prasad Gupt Colony Lanka, Varanasi. U.P. 221005
9161286666, 8573025000
vrbabiowastesolution@gmail.com

FINAL EIA/EMP REPORT OF PROPOSED COMMON BIOMEDICAL WASTE TREATMENT FACILITY (CBWTF)

At

E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh.

OF

VRBA Bio Waste Solution Pvt. Ltd.

Lane No. 3, N1/66-R-25, Shiv Prasad Gupta Colony Lanka, Varanasi, Uttar Pradesh

TOR Details: SEIAA Uttar Pradesh TOR File No.7222, Proposal No. SIA/UP/MIS/82713/2022

Baseline data – 1st October 2022 to 31st December 2022

Prepared by
Environment Management Division of M/s India Glycols Limited, Kashipur
(NABET, QCI Approved -)
A- 1 Industrial Area, Bazpur Road, Kashipur, Uttarakhand
February 2023

.

File No.7222

Goverment of India

State Level Environment Impact Assessment Authority

Uttar Pradesh

***

To,

M/s VRBA BIO WASTE SOLUTION PRIVATE LIMITED
Lane No- 3, N1/66-R-25 Shiv Prasad Gupt Colony Lanka,
Varanasi-221005
Uttar Pradesh

Tel.No.--1; Email:ratandeo72@gmail.com

Sub. Terms of Reference to the Proposed Common Bio Medical Waste Treatment Facility (CBWTF) VRBA Bio Waste Solution Pvt. Ltd. E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, Lane No- 3, N1/66-R-25 Shiv Prasad Gupt Colony Lanka

Dear Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1) along with a Pre-feasibility Report. The details of the proposal are given below:

1. Proposal No.:	SIA/UP/MIS/82713/2022
2. Name of the Proposal:	Proposed Common Bio Medical Waste Treatment Facility (CBWTF) VRBA Bio Waste Solution Pvt. Ltd. E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh
3. Category of the Proposal:	INFRA-2
4. Project/Activity applied for:	7(d)(a)Common Bio-Medical Waste Treatment Facility
5. Date of submission for TOR:	22 Aug 2022

Date : 24-08-2022

Member Secretary
(Member-Secretary, SEIAA)

Office : **Uttar Pradesh Pollution Control Board**
Phone No : **-1** Mobile : **9839097497**
Email id : **msseiaaup@gmail.com**

Note : This is auto tor granted letter.

In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

7(da): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR BIO-MEDICAL WASTE TREATMENT FACILITIES AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

I. Project Details

i. Importance and benefits of the project.

ii. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.

iii. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

iv. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.

v. List of waste to be handled and their characteristics. Details of temporary storage facility for storage of Bio-medical waste at project site.

vi. Other chemicals and materials required with quantities and storage capacities.

vii. Detailed design of pre-treatment and waste stabilization facility of *Bio-medical waste.*

viii. Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the " Bio-Medical Waste Management Rules, 2016 *", notified by the MoEF&CC on 28th March, 2016.*

ix. Process description along with major equipment and machineries, process flow sheet (quantitative) from *Bio-Medical waste* material to disposal to be provided.

x. Details of man-power requirement (regular and contract).

xi. A detailed layout of the project site indicating all the project components.

II. Road and Traffic

xii. Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures

xiii. Examine the details of transportation of Bio-Medical wastes, and its safety in handling.

III. Land Environment

xiv. Detailed soil analysis of the site including its permeability, water holding capacity be included.

xv. Submit the present land use and permission required for any conversion such as forest, agriculture etc.

xvi. Specify the land area and space allotted for each activity proposed within the facility. The area requirements for each activity shall be calculated as per the CPCB guidelines for the specified activity.

xvii. Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xviii. The EIA would address to the conformity of site to the stipulations as made in the Bio-Medical Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules. NOC shall be obtained from State Pollution Control Board/Committee (SPCB/SPCC) regarding site suitability for establishment of Bio-Medical Waste Treatment Facilities.

xix. Post project reclamation management program with financial allocation.

IV. Environmental Monitoring and Management

xx. Examine and submit the details of on line pollutant monitoring.

xxi. Project proponent must ensure Good Combustion Practice (GCP) to reduce the possibilities of formation of 'Total dioxins and furans'. In addition, GCP must be coupled with appropriate End-of-the-pipe treatment at low temperature to reduce the emission of 'Total dioxins and furans' below the standards. Further, the project proponent must provide detailed Standard operating procedure (SOPs) for sampling and monitoring of 'Total dioxins and furans'.

xxii. Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour control

xxiii. Water quality around the landfill site shall be monitored regularly to examine the impact on the ground water.

xxiv. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

xxv. Air Quality Index shall be calculated for base level air quality.

xxvi. Baseline data on Ground water quality is required.

xxvii. Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

V. Waste Management

xxviii. Examine and submit details of the proposed odour control measures.

xxix. The storage and handling of Bio-Medical wastes shall be as per the Bio-Medical Waste Management Rules, 2016.

xxx. Details of storage and disposal of pre-processing and post-processing rejects/inerts and products. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.

xxxi. Details of hazardous/solid waste generation and their management.

VI. Water Environment

xxxii. Detailed hydro-geological studies and possible impact if any accidental contamination occurs shall be included.

xxxiii. Examine and submit details of monitoring of water quality around the landfill site.

xxxiv. Examine and submit details of impact on water body and mitigative measures during rainy season.

xxxv. Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on

peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.

VII. Water Management

xxxvi. Details of effluent treatment and recycling process.

xxxvii. A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

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1 INTRODUCTION

1.1 Purpose of the Project

Improper management of waste generated in health care facilities causes a direct health impact on the community, the health care workers and on the environment. Every day, a significant amount of potentially infectious bio-medical waste is generated around the world. Indiscriminate disposal of bio-medical waste and exposure to such waste posesa serious threat to environment and to human health, bio-medical waste requires specific treatment and management prior to its final disposal

Ministry of Environment, Forest & Climate Change (MoEFCC), Govt. of India has introduced the new notification as Biomedical Waste Management Rules, 2016 based on draft Biomedical Waste (Management & handling) 2011, under the Environment (Protection) act 1986 which replaced the earlier Biomedical waste (management & handling) rules, 1998. In accordance with the rules, every occupier of a healthcare establishment (HCE) shall either set up requisite biomedical waste treatment facilities on site or ensure requisite treatment of the biomedical waste at an approved common treatment facility. It is to ensured that no untreated biomedical waste shall be kept stored beyond a period of 48 hours.

According to Bio-Medical Waste Management Rules 2016, Bio-Medical Waste (BMW) means "any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps".

The treated waste may finally be sent for disposal after incineration or for recycling purposes.

Installation of individual treatment facilities by small healthcare units requires comparatively high capital investment. In addition, it requires separate manpower and infrastructure development for proper operation and maintenance of treatment systems. The concept of CBWTF not only addresses such problems but also prevents proliferation of treatment equipment in a 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 per kilogram gets significantly reduced especially with the introduction of new Biomedical Waste

Management Rules in 2016 which prescribes the standards for dioxin & furans from incinerator. Its considerable advantages have made CBWTF popular and proven concept in many developed countries. CBWTF as an option has been legally introduced in India. The Bio-medical Waste Management Rules makes it mandatory for the bio-medical waste generator within 75 km radius to treat the biomedical waste at the CBWTF.

The Government of India has made it mandatory for all developmental projects to prepare a detailed EIA study so that the impacts of the proposed developmental activity can be predicted and a suitable management plan can be implemented before commissioning the project.

Environmental Impact Assessment (EIA) serves as a useful tool in prediction of potential impacts on the surrounding environment due to developmental project. The purpose of this EIA report is to reduce the burden of environmental impacts for sustainable development. It helps the project proponent, impact assessment authorities, regulatory agencies and other stakeholders in understanding the project, environmental impacts and mitigation measures, and establishing emission requirements and other measures early in the project cycle. This report describes the project location, baseline environmental scenario, potential impacts of the project on the environment and proposed measures for effective environment management during the project cycle (Environmental Management Plan during construction and operation stage of the project).

M/s VRBA Bio Waste Solution Pvt. Ltd. is a private company proposes to setup a Common Bio-medical Treatment Facility (CBWTF) at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh. The proposed project of setting up the Common Bio-medical Waste Treatment Facility (CBWTF) includes Incinerator with Air Pollution Control Device (APCD), Autoclave, Shredder and Effluent Treatment Plant. It is proposed to utilize 0.202 ha of land for the proposed project.

As per EIA Notification 2006, the project was earlier considered by MoEF&CC under Category “B” Projects of activity 7(d), namely Common hazardous waste Treatment and Disposal Facility. Subsequently in the amendment vide Gazette Notification dated 17thApril 2015, separate entry has been made therein for Bio-medical Waste Treatment Facilities. Thus, all Projects of Bio-medical Waste Treatment Facilities now fall under “Category B” activity

7(da). As a part of above process, the application (Form-1 along with Pre-Feasibility Report) was submitted for setting up of Biomedical Waste Treatment Facility.

Environment Management Division of M/s India Glycols Limited, Kashipur, a NABET approved consultant with Certificate No. NABET/EIA/2124/IA0078 dated 19/07/2024, has been assigned for the Environmental Impact Assessment (EIA) studies. The study is done based on Standard Terms of Reference (TOR) issued by State Environmental Impact Assessment Authority, Uttar Pradesh for assessing the impact of the proposed of Common Biomedical Waste Treatment Facility on various environmental parameters in the study area.

1.2 Identification of the Project

The present proposal is for setting up of Common Biomedical Waste Treatment Facility (CBWTF), which includes Incinerator with APCD, Autoclave, Shredder and Effluent Treatment Plant capacity 10.0 KLD which will be built at project site located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh. It is proposed to utilize 0.202 ha of land for setting up of Common Biomedical Waste Treatment Facility.

Common Bio-Medical Waste Treatment Facility (CBWTF) is providing services to Health Care Units for collection of bio-medical wastes for its final disposal to their site. Bio-Medical Waste Management Rules 2016, stipulates that occupier of every organization generating bio-medical waste (as defined in the rules) must manage bio-medical waste as prescribed in the rules such that it does not cause any harm to the environment.

1.3 Objective of the Project

- Establish a Common Bio-medical Waste Treatment facility including the Incinerator, autoclave, shredder and effluent treatment unit.
- Collection of Segregated Biomedical waste and its transportation, storage, treatment and disposal in accordance to the Biomedical Waste Management Rules 2016.
- Compliances with statutory and environmental norms.
- Develop concise waste management principles.

- Introduce a continuing waste management education program for all staff to increase awareness of Occupational Health & Safety issues and waste minimization principles.
- Adopt policies and procedures to minimize the environmental impacts of waste treatment and Disposal.

1.4 Reporting to regulatory authorities as needed.

- Establish a Common Bio-medical Waste Treatment facility including the Incinerator, autoclave, shredder and effluent treatment unit.
- Collection of Segregated Biomedical waste and its transportation, storage, treatment and disposal in accordance to the Biomedical Waste Management Rules 2016.
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- Develop concise waste management principles.
- Introduce a continuing waste management education program for all staff to increase awareness of Occupational Health & Safety issues and waste minimization principles.
- Adopt policies and procedures to minimize the environmental impacts of waste treatment and
- Disposal.
- Reporting to regulatory authorities as needed

1.5 Relevant Provisions of Biomedical Waste Management Rules 2016

"Bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps.

"Handling" in relation to bio-medical waste includes the generation, sorting, segregation, collection, use, storage, packaging, loading, transportation, unloading, processing, treatment, destruction, conversion, or offering for sale, transfer, disposal of such waste.

"Health Care Facility" means a place where diagnosis, treatment or immunization of human beings or animals is provided irrespective of type and size of health treatment system, and research activity pertaining thereto;

"Major accident" means accident occurring while handling of bio-medical waste having potential to affect large masses of public and includes toppling of the truck carrying bio-medical waste, accidental release of bio-medical waste in any water body but exclude accidents like needle prick injuries, mercury spills.

"Management" includes all steps required to ensure that bio- medical waste is managed in such a manner as to protect health and environment against any adverse effects due to handling of such waste;

"Occupier" means a person having administrative control over the institution and the premises generating biomedical waste, which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, health care facility and clinical establishment, irrespective of their system of Medicine and by whatever name they are called;

"Operator of a common bio-medical waste treatment facility" means a person who owns or controls a Common Bio-medical Waste Treatment Facility (CBMWTF) for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste;

Duties of the Occupier- It shall be the duty of every occupier to-

a. Take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment;
b. Make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed Biomedical

Waste Management Rules 2016 to the common bio-medical waste treatment facility or for the appropriate treatment and disposal.

c. Pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) or National AIDs Control Organization (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;
d. Phase out use of chlorinated plastic bags, gloves and blood bags
e. Dispose off solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;
f. Not to give treated bio-medical waste with municipal solid waste;
g. Provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction;
h. Ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities;
i. Ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974;
j. Ensure occupational safety of all its health care workers and others involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipment;
k. Maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and color coding.
l. Report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken
m. Establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months.

1.5.1 Duties of the operator of a common bio-medical waste treatment and disposal facility:

It shall be the duty of every operator to-

a. Take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with Biomedical Waste Management Rules, 2016 and guidelines issued by the Central Government or the central pollution control board from time to time;
b. Ensure timely collection of bio-medical waste from the occupier;
c. Establish bar coding and global positioning system for handling of bio-medical waste within one year;
d. Inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated bio-medical waste in accordance with these rules;
e. Provide training for all its workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter;
f. Assist the occupier in training conducted by them for bio-medical waste management;
g. Report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken and the records relevant thereto;
h. 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;
i. Allow occupier, who are giving waste for treatment to the operator, to see whether the treatment is carried out;
j. Shall display details of authorization, treatment, annual report etc.
k. After ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorization or registration from the respective State Pollution Control Board or Pollution Control Committee;
l. Supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required;
m. Common bio-medical waste treatment facility shall ensure collection of biomedical waste on holidays also;

1.5.2 Duties of Common Biomedical Waste Treatment Facility (CBWTF):

- Guidelines for Handling, Treatment and Disposal of Waste Generated during Treatment/Diagnosis/ Quarantine of COVID-19 Patients:
- Report to SPCBs/PCCs about receiving of waste from COVID-19 isolation wards / Quarantine
- Camps / Quarantined homes / COVID-19 Testing Centers;
- Operator of CBWTF shall ensure regular sanitization of workers involved in handling and collection of biomedical waste;
- Workers shall be provided with adequate PPEs including three layer masks, splash proof aprons/gowns, nitrile gloves, gum boots and safety goggles;
- Use dedicated vehicle to collect COVID-19 ward waste. It is not necessary to place separate label on such vehicles;
- Vehicle should be sanitized with sodium hypochlorite or any appropriate chemical disinfectant after every trip.
- COVID-19 waste should be disposed-off immediately upon receipt at facility.
- In case it is required to treat and dispose more quantity of biomedical waste generated from
- COVID-19 treatment, CBWTF may operate their facilities for extra hours, by giving information to SPCBs/PCCs.
- Operator of CBWTF shall maintain separate record for collection, treatment and disposal of COVID-19 waste.
- Do not allow any worker showing symptoms of illness to work at the facility. May provide adequate leave to such workers and by protecting their salary.
- CBWTF operator shall register on 'COVID19BWM' Tracking App developed by CPCB and also ensure registration of Waste Handler (with vehicle) for entering the data of COVID-19 biomedical waste received and disposed.

1.6 Salient features

The salient feature of the project is summarized in **Table 1.**

Table 1-1: Salient Features of the Project

<table>
<tr><th>S.No.</th><th>Parameters</th><th>Description</th></tr>
<tr><td>1.</td><td>Identification of Project</td><td>The amendment vide Gazette Notification dated 17th April 2015, separate entry has been made there in form Bio-medical Waste Treatment Facilities. Thus, all Projects of Bio-medical Waste Treatment Facilities now fall under “Category B activity 7(da).”</td></tr>
<tr><td>2.</td><td>Project Proponent</td><td>M/s VRBA Bio Waste Solution Pvt. Ltd.</td></tr>
<tr><td>3.</td><td>Brief description of nature of the project</td><td>Biomedical waste is generated from all health care institutions; nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks etc. The responsibility of collection, treatment and safe disposal of all types of solid wastes rests with the generator.
A Common Bio-medical Waste Treatment Facility (CBWTF) is proposed to be set up where bio-medical waste, generated from a number of healthcare units, will be suitably treated as per the prescribed procedure & norms laid down in the regulation.
Proposed project of setting up of the Common Bio- medical Waste Treatment Facility includes Incinerator, Autoclave, Shredder and Effluent Treatment Plant. The present proposal is to utilize 0.202 ha land for setting up of Biomedical Waste Treatment Facility.</td></tr>
<tr><td>4.</td><td colspan="2">Salient Features of the Project</td></tr>
<tr><td>5.</td><td>Proposed plant capacity</td><td>Proposed Capacity of CBWTF:
<table>
<tr><th>Equipment</th><th>Capacity</th><th>Number</th></tr>
<tr><td>Incinerator</td><td>300 kg/hr</td><td>1</td></tr>
<tr><td>Autoclave</td><td>1000 litre/Batch</td><td>1</td></tr>
<tr><td>Shredder</td><td>150 kg/hr</td><td>1</td></tr>
<tr><td>Chemical Disinfection Tank</td><td>1500 Ltr</td><td>1</td></tr>
<tr><td>Effluent Treatment Plant</td><td>10 KLD</td><td>1</td></tr>
</table></td></tr>
<tr><td>6.</td><td>Category of Projects</td><td>Category “B” and Schedule- 7(da)</td></tr>
<tr><td>7.</td><td>Number of working days</td><td>365</td></tr>
<tr><td>8.</td><td>Total Plot Area</td><td>0.202 ha</td></tr>
<tr><td>9.</td><td>Khasra Numbers</td><td>E-46</td></tr>
</table>

10.	Location	E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110
11.	Coordinates of the Plant	1. 25°14'51.96"N 83° 3'34.33"E 2. 25°14'51.66"N 83° 3'35.31"E 3. 25°14'50.22"N 83° 3'34.70"E 4. 25°14'50.14"N 83° 3'33.53"E
13.	Elevation	78m-80 m
14.	Nearest habituated area	Hamidpur, Approx. 1.09 km towards West
15.	Nearest Main Public Road	SH-19 is about Approx. 0.57 Km towards North.
16.	Nearest Railway station/Airport	Jeonathpur Railway Station, approx. 1.68 km in SSE direction. Pt. Deen Dayal Upadhyaya Railway Station, approx. 7.22 km in NNE direction Lal Bahadur Shastri International Airport, approx. 30.15 km in North West direction
17.	Nearest water body	Ganga River, approx. 2.99 km in West direction
18.	Water requirement	Water requirement for the proposed CBWTF project is 11 KLD. Fresh- 7.10 KLD Recycled- 3.90 KLD
19.	Source of water	Ground water Supply (Water will be abstracted only after getting NOC from CGWA).
20.	Wastewater Generation	Waste water generated from the treatment of Biomedical waste during autoclaving, washing of floors, and domestic purpose etc. is 5.25 KLD and it shall be treated in effluent treatment plant and reuse in process
21.	Man Power	During Construction phase, the labors and workers will be hired from nearby villages. Total 20 persons are proposed to hire for plant operation including officers, skilled and unskilled workers.
22.	Air Pollution Control Device	Wet Scrubber, Cyclone and Bag Filter
23.	Nos. of Stack	2
24.	Power requirement	DG Set of 82.5 KVA is proposed for the project and lines will be taken from the authorized electricity board. ~ 1% of the total power load will meet through solar energy.
25.	Alternative site	No Alternative site is examined
26.	Land form, Land use and land ownership	The land for project is E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh.

1.6.1 Project Proponent

VRBA Bio Waste Solution Pvt. Ltd.

Lane No. 3, N1/66-R-25, Shiv Prasad Gupt Colony Lanka, Varanasi, Uttar Pradesh

Email: vrbabiowastesolution@gmail.com

1.6.2 Brief Description of the Project

1.6.2.1 Nature of the project

A Common Bio-medical Waste Treatment Facility (CBWTF) is a set up where bio-medical waste, generated from a number of healthcare units, is suitably treated to reduce adverse effects that this waste may pose. The treated waste may finally be sent for disposal in a secured landfill or for recycling purposes.

Proposed project of setting up of the Common Bio-medical Waste Treatment Facility includes Incinerator, Autoclave, Shredder, Storage, Recycling Unit and Effluent Treatment Facility.

Size of the Project

The proposed project of setting up of the Common Bio-medical Waste Treatment Facility (CBWTF) includes Incinerator, Autoclave, Shredder and Effluent Treatment Plant. It is proposed to utilize 0.202 ha land for setting up of Biomedical Waste Treatment Facility.

1.6.2.2 Cost of the Project

Total Cost of the Proposed Project is estimated approximately Rs.2.80 Cr.

1.6.2.3 Location of the Project

The study area of proposed project of setting up of the Common Bio-medical Waste Treatment Facility (CBWTF) is situated at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110.

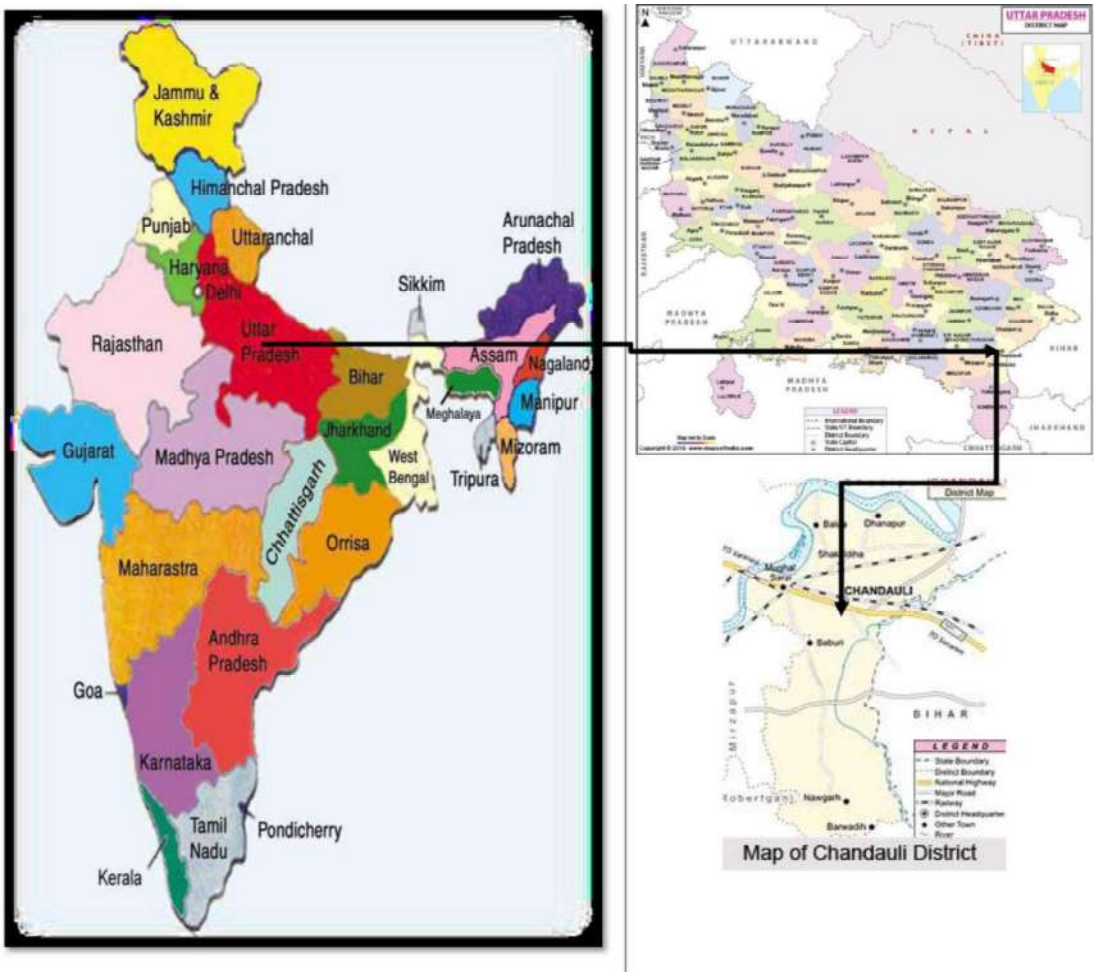


Figure 1-1 : Location of the project

1.7 Importance of Project to Country & Region

In 1983, the World Health Organization Regional office for Europe convened a meeting of concerned personal at Bergen, Norway, which was the first time when this issue was discussed. The seriousness of improper Bio Medical Waste management was brought to the limelight dung the "*beach wash-ups*" during summer 1998; which was investigated by the Environment Protection Agency (EPA) of USA; and it culminated in the passing of Medical Waste Tracking Act (MWTA).

The issue of indiscriminate Bio-Medical Waste management in India has attracted the attention of the highest judicial body at the level of Hon'ble Supreme Court of India and Apex Court has, from time to time issued instructions regarding management of Bio-Medical Waste. In this background in persuasion to the directive of the Court, the Ministry of Environment and Forests,

Government of India notified the Bio-Medical Waste (Management and Handling) Rules on 20thJuly 1998; futher amended in Biomedical Waste Management Ltd, 2016, under the provision of Environment Protection Act 1986. These rules apply to all persons who generate, collect, receive, store, transport, treat, dispose or handle bio-medical waste in any form. The 'prescribed authority' for enforcement of the provisions of these rules in respect of all the health care facilities located in any State/Union Territory is the respective State Pollution Control Board (SPCB)/ Pollution Control Committee (PCC)and in case of health care establishments of the Armed Forces under the Ministry of Defense shall be the Director General, Armed Forces Medical Services (DGAFMS).

'Bio-medical waste' means any waste generated during diagnosis, treatment or immunization of human beings or animals. Management of waste generated from health care facilities is an integral part of infection control and hygiene programs in healthcare settings. These settings are a major contributor to community-acquired infection, as they produce large amounts of biomedical waste.

A Common Bio-medical Waste Treatment Facility (CBWTF) is a set up where bio-medical waste, generated from a number of healthcare units, is imparted necessary treatment to reduce adverse effects that this waste may pose. The treated waste may finally be sent for disposal in a landfill or for recycling purposes. Installation of individual treatment facilities by small healthcare units requires comparatively high capital investment. In addition, it requires separate manpower and infrastructure development for proper operation and maintenance of treatment systems. The concept of CBWTF not only addresses such problems but also prevents proliferation of treatment equipment in a 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 gets significantly reduced. Its considerable advantages have made CBWTF popular and proven concept in many developed countries.

CBWTF as an option has also been legally introduced in India. The Biomedical Waste Management, 2016, gives an option to the bio-medical waste generator that such waste can also be treated at the common bio-medical waste treatment facility. The Second Amendment of the Rules in June, 2000, further eased the bottleneck in upbringing the CBWTF by making Local Authority responsible for providing suitable site within its jurisdiction. The concept of CBWTF

is also being widely accepted in India among the healthcare units, medical associations and entrepreneurs. Recently, a gazette notification dated 28thMarch 2016 has come into effect posing the rules and regulations of handling, storage and treatment of biomedical waste generated under Biomedical Waste Management Rules, 2016.

In order to set up a CBWTF to its maximum perfection, care shall be taken in choosing the right technology, development of CBWTF area, proper designing of transportation system to achieve optimum results.

1.8 Demand- Supply Gap

The Biomedical Waste Management Rules, 2016 stipulates that no occupier shall establish an on-site treatment and disposal facility, if a service of Common Bio-medical Waste Treatment Facility (CBWTF) is available within seventy-five kilometers. There has been a gradual increase in the bio-medical waste generation from the past consecutive years. Present proposal is to utilize 0.202 ha area of s land for setting up of Biomedical Waste Treatment Facility. In the Varanasi Mandal (Districts are Chandauli, Ghazipur, Jaunpur, Varanasi) having total number of beds are 39109 and there is no CBWTF in this Mandal.

1.9 Scope of the study

To conduct EIA Study and prepare report for setting up of Common Biomedical Waste Treatment Facility, which is situated at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh which will be operated accordance to Standard Terms of Reference prescribed by the **SEIAA, U.P TOR File No.7222, Proposal No. SIA/UP/MIS/82713/2022**. Copy of TOR is attached as Annexure-I.

1.9.1 Methodology

The Environment Impact Assessment report has been prepared with the following steps:

Establishment of Baseline Environmental Status

A comprehensive database on the baseline environmental status/conditions of the study area has been established through review, compilation & analysis of:

i) Existing published secondary data/literature/information, and

ii) Primary data generated/collected through initial site surveys and field study. The field monitoring has been carried out as per the guidelines of CPCB and requirement of the MoEF for one complete season. Field study/monitoring has been conducted on:

- Soil Quality
- Water Quality (ground and surface waters)
- Ambient Air Quality
- Noise
- Ecological Aspects
- Socio- Economic Aspects

1.9.2 Environmental Impact Assessment

The project data/activities has been analyzed & linked with the baseline environmental condition in order to list out the affected environmental parameters and assess the likely impacts on such parameters. Compliance of the project with national standards has been duly checked.

1.9.3 Preparation of Environment Management Plan

Environmental Management Plan (EMP) is the key to ensure a safe and clean environment. The desired results from the environmental mitigation measures proposed in the project may not be obtained without a management plan in order to assure its proper implementation & function. The EMP envisages the plans for the proper implementation of mitigation measures to reduce the adverse impacts arising out of the project activities. EMP has been prepared addressing issues such as:

- Details of management plans
- Pollution control/mitigation measures for abatement of the undesirable impacts caused during construction and operational activities
- Maintenance of water resources and water quality
- Post project environmental monitoring programme
- Institutional set up identified/recommended for implementation of the EMP

The study area covers an area of 5 km radius around the proposed project site. Baseline environmental quality of the study area has been assessed based on primary and secondary data collected from various sources supplemented by data generated at site during the period 1st October 2022 to 31st December 2022. Environmental attributes and frequency of monitoring are outlined in Chapter -3.

1.10 Status of Litigation

There are no litigation/ court cases pending against the project as on date.

1.11 Structure of EIA Report

The entire EIA report has been prepared in line with generic structure of EIA document as annexed in EIA Notification, 2006:

Chapter 1: Introduction: This chapter describes the Purpose of the project, Identification of project & project proponent, Brief description of nature, size, location of the project and its importance to the country, region, Scope of the study – details of regulatory scoping carried out (As per Terms of Reference)

Chapter 2: Project Description (Based on pre-feasibility Report): This chapter includes Type of project, Need for the project, Location (maps showing general location, specific location, project boundary & project site layout), Size or magnitude of operation (including associated activities required by or for the project, Proposed schedule for approval and implementation, Technology and process description, Project description (Including drawings showing project layout, components of project etc. Schematic representations of the feasibility drawings which give information important for EIA purpose), Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements (as required by the scope), Assessment of New & untested technology for the risk of technological failure.

Chapter3: Description of the Environment: It covers Study area, period, components & methodology, Establishment of baseline for valued environmental components, as identified in the scope, Base maps of all environmental components.

Chapter 4: Anticipated Environmental Impacts & Mitigation Measures: It includes Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operations, final decommissioning or rehabilitation of a completed project, Measures for minimizing and / or offsetting adverse impacts identified, Irreversible and Irretrievable commitments of environmental components, Assessment of significance of impacts (Criteria for determining significance, Assigning significance) and Mitigation measures.

Chapter 5: Analysis of Alternatives (Technology & Site): In case if scoping includes any alternative then it includes description of each alternative, Summary of adverse impacts of each alternative, Mitigation measures proposed for each alternative and Selection of alternative.

Chapter 6: Environmental Monitoring Program: This chapter covers technical aspects of monitoring the effectiveness of mitigation measures (including Measurement methodologies, frequency, location, and data analysis, reporting schedules, emergency procedures, detailed budget & procurement schedules).

Chapter 7: Risk Assessment and additional Studies: This chapter includes Public Consultation, Risk assessment, Social Impact Assessment and Rehabilitation & Resettlement Action Plans.

Chapter 8: Project Benefits: This chapter describes the benefits coming from the project in terms of improvements in the physical and social infrastructure, employment potential –skilled, semi- skilled and unskilled and other tangible benefits.

Chapter 9: Environmental Cost & Benefit Analysis: This chapter describes if recommended at the Scoping stage.

Chapter 10: Environmental Management Plan: This chapter describes the administrative aspects of ensuring that mitigation measures are implemented and their effectiveness monitored after approval of the EIA.

Chapter 11: Summary and Conclusion: It includes overall justification for implementation of the project and Explanation of how, adverse effects have been mitigated

Chapter 12: Disclosure of consultants Engaged: The names of the Consultants engaged with their brief resume and nature of Consultancy rendered.

1.12 Compliance of TOR

TOR Details SEIAA Uttar Pradesh TOR File No.7222, Proposal No. SIA/UP/MIS/82713/2022. Copy of TOR is attached as Annexure –I.

Table 1-2: Compliance of TOR

<table>
<tr><th>S.NO</th><th>TOR</th><th>Compliance</th></tr>
<tr><td>I.</td><td colspan="2">Project Details</td></tr>
<tr><td>i.</td><td>Importance and benefits of the project.</td><td>The importance of Project is that to manage the Bio medical waste in Varanasi Mandal area within 75 km buffer area from project site. The proposed facilities will provide employment to the local people.</td></tr>
<tr><td>ii.</td><td>Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.</td><td>The proposed project site is located in Industrial area, Ramnagar, Phase-1, Chandauli. As per the revised guideline of CPCB for CBWTF states that
“A CBWTF shall preferably be developed in a notified industrial area without any requirement of buffer zone”.</td></tr>
<tr><td>iii.</td><td>The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.</td><td>Project Capital Cost Rs. 2.80 Crores
EMP capital cost is Rs 40.0 Lakhs and 5 Lakhs is recurring cost of EMP</td></tr>
<tr><td>iv.</td><td>Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided</td><td><table>
<tr><th>S. No</th><th>Equipment</th><th>Capacity</th></tr>
<tr><td>1</td><td>Incinerator</td><td>300 Kg/Hr.</td></tr>
<tr><td>2</td><td>Autoclave</td><td>1000 L per batch</td></tr>
<tr><td>3</td><td>Shredder</td><td>150 Kg/hr</td></tr>
<tr><td>4.</td><td>Chemical Disinfection Tank:</td><td>1500 Ltr</td></tr>
<tr><td>4</td><td>ETP</td><td>10 KLD</td></tr>
</table></td></tr>
<tr><td>v.</td><td>List of waste to be handled and their characteristics. Details of temporary storage facility for storage of Bio-medical waste at project site.</td><td>All the details of waste are given in Chapter -2 of EIA report</td></tr>
<tr><td>vi.</td><td>Other chemicals and materials required with quantities and storage capacities.</td><td>No such chemical will be stored</td></tr>
<tr><td>vii.</td><td>Detailed design of pre-treatment and waste stabilization facility of Bio-medical waste.</td><td>Autoclave waste will be pre treated in disinfection tank for pretreatment.</td></tr>
</table>

viii.	Project proponents would also submit a write up on how their project proposal conform to the stipulations made in the " Bio-Medical Waste Management Rules, 2016 ", notified by the MoEF&CC on 28th March, 2016.	Point wise compliance of Bio-Medical Waste Management Rules, 2016 ", notified by the MoEF&CC on 28th March, 2016 will be given in Chapter-2.
ix.	Process description along with major equipment and machineries, process flow sheet (quantitative) from Bio-Medical waste material to disposal to be provided.	Process description along with major equipment and machineries, process flow sheet is detailed in Chapter -2.
x.	Details of man-power requirement (regular and contract).	Total manpower will be 25 on regular basis and 50 will be on contract basis.
xi.	A detailed layout of the project site indicating all the project components.	Detailed lay out is given in Chapter -2
II.	**Road and Traffic**	
xii.	Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures	The proposed site is located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110. The nearest road adjacent to the site is industrial road no- 10. SH-19 is about Approx. 0.57 Km towards North. The nearest Railway station Singhitali, Uttar Pradesh is about 2.54 Km East from the site
xiii.	Examine the details of transportation of Bio-Medical wastes, and its safety in handling.	The details of transportation of Bio-Medical wastes, and its safety in handling is given in Chapter -2
III	**Land Environment**	
xiv.	Detailed soil analysis of the site including its permeability, water holding capacity be included.	Soil analysis report of site including its permeability, water holding capacity is given in Chapter -3.
xv.	Submit the present land use and permission required for any conversion such as forest, agriculture etc.	The present land of the project site is industrial land, and no need of for any conversion is required.
xvi.	Specify the land area and space allotted for each activity proposed within the facility. The area requirements for each activity shall be calculated as per the CPCB guidelines for the specified activity.	Specify the land area and space allotted for each activity proposed within the facilities are given in Chapter -2.
xvii	Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of	Land document is attached is as Annexure - I.

	the acquisition process and expected time of complete possession of the land	
xviii.	The EIA would address to the conformity of site to the stipulations as made in the Bio-Medical Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules. NOC shall be obtained from State Pollution Control Board/Committee (SPCB/SPCC) regarding site suitability for establishment of Bio-Medical Waste Treatment Facilities.	Yes the site to the stipulations as made in the Bio-Medical Waste Management Rules, 2016.
xix.	Post project reclamation management program with financial allocation.	There will be no landfill site therefore no site reclamation management program will be proposed.
IV.	**Environmental Monitoring and Management**	
xx.	Examine and submit the details of on line pollutant monitoring.	All pollutant which are mentioned in CPCB guideline for CBWTF are monitored regularly and online stack monitoring system and ambient monitoring system will be installed at site.
xxi.	Project proponent must ensure Good Combustion Practice (GCP) to reduce the possibilities of formation of 'Total dioxins and furans'. In addition, GCP must be coupled with appropriate End-of-the-pipe treatment at low temperature to reduce the emission of 'Total dioxins and furans' below the standards. Further, the project proponent must provide detailed Standard operating procedure (SOPs) for sampling and monitoring of 'Total dioxins and furans'.	Yes, will ensure Good Combustion Practice (GCP) to reduce the possibilities of formation of 'Total dioxins and furans. In addition, GCP must be coupled with appropriate. Combustion efficiency (CE) will be at least 99.00%.
xxii.	Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour	Environmental Monitoring Plan and environmental cost and benefit assessment.

	control.	
xxiii.	Water quality around the landfill site shall be monitored regularly to examine the impact on the ground water.	Not applicable as landfill site is not proposed in CBWTF.
xxiv.	A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.	The Final EIA /EMP report is prepared in accordance with the TOR and should be submitted to the MOEF &CC.
xxv.	Air Quality Index shall be calculated for base level air quality.	Air Quality level is given in chapter -3
xxvi.	Baseline data on Ground water quality is required.	Ground water quality report of the study area is given in Chapter -03.
xxvii	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.	Detailed pollution control and mitigation measures are given in Chapter -4.
V.	**Waste Management**	
xxviii	Examine and submit details of the proposed odour control measures.	Best management practice will be adopted to control the odour.
xxix.	The storage and handling of Bio-Medical wastes shall be as per the Bio-Medical Waste Management Rules, 2016.	Yes, storage and handling of Bio-Medical wastes shall be done as per the Bio-Medical Waste Management Rules, 2016
xxx.	Details of storage and disposal of pre-processing and post-processing rejects/inerts and products. List of proposed end receivers for the rejects/inerts/products should be provided. MoUs to be submitted in this regard.	
xxxi.	Details of hazardous/solid waste generation and their management.	Details of hazardous waste/solid waste are detailed in chapter -2.
VI.	**Water Environment**	
xxxii.	Detailed hydro-geological studies and possible impact if any accidental contamination occurs shall be included.	There will be no interaction of ground water therefore no hydro-geological studies are required and no accidental contamination occurs shall be included.
xxxiii.	Examine and submit details of monitoring of water quality around the landfill site.	Landfill is not proposed in CBWTF. Therefore, monitoring of water quality around
xxxiv.	Examine and submit details of impact on water body and mitigative measures during rainy season.	There will be no impact on water body.

xxxv.	Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.	Drainage of project up to 5 km radius of study area
VII.	**Water Management**	
xxxvi.	Details of effluent treatment and recycling process.	ETP (10 KLD) will be installed at site and treated water from ETP will be reused for scrubbing and green belt development
xxxvii.	A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.	Source of water is ground water. NOC is exempted for as this is an MSME project clarification letter is attached as Annexure.
VIII.	**Energy Management**	
xxxviii.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.	Proposed – 82.5 KVA power load is required for the proposed CBWTF. Source of power is UPPCL
IX.	**Disaster Management Plan**	
xxxix.	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.	The details of Disaster Management Plan is give in Chapter -7
xl.	Hazard identification and proposed mitigation measures.	Details are given in Chapter -7 of EIA report.
X.	**Green Belt**	
X1i	A detailed Plan for green belt development.	Detail plan for green belt development is given in Chapter-10 of the EIA report.
XI.	**Socioeconomic Environment**	
X1ii	Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the	As the proposed project is located in the Industrial area therefore the project is exempted for the Public hearing.

	Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.	
X1iii.	The project proponents shall satisfactorily address all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.	No complaints/suggestions is received at the time of Final EIA report submission.
XII.	**Court Cases**	
x1iv.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	No, litigation pending against the project.
XIII	**Miscellaneous**	
x1v	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website **http://moef.nic.in/Manual/Incinerator**	Yes, we have referred model ToR available on Ministry website.

2 PROJECT DESCRIPTION

Proposed Common Bio Medical Waste Treatment Facility (CBWTF) by M/S AV Biomedical Waste Services is located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110 where bio-medical waste generated from various healthcare units, are suitably treated to reduce adverse effects that these wastes may pose. The Bio-medical Waste Management Rules, 2016 makes it mandatory for the biomedical waste generators within 75 km distance to get the biomedical waste treated and disposed of through CBMWTF.

In the prevailing situation, there is no other Common Biomedical Waste Treatment Facilities in ~75 km area.) Site feasibility report from RO-UPPCB is attached as **Annexure-III**.

2.1 Need for the Project

In need of professional attention for effective management to contain costs on the one hand and enhance efficiencies on the other, M/s VRBA Bio Waste Solution Pvt. Ltd has proposed for development of Common biomedical waste treatment facility (CBWTF) for biomedical waste generation in the district of Chandauli of Uttar Pradesh. The project aims to cater the biomedical waste generated from nearby health care facilities and medical institutions from the proposed site. Currently, there is no other Common Biomedical Waste Treatment Facilities operational in in 75 km area as shown in Figure 2.As per the CPCB guidelines, 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 500m so that it shall have minimal impact on these areas.

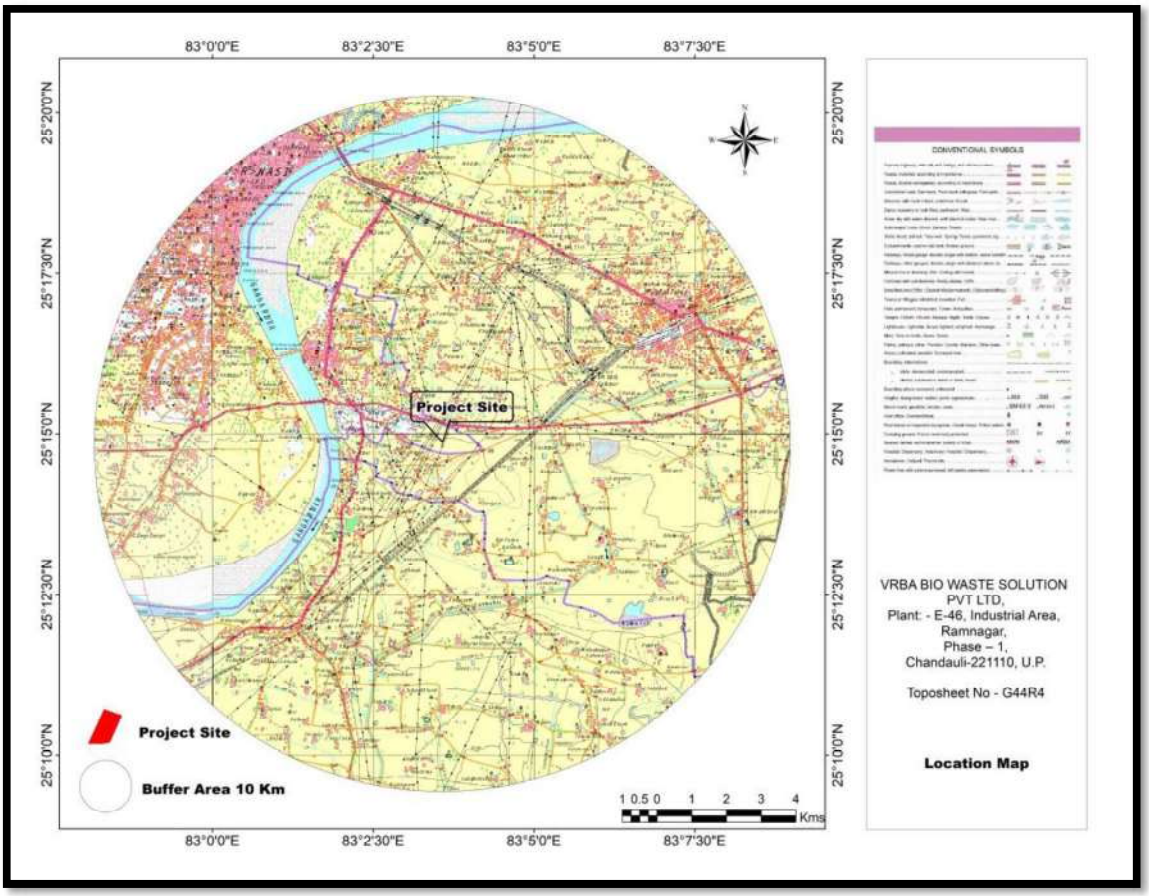


Figure 2-1: Location on Topo sheet

2.2 Site selection criteria

As per the Revised Guidelines for Common Bio-medical Waste Treatment Facilities- *A CBWTF shall preferably be developed in a notified industrial area without any requirement of buffer zone*. The proposed project area is fall into notified industrial area at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110

2.3 Environmental Setting of the Project

The details of the Environment setting project are shown in below Table.

Table 2-1: Environment setting project

S. No.	Particulars	Details
1.	Topo-sheet no.	G44R4
2.	Elevation	80 m
3.	Nearest settlement	Hamidpur, approx. 1.09 km towards West

4.	Nearest major town	Ramnagar, approx. 4.15 km in North West direction
5.	Nearest highway	NH-19, approx. 0.60 km in North direction NH-35, approx. 2.14 km in West direction Jeonathpur Station Rd, approx. 0.57 km in SSW direction
6.	Nearest railway Station	Jeonathpur Railway Station, approx. 1.68 km towards SSE direction Pt. Deen Dayal Upadhyaya Railway Station, approx. 7.22 km in NNE direction
7.	Nearest major Airport	Lal Bahadur Shastri International Airport, approx. 30.15 km in North West direction
8.	Nearest tourist Places	Ramnagar Fort, Approx. 4.22 Km towards NW direction
9.	Defense Installations	Varanasi Cantonment, Approx. 13.05 Km towards North West direction
10.	Archaeologically Listed important Place	Nil (Within 15 kms of study area)
11.	Ecological sensitive Zones	Nil (Within 15 kms of study area)
12.	Reserved/Protected Forest	Nil (Within 15 kms of study area)
13.	Nearest Streams/Rivers	Ganga River: 2.99 km (West)
14.	Seismic zone	Seismic zone- III

2.4 Size and magnitude of Operation

The proposed facility is extended up to 0.202 ha land. The total cost of the project is estimated to be Rs. 2.784 Cr. The proposed equipment's to be installed in the plant are mentioned in table below.

Table 2-2: Proposed equipment's in the plant

S.No.	Equipment	Installed Capacity	Number
1	Incinerator	300 kg/Hr	1
2	Autoclave	1000 ltr/batch	1
3	Shredder	150 kg/hr	1
4	Chemical Disinfection Tank	1500 Ltr	1
5	Effluent Treatment Plant	10 KLD	1

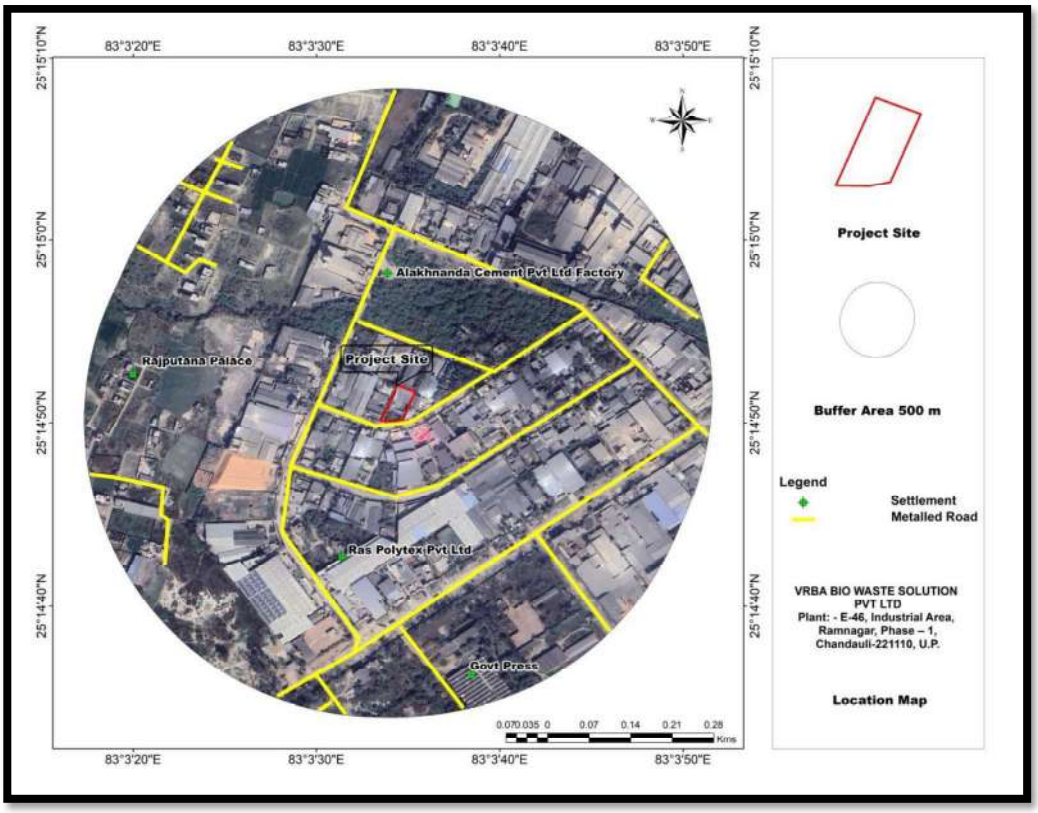


Figure 2-2: Buffer map of the study area

2.5 Land requirement and availability

M/S AV Biomedical Waste Services has proposed to setup the Common Biomedical Waste Treatment Facility at is located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110. The present proposal is to utilize 0.202-hectare land for setting up of Biomedical Waste Treatment Facility.

2.5.1 Land Ownership Details

Land Documents are attached as Annexure I.

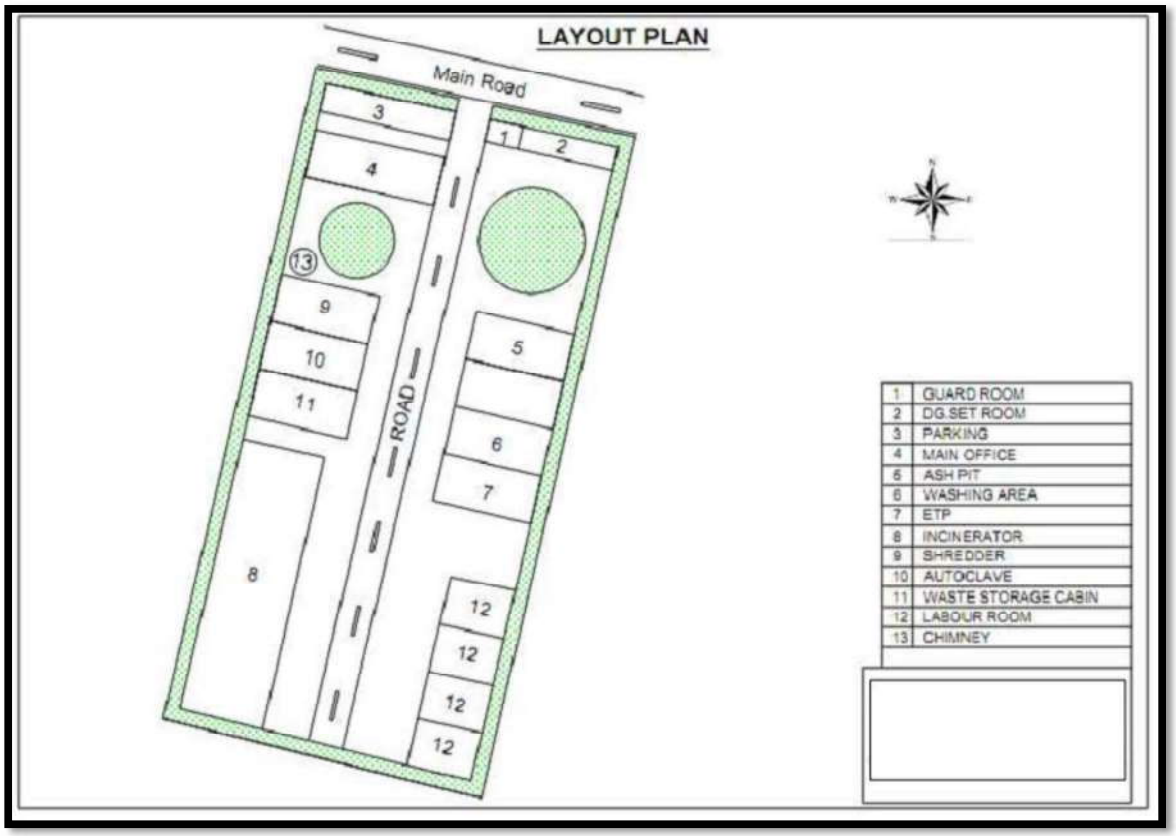


Figure 2-3: Layout plan of the site

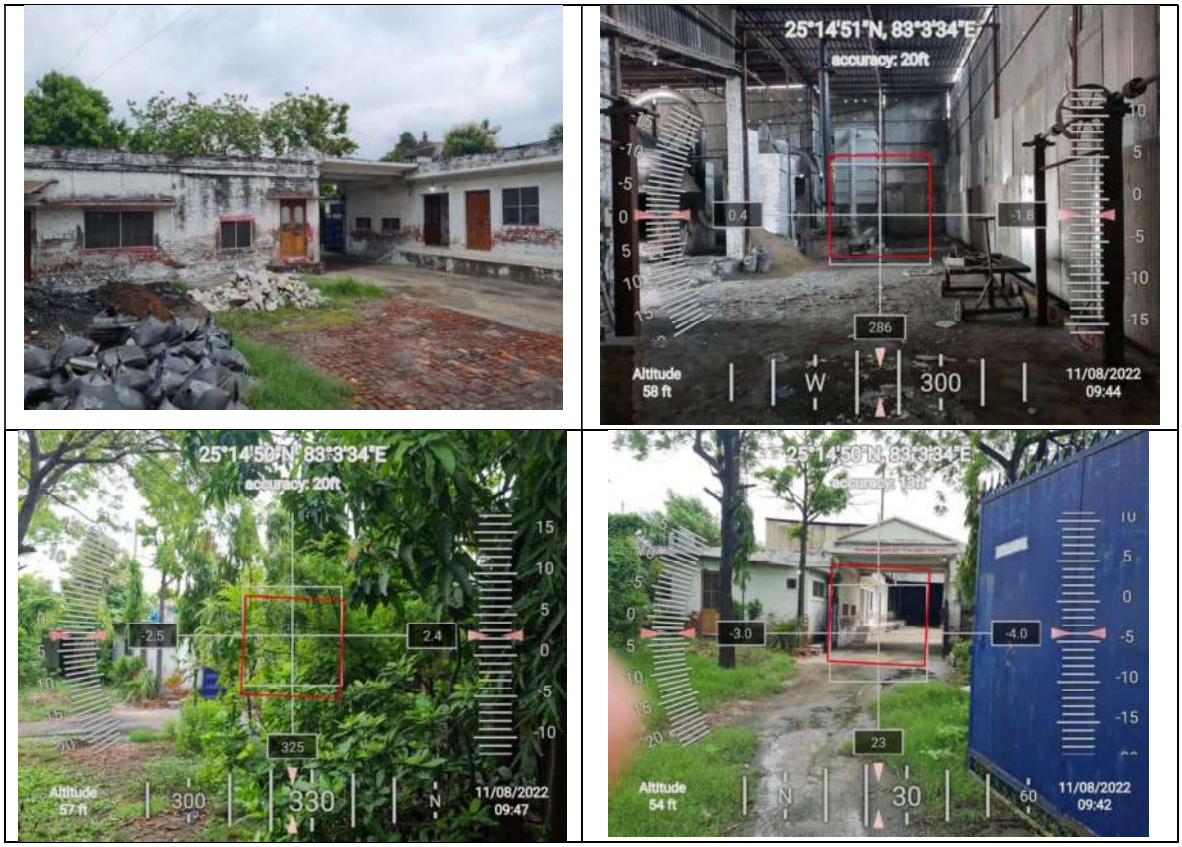


Figure 2-4: Site Photographs

2.5.2 Alternate Sites

The proposed projects have no alternative site

Process of Biomedical Waste collection, storage, treatment and disposal

The flow chart of process of collection, transportation, storage, treatment and disposal of biomedical waste is shown in figure-4 below.

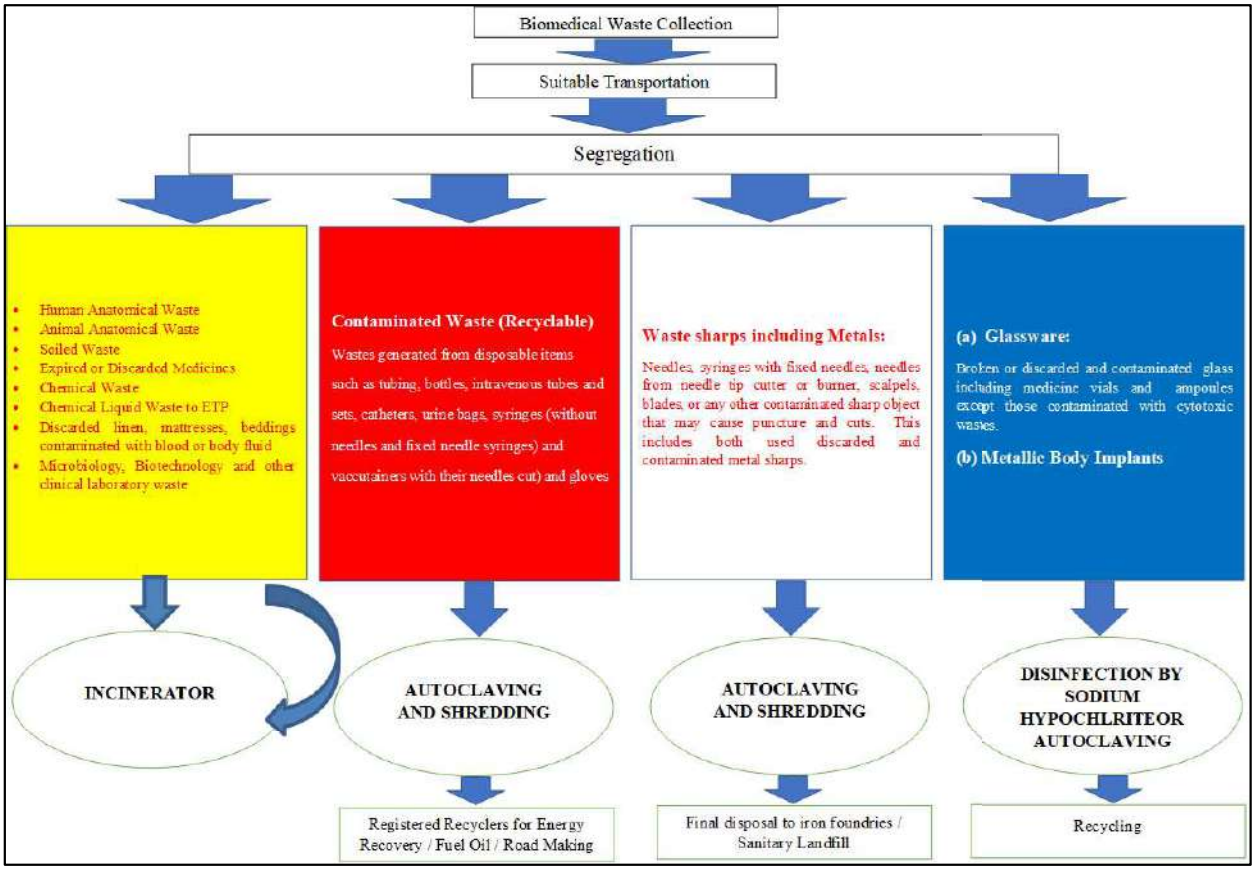


Figure 2-5: Process Flow Diagram

2.5.3 Collection of Biomedical Waste from Hospitals

The health care facility shall be advised to segregate the waste and enable trained personnel to carefully pack the waste as it contains sharps, solid waste etc. The waste collected shall be endorsed by issuing a small manifest. It is also realized that the Bio-medical Waste shall be collected every day and not be delayed more than 48 hours as it has tendency to give out odour & deteriorate with long standing storage. The collection of the waste from hospital and its movement to the carrying vehicle shall be properly managed by avoiding any spillage in the path. It is intended to have 5 closed vehicles (E.g. dimension size of 14ft x 6ft x 5.5ft with carrying capacity 3000kg) for collection and transportation of biomedical waste to CBWTF covering all the 4 districts proposed to cater within 75 km radius.

2.5.4 Transportation of the Waste to CBWTF

Proper fully covered dedicated vehicles shall be used for transportation of biomedical waste from healthcare facility to the treatment facility. The personnel hired for the transportation will be

licensed driver and shall be trained for specific requirements of collection of infectious biomedical waste the bins containing the waste shall be stacked in a manner to avoid overturning in case of jerks. The Waste bins shall be unloaded from the trucks manually by trained staff at the facility wearing a persona viz. Overalls, Gloves, Gum Boots etc. ensuring there are no health impacts during the process. The dedicated vehicle for transportation of waste shall have following features;

(I) Separate cabins shall be provided for driver/staff and the bio-medical waste containers.

(II) The base of the waste cabin shall be leak proof to avoid pilferage of liquid during transportation.

(III) The waste cabin may be designed for storing waste containers in tiers.

(IV) The waste cabin shall be so designed that it is easy to wash and disinfect.

(V) The inner surface of the waste cabin shall be made of smooth surface to minimize water retention.

(VI) The waste cabin shall have provisions for sufficient openings in the rear and/or sides so that waste containers can be easily loaded and unloaded.

(VII) The vehicle shall be labeled with the bio-medical waste symbol (as per the schedule iii of the rules) and display the name, address and telephone number of the CBWTF.

(VIII) The vehicle will be fitted with GPS system for tracking.

Depending upon the area to be covered under the CBWTF, the route of transportation shall be worked out. The transportation routes of the vehicle shall be designed for optimum travel distance and to cover maximum number of healthcare units. As far as possible, the transportation shall be carried out during non-peak traffic hours. It shall be ensured that the total time taken from generation of bio-medical waste to its treatment, which also include collection and transportation and treatment time, shall not exceed 48 hours.

2.5.5 Storage

The proposed CBWTF will have storage area. The storage shed consists of different cells for storing different kinds of bio-medical waste. The storage building is an enclosed structure with sufficient ventilations. The bio medical waste can be directly stored in dumper containers with lids of suitable size. The storage area will be at the entry point of the CBWTF to unload and store

all biomedical wastes that have been transported to the facility by vehicle. The front portion of the room shall be utilized for unloading the wastes from the vehicle and back or side portion shall be utilised for shifting the wastes to the respective treatment equipment. The room where waste is unloaded the floor shall be made impermeable so that any liquid spilled during unloading does not percolate into the ground. The liquid generated during handling of wastes and washing, shall be diverted to the inlet of ETP.

In the main storage room, wastes shall be stacked with clear distinction as per the color coding of the containers. From here, the coloured containers will be sent to the respective treatment equipment.

2.5.6 Treated Waste Storage

After autoclaving the wastes will be segregated and stored in the treated waste storage area. Plastic waste will stored after shredding. Plastics, metals, glass will be stored separately. Waste having recycle value will be sold to registered or authorized recyclers. Disinfection and Destruction.

Upon receipt at the facility, wastes containers shall be unloaded. Wastes based on their colour codes shall be separated and properly treated and disposed of as per MoEF&CC rules the incinerable waste shall be loaded into the incinerator while autoclavable shall be loaded into the autoclave for dis-infection. Residue from incinerator units shall be disposed into a landfill and waste from autoclave shall send to authorized recyclers.

2.5.7 Treatment of Waste

The segregated waste shall be subjected to treatment in accordance to procedure prescribed in Biomedical Rules and CPCB guidelines.

2.5.7.1 Incineration

Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials. As being high temperature thermal process employing combustion of the waste under controlled condition for converting it into inert material and gases.

A process combination of pyrolysis and controlled air combustion, where heat and air for combustion is regulated in such a way as to first volatalise/gasify the waste in conditions of inadequate air, i.e., below stochiometric air conditions and heat and then totally destroy it in adequate heat and excess air, thereby making the end products environmentally safe.

The primary purpose of incineration is to burn the waste to ashes through a combustion process. Proposed project intends to setup a 300 Kg/ hr incinerator. The unit shall be a dual chambered incinerator. The primary chambers primary purpose would be combustion of the waste materials into safe end products (ash). The temperature of the primary chamber would be850°C and above wherein, wastes shall be completely destroyed. The primary chamber would have an attached burner with auxiliary fuel supply to augment the fuel requirements and ensure maintenance of temperatures. The purpose of the secondary chamber would be to burn the off gases and ensure safe end products (gaseous). The secondary chamber would operate at a temperature of 1050°C and above. The gases would be completely burnt and safe gases then shall be let out of the incinerator unit. The incinerator shall be completely automated with control panel and continuous recording of temperatures. The entire system is very simple and is easy to operate. The system is environmentally safe without any hazard.

The size of the opening through which the waste is charged shall be larger than the size of the waste bag to be fed. Volume of the primary chamber shall be five times the volume of one batch. Pressure gauges shall be provided on the primary and secondary air ducting. Combustion air measurement through flow transmitter should be provided and the display shall be in PLC. “Controlled air” incineration principle shall be followed, as particulate matter emission will be low. The combustion air shall be supplied through a separate fan after accounting for the air supplied through the burners. Air supply in the primary and secondary chamber may be regulated between 30%-80% and 170%-120% of stoichiometric requirement respectively. Primary air shall be admitted near / at the hearth for better contact.

Flow meter/suitable flow measurement device shall be provided on the primary & secondary air ducting. The combustion air shall be supplied through a separate forced draft fan after accounting for the air supplied through burners. The pressure in the incineration chambers under all circumstances should be lower than the ambient pressure in the room where the incinerator is installed A minimum negative draft of 1.27 to 2.54 mm of Water Column (WC) shall be maintained in the primary chamber to avoid leakage of gaseous emissions from the chamber and fitted with WC measurement mechanism (eg. U-tube manometer etc.) or digital display provision and connected with PLC.

The waste shall be fed into the incinerator in small batches (about 15-20% of total capacity of the incinerator) after the fixed interval of time in case of fixed hearth incinerator and continuous charging using appropriate feeding mechanism in case of rotary kiln incinerator or as recommended by the manufacturer, depending on the capacity of the incinerator. The size of the hearth i.e. primary chamber shall be designed properly. The sides and top of the primary and secondary chamber shall have rounded corners from inside to avoid possibility of formation of black or cold pockets/dead zones. The size of the secondary chamber shall be properly designed so as to facilitate a minimum of two seconds residence time to ensure combustion of the gas flow, unburnt material such as volatiles, smoke and soot. For the estimation of residence time in the secondary chamber its volume shall be calculated starting from the secondary burner tip to the thermocouple.

Incinerator walls shall be protected with insulated fire bricks/refractory system. The refractory lining of the chamber shall be strong enough to sustain thermal shocks i.e., minimum temperature of 1000° C in the primary chamber and 1050 +/- 50 ° C in the secondary chamber. The refractory & insulation bricks shall have suitable thickness each & shall conform to IS: 8-1994 & IS: 2042-2006 respectively. However, in case the bio-medical waste incinerator operator wishes to treat outdated medicines or cytotoxic waste, the refractory lining of the chamber shall be designed suitably in conform to IS Specifications for bricks or refractory to with stand minimum temperature of 1200° C in secondary chamber. The incinerator combustion chamber(s) should be designed for easy maintenance of all internal parts including the refractory and insulation.

The materials used in the individual parts of the incinerator shall be heat resistance and shall with stand against the mechanical properties, oxidation, corrosion, etc. The Incinerator shell shall be made of mild steel plate of adequate thickness (minimum 5 mm thick) & painted externally with heat resistant aluminum paint suitable to withstand temperature of 250°C with proper surface preparation and also the outside surface temperature of the incinerator casing being touched during normal operations should not exceed 45 to 50 °C above ambient temperature and should be provided with a safety measure in the form of a spikes or mesh around hot surface which will prevent direct touch.

Refractory lining of all the hot ducts shall be done with refractory castable & insulating castable. Good quality Ceramic wool shall be used at all hot duct flanges & expansion joints.

The thermocouple sensor location shall be after tip of the burner and before exit of the incinerator chambers as follows:

There shall be separate burners for both Primary and Secondary Chamber. One ormore separate burners each for primary and secondary chambers may be required depending on diameters of the incinerator chambers to maintain desired temperatures in the incinerator chambers. The temperature of Primary and Secondary chambers shall be maintained 800°C and 1050±50°C respectively. The burners shall have automatic switches. However, considering the life of refractory and also to avoid cracks in the refractory, pre-heating and cooling should be done gradually before and after incineration process. Also, the Incinerators (combustion chambers) shall be able to incinerate the waste so as to achieve the Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%or their Loss on Ignition (LoI) shall be less than 5%of the dry weight.

The burners shall have automatic switching "off/on" control to avoid the fluctuations of temperatures beyond the required temperature range. Each burner shall have spark igniters and main burner. Proper flame safeguard provision of the burner shall be installed. View port shall be provided to both the chambers. Burner retracting mechanism in both the chambers to safeguard the burners. (d) Provide projected type of observation or view ports (high-temperature glass with a metal closure provision) to observe visual condition of the burning process and waste/ash accumulation in the combustion chamber. Neither heat, flame nor particles should be able to pass through the observation or viewport. The flame of the Primary chamber shall be pointing towards the centre of the hearth shall be having a length such that it touches the waste but does not impinge directly on the refractory floor or wall. The Secondary burner shall be positioned in such a way that the flue gas passes through the flame. The automatic feeding mechanism shall be provided with the Incinerator.

There shall not be any manual handling during charging of waste in to the primary chamber of the incinerator. The waste shall be charged in bags through automatic feeding device at the manufacturer's recommended intervals ensuring no direct exposure of furnace atmosphere to the

incinerator operator. The device shall prevent leakage of the hot flue gas & any backfire. The waste shall be introduced on the hearth in such a way so as to prevent the heap formation. Suitable raking arrangement shall be provided for uniform spreading of waste on the hearth.

A tamper-proof PLC (Programmable Logic Control) based control system or SCADA in case of all the upcoming new incinerator with higher capacity (i.e., more than 250 Kg/hour) shall be installed to prevent: (a) Opening of waste charging door while the incinerator is in operation with burning of waste or while the incinerator chamber is having temperature is less than 750°C and if the temperature in primary chamber is higher than 850°C. Waste charging in case of any unsafe conditions such as very high temperature in the primary & secondary chambers. (b) failure of the combustion air fan, ID fan, recirculation pumps; (c) low water pressure & high temperature of the flue gas at the outlet of air pollution control device.

The incineration system must have an automatic emergency vent designed with a provision of valves and a compressor. The emergency vent shall remain closed and such provision it shall not emit flue gases or leakages during normal operation of the incinerator. Each incineration system shall have graphic or computer recording devices which shall automatically and continuously monitor and record dates, time of day, batch sequential number and operating parameters such as temperatures in both the chambers as well as stack exit gas. Flue gas parameters such as CO, CO2, and O2 as well as other relevant parameters in gaseous emission as set by the prescribed authority shall also be measured during the operation of the incineration using continuous emission monitoring system (CEMS).

Provision of heat recovery system/heat exchanger with the incinerator shall also be considered wherever possible or feasible. Pre-heating of combustion air shall be practiced wherever possible. Structural design of the chimney / stack shall be as per IS: 6533-1989. The chimney/stack shall be lined from inside with natural hard rubber suitable for the duty conditions and shall also conform to IS:4682 Part I-1994 or suitable thickness of Fibre Reinforced Plastic (FRP) lining also be used to avoid corrosion due to oxygen and acids in the flue gas.

The incinerator should have alarm system to alert the incinerator in the event of power failure, non-operation of the APCD, not maintaining adequate temperatures in primary and secondary chambers or in case of any emergency including the following:

- Deviation from permitted range of pH of the scrubbed liquid;
- Deviation from permitted range of ID Fan Temperature;
- Low level of diesel;
- Low temperature of primary chamber at the time of waste feeding;
- Exceeding of outlet water temperature
- Fault in chimney lighting arrestor;
- Failure of water and electricity supply; and
- Failure of solenoid valve of any of the burners.

Relevant operating parameters as per technology provider/design requirement. The incinerator should have instruction plate(s) attached in a prominent location on the unit that clearly addresses:

- Cleaning ashes and slag from the combustion chamber(s) and cleaning of combustion air openings before starting the incinerator and
- Operating procedures and instructions. These should include proper start-up procedures, normal shut-down procedures, emergency shut-down procedures, and procedures for loading waste.

All the measuring devices attached with the incinerator shall have digital display and have provision of connecting to the recording system, which includes fuel meter and separate energy meter.

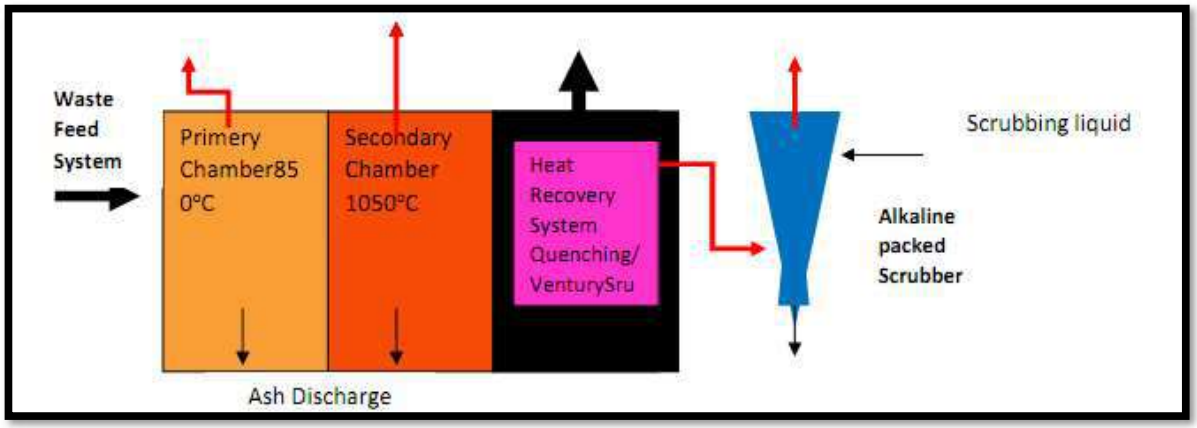


Figure 2-6: Diagrammatic view of Incinerator

2.5.8 Air Pollution Control Device (APCD)

The gases after being burnt at 1050°C shall be run into a ventury scrubber followed by a flooded scrubber with water quenching arrangement. The scrubber shall be an alkaline scrubber to neutralise the gases and ensure trapping of any pollutants escaping into the environment. The purpose of water quenching is to reduce the temperature of the gases which are at high temperature. The clean gases are let out into the environment. The scrubbed water shall be collected into a sump, where the water is neutralised, and then sent into a cooling tower from where the water is recirculated into the scrubber after cleaning them of their particulates by way of pressure sand filter and activated carbon filter. The system is thus a zero discharge system in terms of water discharges and is pollution free.

Autoclave

An autoclave is a specialized piece of equipment designed to deliver 1210 C temperature under 15 psi pressures to a chamber, with the goal of decontaminating or sterilizing the contents of the chamber. Decontamination is the reduction of contamination to a level where it is no longer a hazard to people or the environment. Intends to establish an autoclave with above principle. To ensure safety and quality control, all bio-hazardous materials and items contaminated with potentially infectious agents should be decontaminated before use or disposal. Such items include, but are not limited to: culture media, surgical instruments, laboratory equipment, glassware, and biomedical waste including sharps.

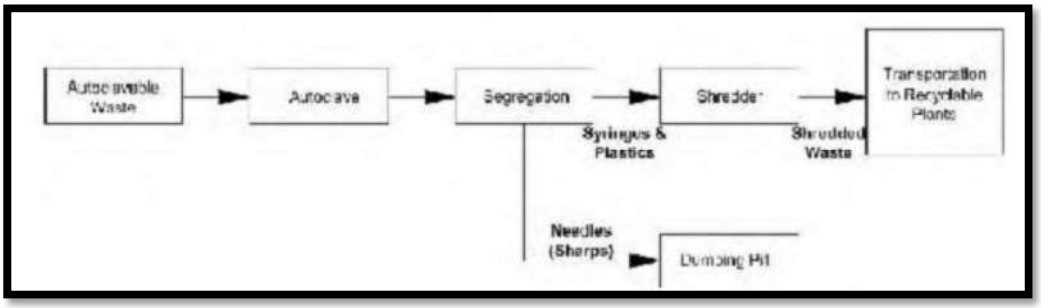


Figure 2-7: Process Flow Diagram of Autoclave

Shredder

Shredding is a process by which waste are de-shaped or cut into smaller pieces so as to make the waste Shredding is a process by which waste are de-shaped or cut into smaller pieces so as to make the waste unrecognizable. Shredder has non- corrosive sharp blades capable for shredding of plastic waste, sharps, bottles, needles, tubing's, and other general waste. The low speed two shaft systems is effective for bottles, needles, tubing's, and other general waste. The low speed two shaft systems is effective for shredding hard and solid waste. Environment intends to establish a Shredder, thus rendering the waste free from infection. The dis-infected waste shall then be segregated into HDPE, PP, rubber, latex, glass and metal. The segregated materials shall then be shredded completing the process of dis-infection sent to recycler approved by UPPCB.

Waste Treatment and Disposal Scheme

Depending on the category/nature of the waste the following treatment and disposal method are employed according to Bio-medical Waste Treatment Rules 2016.

Table 2-3: Treatment and disposal method are employed according to Bio-medical Waste Treatment Rules 2016

Category	Type of Waste	Type of Bag or Container to be used	Treatment and Disposal options
YELLOW	Human tissues, organs, body parts and fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time).	Yellow coloured non-chlorinated plastic bags	Incineration or Plasma Pyrolysis or deep burial
	Animal Anatomical Waste: Experimental animal carcasses, body parts, organs, tissues, including the waste generated from animals used in experiments or testing in veterinary hospitals or colleges or animal houses.		
	Soiled Waste: Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs and bags containing residual or discarded blood and blood components.		Incineration deep burial* or Plasma Pyrolysis or In absence of above facilities, Autoclaving or micro-waving/ hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent for energy recovery.
	Expired or Discarded Medicines: Pharmaceutical waste like antibiotics, cytotoxic drugs including all items contaminated with cytotoxic drugs along with glass or plastic ampoule, vials etc	Yellow coloured non-chlorinated plastic bags or containers	Expired cytotoxic drugs and items contaminated with cytotoxic drugs to be returned back to the manufacturer or supplier for incineration at temperature >1200^{0}C or to common bio-medical waste

			treatment facility or hazardous waste treatment, storage and disposal facility for incineration at >1200^{0}C or Encapsulation or Plasma Pyrolysis at 1200^{0}C. All other discarded medicines shall be either sent back to manufacturer or disposed by Incineration.
	Chemical Waste: Chemicals used in production of biological and used or discarded disinfectants.	Yellow coloured containers or non-chlorinated plastic bags	Disposed of by incineration or Plasma Pyrolysis or encapsulation in hazardous waste treatment, storage and disposal facility.
	Chemical Liquid Waste: Liquid waste generated due to use of chemicals in production of biological and used or discarded disinfectants, Silver X-ray film developing liquid, Discarded Formalin, Infected Secretions, Aspirated body fluids, liquid from laboratories and floor washings, cleaning, house-keeping and disinfecting activities etc.	Separate collection system leading to effluent treatment system	After resource recovery, the chemical liquid waste shall be pre-treated before mixing with other wastewater. The combined discharge shall conform to the discharge norms given in Schedule III.
	Discarded linen, mattresses, beddings contaminated with blood or body fluid.	Non-Chlorinated yellow plastic bags or suitable packing material	Non- chlorinated chemical disinfection followed by incineration or Plasma Pyrolysis or for energy recovery. In absence of above facilities, shredding or mutilation or combination of sterilization and shredding.

			Treated Waste to be sent for energy recovery or incineration or Plasma Pyrolysis.
	Microbiology, Biotechnology and other clinical laboratory waste: Blood bags, Laboratory cultures, stocks or specimens of micro-organisms, live or attenuated vaccines, human and animal cell cultures used in research, industrial laboratories, production of biological, residual toxins, dishes and devices used for cultures.	Autoclave safe plastic bags or containers	Pre- treat to sterilize with non-chlorinated chemicals on-site as per National AIDS Control Organization or World Health Organization guidelines thereafter for Incineration.
RED	Contaminated Waste (Recyclable) Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and fixed needle syringes) and vaccutainers with their needles cut) and gloves.	Red coloured non- chlorinated plastic bags or containers	Autoclaving or micro-waving/ hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent to registered or authorized recyclers or for energy recovery or plastics to diesel or fuel oil or for road making, whichever is possible. Plastic waste should not be sent to landfill sites.
WHITE (Translucent)	**Waste sharps including Metals:** Needles, syringes with fixed needles, needles from needle tip cutter or burner, scalpels, blades,	Puncture proof, Leak proof, tamper proof containers	Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation in metal container

	or any other contaminated sharp object that may cause puncture and cuts. This includes both used, discarded and contaminated metal sharps		or cement concrete; combination of shredding cum autoclaving; and sent for final disposal to iron foundries (having consent to operate from the State Pollution Control Boards or Pollution Control Committees) or sanitary landfill or designated concrete waste sharp pit.
BLUE	**Glassware:** Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes	Cardboard boxes with blue colored marking	Disinfection (by soaking the washed glass waste after cleaning with detergent and Sodium Hypochlorite treatment) or through autoclaving or microwaving or hydroclaving and then sent for recycling.
	Mettalic Body Implants		

STANDARDS FOR INCINERATION:

All incinerators shall meet the following operating and emission standards-

A. Operating Standards

1. Combustion efficiency (CE) shall be at least 99.00%.
2. The Combustion efficiency is computed as follows:

$$C.E. = \frac{\%C02}{\%C02 + \%CO} \times 100$$

3. The temperature of the primary chamber shall be a minimum of 800 °C and the secondary chamber shall be minimum of 1050°C + or - 50°C.

The secondary chamber gas residence time shall be at least two seconds

B. Emission Standards

Table 2-4: Emission Standards

S.No.	Parameter	Standards	
1.	**2.**	**3.**	**4**
		Limiting concentration in mg/Nm3 unless stated	**Sampling Duration in minutes, unless stated**
1.	Particulate matter	50	30 or 1NM3 of sample volume, whichever is more.
2.	Nitrogen Oxides NO and NO2 expressed asNO2	400	30 for online sampling or grab sample.
3.	HCl	50	30 or 1NM3 of sample volume, whichever is more.
4.	Total Dioxins and Furans	0.1ngTEQ/Nm3 (at 11% O2)	8 hours or 5NM3 of sample volume whichever is more.
5.	Hg and its compounds.	0.05	2 hours or 1NM3 of sample volume, whichever is more.

C. Stack Height: 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 Environment (Protection) Act, 1986 and in accordance with the CPCB Guidelines of Emission Regulation Part- III.

Note:

a) All upcoming Common Bio-medical Waste Treatment and Disposal Facilities having incineration facility or captive incinerator shall comply with standards for Dioxins and Furans.
b) Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.
c) Ash from incineration of biomedical waste shall be disposed of at Common Hazardous Waste Treatment and Disposal Facility. However, it may be disposed of in municipal landfill, if the toxic metals in incineration ash are within the regulatory quantities as defined under the Hazardous Waste (Management and Handling and Transboundary Movement) Rules, 2008 or as revised from time to time.
d) Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, CNG, PNG or LPG shall be used as fuel in the incinerator.
e) The occupier or operator of a common bio-medical waste treatment facility shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) once in three months through a laboratory approved under the Environment (Protection) Act, 1986 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.
f) The occupier or operator of the common bio-medical waste treatment facility shall install continuous emission monitoring system for the parameters as stipulated by SPCBs or PCCs in authorization and transmit the data real time to the servers at SPCBs or PCCs and CPCB.
g) All monitored values shall be corrected to 11% Oxygen on dry basis.
h) Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon (TOC) content in the slag and

bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.

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

2.5.8.1 Chemical Disinfection

This treatment shall be to microbiology & biotechnology waste, waste sharps, infectious solid waste and chemical wastes. Chemical treatment involves use of at least 1%hypochlorite solution with a minimum contact period of 30 minutes or other equivalent chemical reagents such as phenolic compounds, iodine, hexachlorophene, iodine-alcohol or formaldehyde-alcohol combination etc. No chlorinated compound shall be used for disinfection of waste to be treated in incinerator. Waste after disinfection will be shredded and will be disposed in secured landfill or recycled through registered recyclers. Chemical waste after chemical treatment is discharged into drains and solids are disposed in secured in landfill.

2.5.8.2 Sharp pits

Sharp pits shall be provided for the disposal of treated sharps. Needles are cut into pieces to avoid reuse. For disposal of sharps, pits of about 3m diameter and 3m depth will be constructed of concrete/concrete hollow bricks with suitable plastering.

2.5.8.3 Effluent Treatment Plant

The proposed CBWTF will have an ETP of 10 m3 per day (KLD) capacity. Chemical wastes after chemical treatment are discharged into ETP. The waste water generated from the scrubber, vehicle sterilization area and floor washing will also be treated in an effluent treatment plant. Sealed drainage will be provided to collect the all liquid effluents. Effluent will be collected in equalization tanks after passing through the grit chamber. Grit chamber removes large solid particles. From the equalization tank, raw effluent is pumped to the flash mixers where flocculants and coagulants are added. Effluent is taken to primary clarifier where settling of solids takes place. The thickened sludge is collected, dewatered and disposed in the landfill. The wet sludge is dewatered in sludge drying bed and temporarily stored in sludge storage area. Sludge after drying will be disposed in landfill. Clarified effluent is biologically treated by activated sludge process in an aeration tank. The biologically treated effluent will be taken to the

secondary clarifier and the overflow from the secondary clarifier will be allowed to pass through pressurized sand filters (PSF) and activated carbon filters (ACF).

Finally, the treated effluent will be recycled for floor washing and gardening. The treated effluent recycled for the use in scrubber will not be treated with hypochlorite solution.

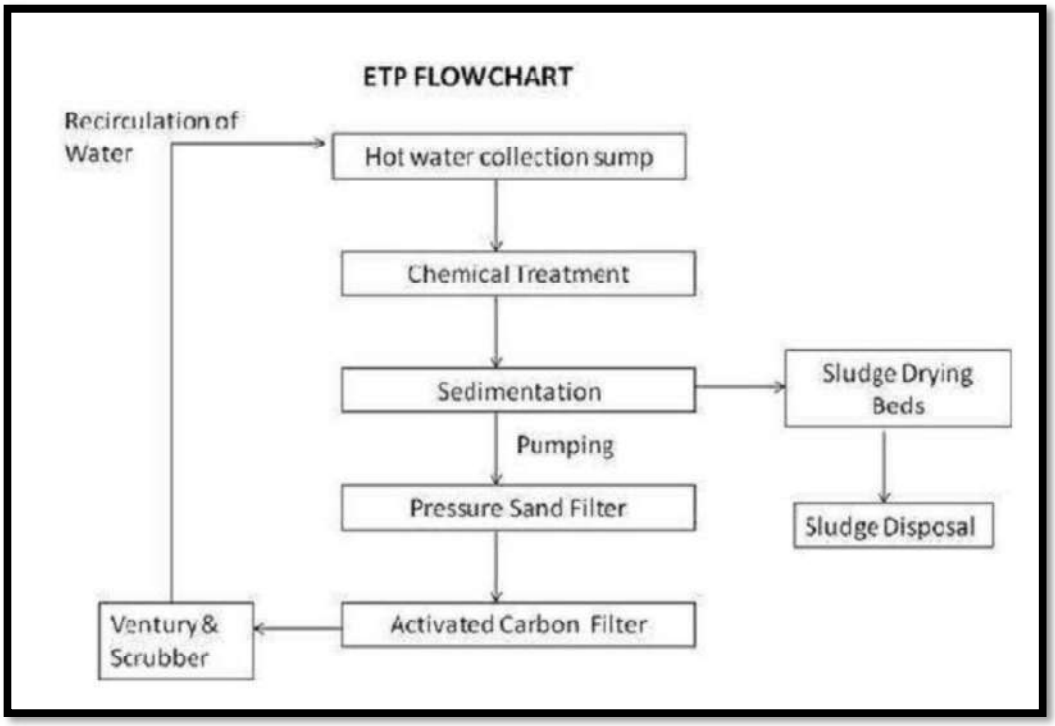


Figure 2-8: Effluent Treatment Plant Flow Diagram

2.5.9 Disposal

Ash, residue from high temperature incineration and other material residues from the process shall be collected into containers and shall be disposed into a secure landfill.

Recycle of Treated Waste

The treated waste will be segregated and option for sale of recyclable waste will be worked out. Recovery of metal scraps from sharps will also be worked out.

Health and Safety

The operators, who are in contact with the infectious waste generated, are continuously at risk during their working hours. Therefore, it is essential that adequate protection measures are provided against occupational health hazards.

Occupational Hazards

The following types of occupational hazards can occur with cleaning/collection or transportation of waste etc. Accidental cut or punctures from infected sharps such as, hypodermic needles, scalpels, knives etc. Contact with infected material like pathological waste, used gloves, tubing etc.

Safety Measures

- Display of illustrated notices with clear instructions for do's and don'ts in English and the local language.
- Issuance of all protective gears such as, gloves, aprons, masks, gum boot etc. without fail.
- Provision of disinfectant, soap etc. of the right quality and clean towels.
- Provision of a wash area.
- Washing and disinfecting facility for the cleaning equipment and tools.
- Regular medical checkup for the employees

Documents and Records

Daily records shall be maintained for the waste accepted and treated waste removed from the site. This record shall include the following minimum details:
Waste Accepted: Waste collection date, Name of the healthcare unit, Waste category as per the Rules, Quantity of waste, Vehicle number & receiving date (at site).
Treated Waste Removed: Date, treated waste type, quantity, vehicle number and location of disposal.

- Label for transport of bio-medical waste containers / bags.
- Logbook for Treatment Equipment's
- The weight of each batch.
- The categories of waste as per the Rules.
- The time, date and duration of each treatment cycle and total hours of operations.
- The complete details of all operational parameters during each cycle
- Lab analysis
- Accident reporting

Site Records

- Site records shall include the following:
- Maintenance schedule, breakdowns/trouble shootings and remedial actions
- Emergencies
- Incidents of unacceptable waste received and the action taken
- Details of site inspections by the officials of the regulatory Agency and necessary action on the observations.

3 DESCRIPTION OF THE EXISTING ENVIRONMENT

3.1 Introduction

This chapter describes the existing environmental status of the study area with reference to the prominent environmental attributes. The study covers the core zone and buffer zone of 10 km radius around the project site.

3.1 Present Environmental Scenario

Baseline study is conducted in order to identify the changes to the natural and socioeconomic environments, or any potential impact and to have a thorough understanding of the nature of those existing environments prior to utilize 0.202 hectare of land for setting up of biomedical waste treatment facility. The present environmental scenario has been described in this chapter in respect of ambient air quality, water and effluent quality, noise level measurement, land use/cover pattern, socio- economic scenario, biodiversity, and hydrogeology.

3.2 Sources of Environmental Data

The baseline information on micro-meteorological data was generated by M/s EMDIGL, a NABET approved Consultant and ETS Lab.

3.3 Study Area

For the description of baseline environmental scenario, the CBWTF project area has been considered as the core zone. The area falling within a distance of 5 km from the boundary of the core zone has been considered as the buffer zone. The core zone and the buffer zone, combined together, form the study area. The study area is considered 10 km around the proposed project located in E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh.

Study Period: The baseline data were collected during post monsoon season **1st October 2022 to 31st December 2022.**

Approach and Transportation

The study area is at distance of approx. 1.68 km (Aerial) to Jeonathpur Railway Station in SSE direction. The airport (Lal Bahadur Shastri International Airport) is at a distance of 30.15 km (Aerial) from the project site in North West.

3.4 Topography

It is hilly tract with dissected surface. There is a zone of scarpment in the center part which is further converted into spur towards north. The Vindhyan Range extends upto this region. The maximum height is represented by 300 m (1000') contour which runs in the south eastern part.

3.5 Climate & Rainfall

The average annual rainfall is 1069.6 mm. The climate is sub humid and it resembles that of the eastern districts of U.P being moist and relaxing except in the cold and summer season. About 90% of rainfall takes place from June to September. During monsoon surplus water is available for deep percolation to ground water.

There is a meteorological observatory at Varanasi, the records of which may be taken as representative meteorological condition. May is the hottest month with the mean daily maximum temperature at 41.5^{0}C, mean daily minimum temperature at 26^{0}C and maximum temperature in this period may sometimes be high at 47^{0}C. With the onset of the monsoon temp begin to drop and night temperature continues to be high. January is the coldest month with mean daily maximum temperature at about 23^{0}C and mean daily minimum temperature about 9.7^{0}C. The mean monthly maximum temperature is 32.2^{0}C and means monthly minimum temperature is 19.9^{0}C.

During the cold season and first half of the hot season the air is very dry. The mean monthly morning relative humidity is 66% and means monthly evening relative humidity is 50%.

Winds are generally high throughout the year, the mean wind velocity is 5.5 kmph. The potential evapotranspiration is 1608.9mm.

3.5.1 Meteorology

The meteorological data recorded continuously during season of Post-Monsoon Season (October-December 2022) on hourly basis for wind speed, wind direction, relative humidity, precipitation and temperature and the same is processed to extract the 24-hour mean meteorological data as per the guidelines of IMD and MoEF for application of AERMOD Version 10.0.1 model. Stability classes computed for the mean hours is based on the guidelines issued by CPCB on modelling. Mixing heights representative of the region have been taken from the available published literature.

Stability Classification

Wind direction fluctuation method (CPCB PROBES/70/1997-1998) is adopted for hourly stability as determined by wind direction fluctuation method as suggested by Slade (1965).

$$\sigma_{\Theta} = Wdr/6$$

Wdr: the overall wind direction fluctuation or width of the wind direction in degrees, over the averaging period.

σ_{Θ} : the standard deviation of wind direction fluctuation.

The stability classes are as detailed below:

Table 3-1: Stability Classification based Wind direction fluctuation

Stability Class	σ_{Θ} (degree)
A (Extremely Unstable)	>22.5
B (Moderately Unstable)	22.4-17.5
C (Slightly Unstable)	17.4-12.5
D (Neutral)	12.4-7.5
E (Slightly Stable)	7.4-3.5
F (Stable)	<3.5

Monthly Wind Speed and Wind Direction

The weather is one of the main factors affecting the air quality. Weather can help to clear away pollutants from atmosphere to improve air quality, or it can make air pollution extremely worse by helping to form highly polluted regions. The concentration of air pollutants in ambient air is governed by the meteorological parameters such as atmospheric wind speed, wind direction, relative humidity, and temperature. Rainfall can effectively remove atmospheric particulate pollutants, and the removal rate of PM10 is greater than the removal rate of PM2.5. In general

wind speed more than 7 m/s can lift dust. Heavier particles will settle near the source area, with the smaller ones settling farther away. The site-specific weather data has been collected by installation of weather monitoring station at site.

Table 3-2: Weather Monitoring Data of the Site

Months	Relative Humidity, %	Rainfall, mm	Mean Wind Speed, m/sec	Wind Directions (blowing from)	Avrg Temperature (degree Celsius)
October	56%	38	3.15	West	31
November	43%	12	3.24	North West	28
December	38%	10	2.96	North West	22

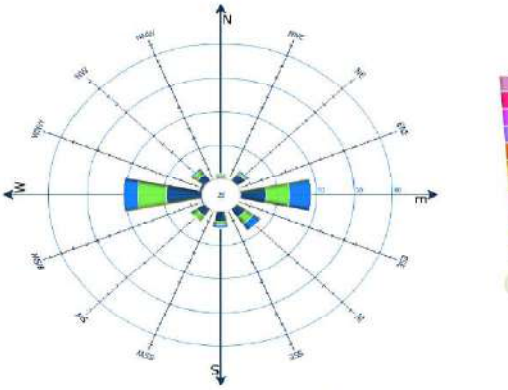
Table 3-3: Meteorological Parameters (Oct-Dec 2022)

Meteorological Parameters (Oct-Dec 2022)			
Parameter	Min. Value	Max. Value	Mean Value
Temperature (°C)	4.2	37.5	22.5
Wind Speed (m/s)	1.5	14.3	3.15
Relative Humidity (%)	21	75	48
Solar Radiation (W/m2)	5000	5500	5300
Rainfall	Total rainfall (mm)	No. of rainy days	Average annual rainfall (mm)
	60	12	1019

Secondary Wind rose *of the Varanasi (Source-IMD Winrose Book)*

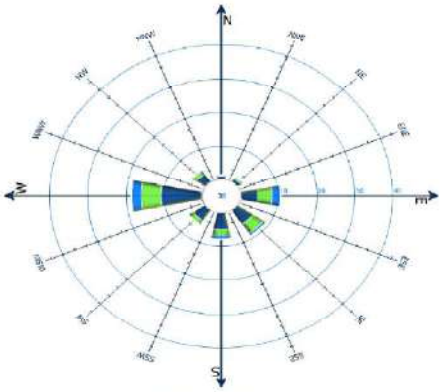
HOUR : 0300 UTC — VARANASI (BHU) — PERIOD :1971- 2000

SEPTEMBER



DIR. (Degrees)	SPEED OF 10-MN MEAN WIND meters per second												
	0.0 - 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 4.5	4.5 - 7.0	7.0 - 9.0	9.0 - 11.0	11.0 - 14.0	14.0 - 17.0	17.0 - 20.0	20.0 - 25.0	>=25.0	total
348-11		0.6	0.7	0.3									1.6
11-33		0.2	0.1										0.3
33-56		2.0	0.7	0.7									4.0
56-78		0.2		0.2									0.4
78-101	0.2	6.0	6.1	6.6									18.7
101-123		0.1											0.1
123-146		3.0	2.4	2.4									7.8
146-168		0.1		0.1									0.2
168-191		2.9	1.1	0.9									4.8
191-213		0.2		0.1									0.3
213-236		2.5	1.8	0.2									4.6
236-258		0.5	0.2	0.1									0.8
258-281		9.2	7.6	3.9									20.7
281-303		0.6	0.1										0.9
303-326		2.4	1.7	0.7									4.8
326-348													0.0
Total	0.2	31.0	22.6	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0
Calm:	24.7	Total data used:899 Total missing data: 20											

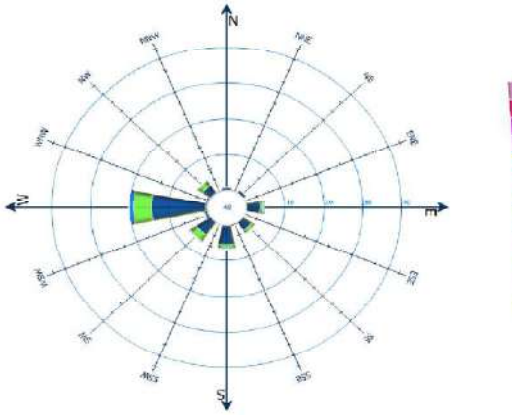
OCTOBER



DIR. (Degrees)	SPEED OF 10-MN MEAN WIND meters per second												
	0.0 - 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 4.5	4.5 - 7.0	7.0 - 9.0	9.0 - 11.0	11.0 - 14.0	14.0 - 17.0	17.0 - 20.0	20.0 - 25.0	>=25.0	total
348-11		1.0	0.3	0.1									1.4
11-33													0.0
33-56		1.0	0.0	0.3									1.3
56-78				0.1									0.1
78-101	0.2	4.3	3.9	2.3									10.6
101-123	0.1	0.3											0.4
123-146		4.9	3.4	0.7									9.0
146-168		0.2		0.1									0.3
168-191		5.0	1.8	1.0									7.8
191-213													0.0
213-236		3.8	1.3										5.1
236-258		0.3	0.1										0.4
258-281	0.3	10.5	5.1	2.6									18.5
281-303	0.1	0.1											0.2
303-326		2.9	1.1	0.3									4.3
326-348													0.0
Total	0.7	34.3	17.5	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.3
Calm:	39.7	Total data used:930 Total missing data: 55											

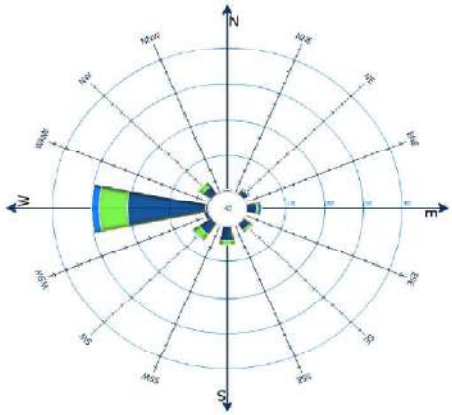
HOUR : 0300 UTC — VARANASI (BHU) — PERIOD :1971- 2000

NOVEMBER



DIR. (Degrees)	SPEED OF 10-MN MEAN WIND meters per second												
	0.0 - 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 4.5	4.5 - 7.0	7.0 - 9.0	9.0 - 11.0	11.0 - 14.0	14.0 - 17.0	17.0 - 20.0	20.0 - 25.0	>=25.0	total
348-11		0.7		0.1									0.8
11-33													0.0
33-56		0.9	0.1										1.0
56-78			0.1										0.1
78-101	0.1	3.6	0.7	0.5									4.9
101-123		0.1											0.1
123-146		2.8	1.0										3.8
146-168		0.5											0.5
168-191	0.1	5.3	1.0	0.3									6.7
191-213		0.1											0.1
213-236		4.4	2.0	0.3									6.7
236-258	0.1	0.8	0.2	0.2									1.3
258-281	0.5	13.8	4.8	1.2									20.3
281-303	0.1	0.5	0.1										0.7
303-326		2.6	1.5	0.2									4.3
326-348													0.0
Total	0.9	36.1	11.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.4
Calm:	48.6	Total data used:900 Total missing data: 36											

DECEMBER



DIR. (Degrees)	SPEED OF 10-MN MEAN WIND meters per second												
	0.0 - 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 4.5	4.5 - 7.0	7.0 - 9.0	9.0 - 11.0	11.0 - 14.0	14.0 - 17.0	17.0 - 20.0	20.0 - 25.0	>=25.0	total
348-11		0.4	0.2	0.1									0.7
11-33		0.1	0.1										0.2
33-56		1.6	0.2	0.4									2.2
56-78													0.0
78-101		2.5	0.5	0.7									3.7
101-123			0.1										0.1
123-146	0.1	2.2	0.7	0.1									3.1
146-168		0.1											0.1
168-191		3.9	1.2										5.1
191-213		0.1	0.1										0.2
213-236		3.7	1.9	0.4									6.0
236-258		1.1	0.2										1.3
258-281	0.6	20.2	7.2	2.0									30.0
281-303	0.1	0.4											0.5
303-326		2.6	1.4		0.1								4.1
326-348													0.0
Total	0.8	38.9	13.8	3.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	57.4
Calm:	42.6	Total data used:930 Total missing data: 94											

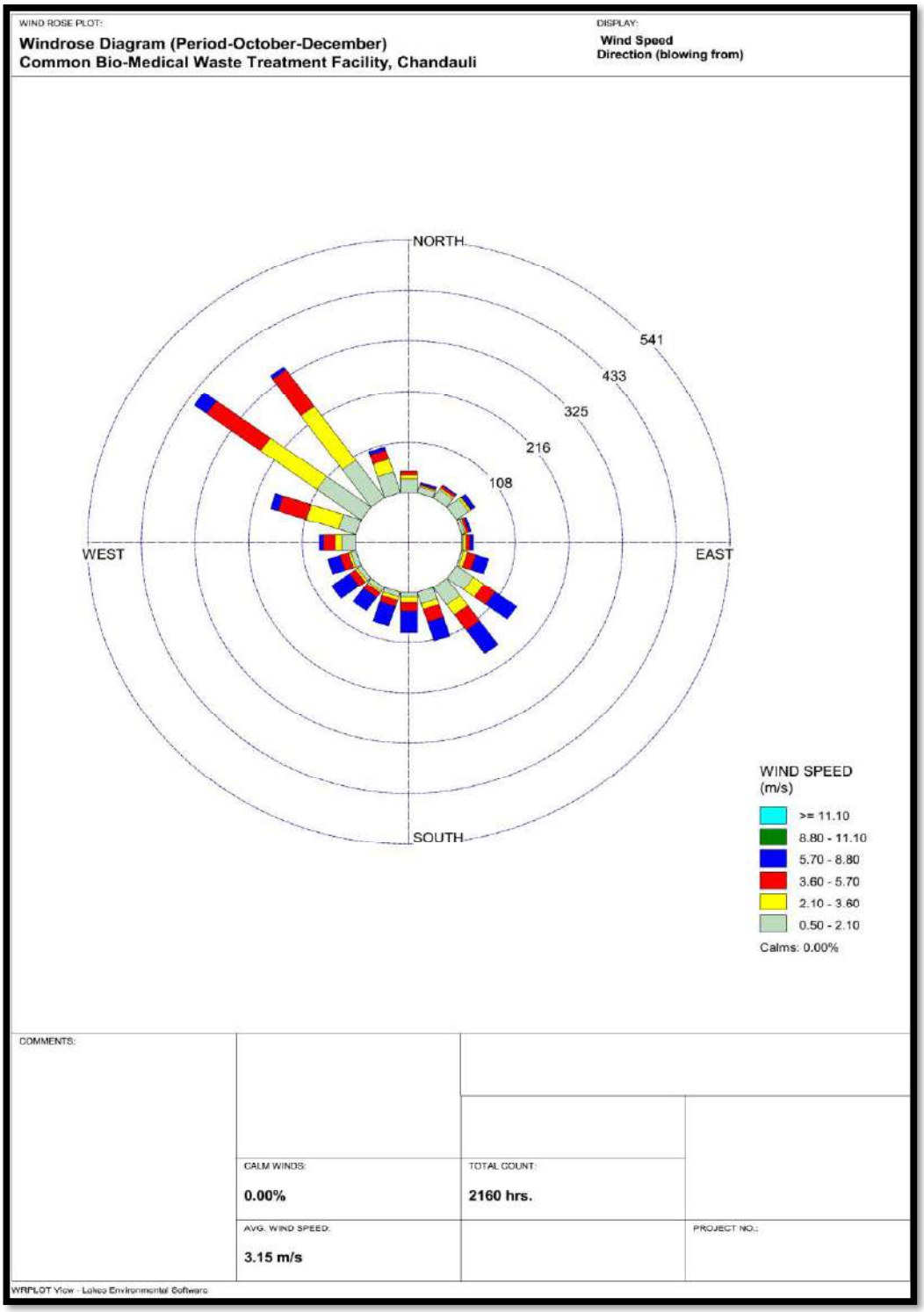


Figure 3-1: Wind Rose Diagram at project site during study period

The wind direction is predominantly from South East & North West during study period. The wind rose diagram prepared from data collected at site is shown in Figure 3-5.

3.6 Ambient Air Quality

The prime objective of the baseline ambient air quality monitoring is to evaluate the existing air quality of the area and to confirm whether the ambient air quality during the operation of the proposed project meets the air quality standards. This section describes the selection of sampling locations, methodology adopted for sampling, analytical techniques and frequency of sampling.

3.6.1.1 Location and selection of ambient air sampling stations

The ambient air quality monitoring locations were established in the study area. For selection of ambient air quality monitoring locations, the following factors were considered:

- Meteorological conditions in the area;
- Topography of the study area;
- Representativeness of the habitation for establishing baseline status;
- Likely impact areas.

Table 3-4: Details of Ambient Air Quality Monitoring stations

S.No	Locations	Distance & Direction	Co-ordinate
AAQ1	Project Site	--	25°14'51.00"N 83° 3'34.82"E
AAQ2	Road No 10, Ramnagar Industrial Area	0.37 km, West	25°14'53.25"N 83° 3'47.54"E
AAQ3	Semara	6.41 km, NNW	25°18'11.92"N 83° 2'31.33"E
AAQ4	Dafi	8.14 km, West	25°14'39.30"N 82°58'43.97"E
AAQ5	Mathana	5.00 km, SSE	25°12'18.87"N 83° 4'39.48"E
AAQ6	Mughalsarai	7.04 km ,NE	25°17'5.86"N 83° 6'56.13"E
AAQ7	Narayanpur	6.44 km, SSW	25°11'43.08"N 83° 1'51.73"E
AAQ8	Godhana	7.66 km, ENE	25°15'16.72"N 83° 8'7.31"E

Figure 3-2: Air monitoring Locations

Figure 3-3: Air Monitoring photographs

3.6.2 Frequency and parameters of sampling

Ambient air quality monitoring has been carried simultaneously at 8 locations (One in the Core Zone and seven in the Buffer Zone) with a frequency of two consecutive days per week for 12 weeks. The samples were analyzed in laboratory by adopting the methods specified in National Ambient Air Quality Standards.

The following air pollution parameters were monitored during the sampling periods, for each sample:

- Respirable Particulate Matter (PM10)
- Fine particulate Matter (PM2.5)
- Sulphur dioxide (SO2)
- Oxides of nitrogen (NOx)
- Carbon Monoxide (CO)

Table 3-5: Report of collected ambient air monitoring samples

Parameter		AQ1	AQ2	AQ3	AQ4	AQ5	AQ6	AQ7	AQ8	NAAQS
		Project Site	Road No 10, Ramnagar Industrial Area	Semara	Dafi	Mathan a	Mughalsarai	Narayanpur	Godhana	
PM10 (µg/m3)	Min.	72.3	77.4	64.5	67.1	69.6	57.9	63.0	59.6	100
	Max.	81.1	86.2	72.6	75.6	78.6	68.9	77.2	67.6	
	Mean	76.0	81.2	68.0	70.7	73.4	61.5	67.4	63.0	
	98 %*	80.84	85.95	72.42	75.38	78.32	67.30	74.49	67.37	
PM2.5 (µg/m3)	Min.	32.6	39.2	28.3	28.6	29.3	23.8	25.8	29.7	60
	Max.	41.3	47.9	36.2	37.1	38.1	31.3	33.9	38.7	
	Mean	38.4	45.0	33.6	34.3	35.2	28.8	31.3	35.7	
	98 %*	41.20	47.86	36.14	36.96	38.01	31.17	33.86	38.65	
SO2 (µg/m3)	Min.	10.3	12.0	8.7	8.2	10.0	7.3	9.9	7.5	80
	Max.	15.1	18.2	12.2	10.9	14.3	12.9	13.2	11.9	
	Mean	12.6	14.6	10.6	9.6	12.6	11.5	11.5	10.7	
	98 %*	14.76	18.01	12.19	10.90	14.02	12.90	13.02	11.88	
NOX (µg/m3)	Min.	20.7	23.6	19.7	20.1	18.5	18.7	24.6	26.4	80
	Max.	31.1	35.7	30.5	27.1	30.5	28.6	28.8	32.5	
	Mean	26.0	28.3	27.7	24.0	23.0	22.3	26.7	29.2	
	98 %*	30.27	34.55	30.36	26.61	28.80	26.99	28.55	32.30	
(CO) (mg/m3)	Min.	0.90	0.82	0.55	0.50	0.52	0.60	0.50	0.56	1 Hrs.=04
	Max.	1.85	1.92	1.47	1.35	1.42	1.80	1.35	1.82	
	Mean	1.46	1.42	0.91	0.94	0.92	1.25	0.94	1.22	
	98 %*	1.83	1.85	1.43	1.35	1.42	1.80	1.35	2.81	

The summary of results of ambient air quality monitoring of $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO are presented in Table 3-6. On the basis of tabulated data in Table 3-6, the following observations can be made:

3.6.2.1 Particulate Matter (PM10)

The maximum and minimum concentrations for PM10 were recorded as 86.2µg/m3 and 57.9µg/m3, respectively. The maximum concentration of PM10 was recorded at the (AQ2) Rd. No. 10, Ramnagar Industrial Area) and minimum concentration was observed at (AQ6) Mughalsarai. The mean concentration ranges between 61.5µg/m3 to 81.2µg/m3. 98th percentile values for PM10 during study period range between 67.30µg/m3 to 85.95µg/m3.

3.6.2.2 Fine Particulate Matter (PM2.5)

The maximum and minimum concentrations for PM2.5 were recorded as 47.9µg/m3 and 23.8µg/m3 respectively. The maximum concentration was recorded at (AQ2) Rd. No. 10, Ramnagar Industrial Area and the minimum concentration was recorded at (AQ6) Mughalsarai. The mean concentration ranges between 28.8µg/m3 to 45.0µg/m3. 98th percentile values for PM2.5 during study period range between 31.17µg/m3 to 47.86µg/m3.

3.6.2.3 Sulphur Dioxide (SO2)

The maximum and minimum SO2 concentrations were recorded as 18.2µg/m3 and 7.3µg/m3. The maximum concentration was recorded at (AQ2) Rd. No. 10, Ramnagar Industrial Area and the minimum concentration was recorded at (AQ6) Mughalsarai. The mean values were observed from 9.6µg/m3 to 14.6µg/m3. 98th percentile values for SO2 during study period range between 10.90µg/m3 to 18.01µg/m3.

3.6.2.4 Nitrogen Oxide (NO2)

The maximum and minimum NO2 concentrations were recorded as 35.7µg/m3 and 18.5µg/m3. The maximum concentration was recorded at (AQ2) Rd. No. 10, Ramnagar Industrial Area and the minimum concentration was recorded at (AQ5) Mathana. The mean values for NO2 were observed in the range between 22.3µg/m3 to 29.2µg/m3. 98th percentile values for NO2 during study period range between 26.61µg/m3 to 34.55µg/m3.

3.6.2.5 Carbon Monoxide (CO)

The maximum and minimum CO concentrations were recorded as 1.92mg/m3 and 0.50mg/m3. The maximum concentration was recorded at (AQ2) Rd. No. 10, Ramnagar Industrial Area and the minimum concentration was recorded at (AQ4) Dafi. The mean values for CO were observed in the range between 0.91mg/m3 to 1.46mg/m3. 98th percentile values for CO during study period range between 1.35mg/m3 to 2.81mg/m3.

3.7 Water Environment

3.7.1 Drainage Pattern of the Study area

The drainage in the district is controlled by the river Ganga which is flowing roughly south-west to north-east in the beginning then WNW to SES in the later phase, and forms boundary with Ghazipur district. One of the major tributory of river Ganga is Karam-nasha River which flows from SW to NE and forming boundary with the Bihar state. Chandra Prabha is another tributary which flows in the central part of the area.

The project is not located within 1.0 km radius of any major river.

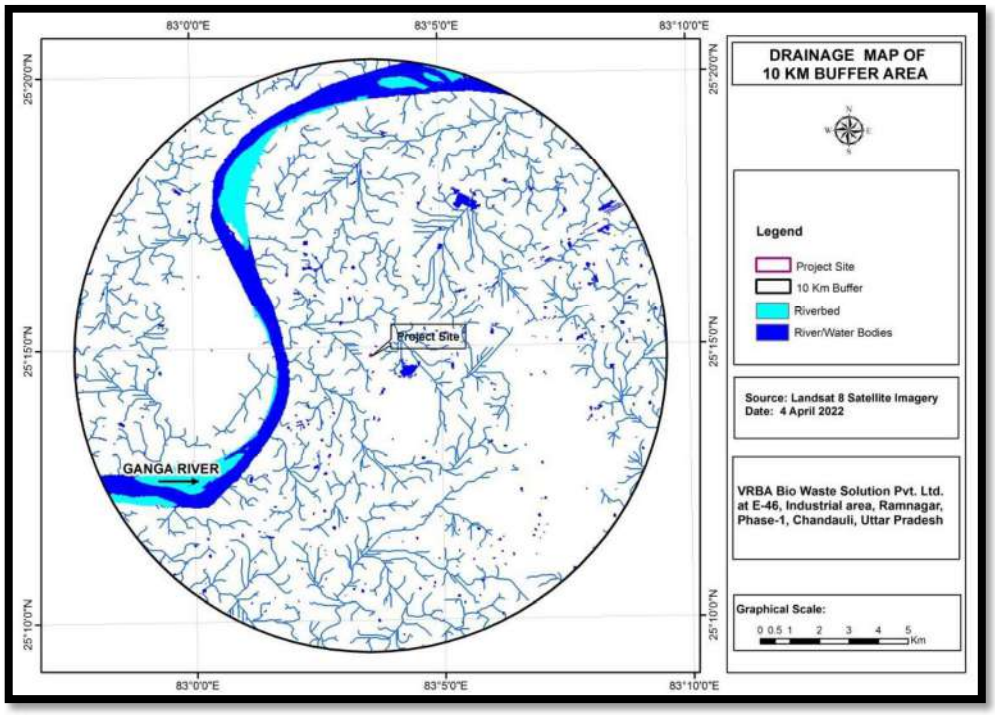


Figure 3-4: Drainage map of the study area

3.7.2 Water Quality report

Baseline Information on Water Quality: Water quality monitoring were carried out at 8 (Eight) locations for ground water and 8(Eight) locations for surface water.

Frequency of sampling was once for one season (October, November and December) during post-monsoon season for eight surface water sampling locations and eight ground water sampling locations. The locations of water quality monitoring stations are mentioned in the Table 3.7 & 3.8 for surface water and ground water respectively and locations are shown in maps in figure 3.9 & 3.10.

Methodology: Water samples were collected manually from selected 6 (Six) sampling points as mentioned in previous paragraphs. Polytetrafluoroethylene (PTFE) sample bottles were used for sample collection. These bottles were washed and sterilized properly in an autoclave before being used for water sample collection.
The analysis of water samples carried out at NABL Accredited Chemical Testing Laboratory of ETS. Analysis procedures adopted as per the Standard Operating Procedure (SOP) for WATER prepared based on BIS specification confirming to Central Pollution Control Board Guidelines.

Table 3-6: Surface Water Sampling Locations

S.No	Locations	Distance & Direction	Co-ordinate	Environmental Setting	Justifications
SW1	Ganga River (Upstream)	2.80 km, West	25°14'48.05"N 83° 1'54.20"E	River in buffer zone	River Ganga is the major river draining Chandauli district and one of the major tributory of river Ganga is Karam-nasha River which flows from SW to NE and forming boundary with the Bihar state. Chandra Prabha is another tributary which flows in the central part of the area and controlling the drainage of the area. Within 10 km radius of the project area, there are several open ponds. Eight surface water sampling locations are chosen from this area to study over all surface water quality within the total study area comprising 10 km radius from the boundary of the project site
SW2	Ganga River (Downstream)	2.81 km, West	25°14'51.30"N 83° 1'53.74"E	River in buffer zone	
SW3	Pokhra, Ramsagar	3.85 km, NW	25°16'19.46"N 83° 1'56.69"E	Open pond in buffer zone	
SW4	Pond, Mannapur	3.06 km, NNW	25°16'29.93"N 83° 3'17.71"E	Open pond in buffer zone	
SW5	Pirkhir, U.P	7.79 km, SE	25°11'54.54"N 83° 6'54.71"E	Open pond in buffer zone	
SW6	Pond, Rema, U.P	8.55 km, ENE	25°15'24.79"N 83° 8'37.61"E	Open pond in buffer zone	
SW7	Satyam Pond, Mughalsarai	7.79 km, NE	25°17'51.21"N 83° 6'51.09"E	Open pond in buffer zone	
SW8	Pond, Domari	5.5 km, South	25°11'52.00"N 83° 3'1.77"E	Open pond in buffer zone	

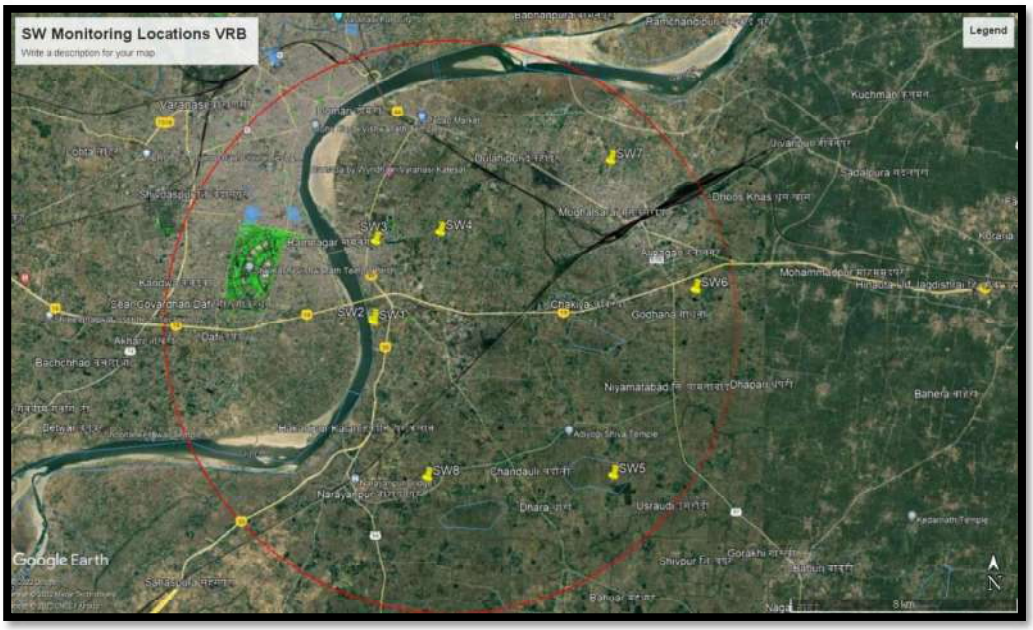


Figure 3-5: Surface water location

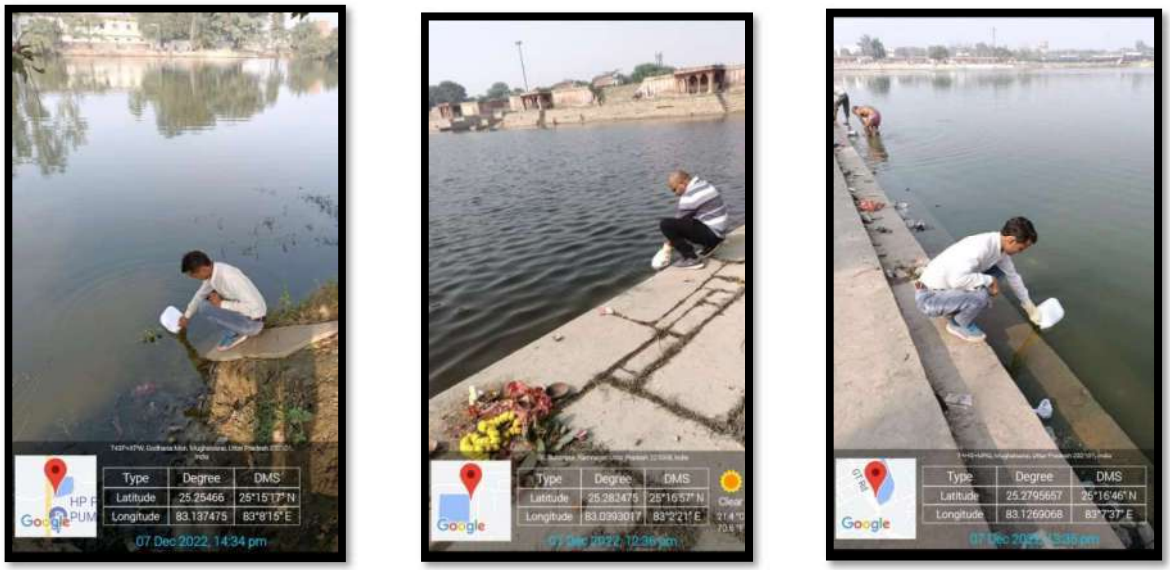


Figure 3-6: Surface water sampling photograph

Table 3-7: Analysis Report of Surface Water

S. No.	Parameter	Unit	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	Test Method
1	Colour	Hazen	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	APHA 2120-B
2	Odour	…	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	APHA 2150-B
3	Taste	…	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	APHA 2160-C
4	pH	…	7.84	7.80	7.58	7.66	8.05	7.36	7.43	7.47	APHA 4500-H+
5	Turbidity	NTU	11.4	12.5	15.7	13.25	13.53	12.54	11.5	11.0	APHA 2130-B
6	Total Dissolved Solids (TDS)	mg/L	473.8	542.1	381.9	602.35	475.9	631.1	498.1	389.4	APHA 2540-C
7	Total Suspended Solids (TSS)	mg/L	40.1	47.2	38.0	37.6	38.6	41.9	38.0	31.5	APHA 2540-D
8	Total Alkalinity (CaCO3)	mg/L	254.2	165.0	167.4	182.5	162.8	219.6	203.5	133.2	APHA 2320-B
9	Total Hardness (CaCO3)	mg/L	367.6	273.6	239.3	328.9	231.7	324.3	287.7	189.6	APHA 2340-C
10	Calcium (Ca)	mg/L	32.4	57.6	66.7	62.3	99.8	87.6	74.3	81.7	APHA 3500:(Ca)-B
11	Magnesium, (Mg)	mg/L	17.8	15.8	23.3	18.6	20.3	52.5	50.3	16.6	APHA 3500:(Mg)-B
12	Chloride, (Cl)	mg/L	52.2	92.6	114.2	112.3	145.4	132.3	126.7	118.9	APHA 4500:(Cl-)-B

13	Sulphate, (SO4)	mg/L	75.4	67.8	38.2	72.5	81.2	60.9	99.8	81.7	APHA 4500:(SO4)-E
14	Fluoride,(F)	mg/L	0.23	0.19	0.24	0.36	0.17	0.30	0.20	0.14	APHA 4500:(F-)-D
15	Aluminium, (Al)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA-3120B
16	Iron,(Fe)	mg/L	0.45	0.17	0.11	0.15	0.26	0.08	0.12	0.15	APHA-3120B
17	Nitrate,(NO 3)	mg/L	2.88	2.04	3.74	2.54	3.41	6.46	3.06	2.79	APHA 4500:(NO3-)-B
18	Zinc,(Zn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	APHA-3120B
19	Cadmium,(C d)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	APHA 3120B
20	Lead,(Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	APHA-3120B
21	Nickel,(Ni)	mg/L	0.15	0.11	0.143	0.11	0.08	0.16	0.12	0.07	APHA-3120B
22	Conductivity	µs/cm	712.4	783.4	617.5	795.6	696.7	890.6	738.7	570.0	APHA 2510-B
23	Boron,(B)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA 4500:(B)-C
24	Selenium, (Se)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA-3120B
25	Manganese, (Mn)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA-3120B
26	Mercury,(Hg)	ug/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	APHA-3114C
27	Arsenic,(As)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	APHA 3120B
28	Chromium, (Cr)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA-3120B
29	Molybdenu m,(Mo)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA-3120B

30	Ammonia, (as Total NH3-N)	mg/L	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	APHA 4500: (NH3)-C
31	Chemical Oxygen Demand, (COD)	mg/L	38.8	32.6	17.06	21.36	23.76	20.5	16.9	24.4	APHA 5220-C
32	Biological Oxygen Demand(BOD3d270C)	mg/L	4.6	4.1	4.07	2.98	5.28	3.4	4.5	3.32	IS: 3025 (Part-44)
33	Dissolved Oxygen (DO)	mg/L	7.27	5.83	5.79	4.5	3.883	7.6	5.08	5.1	APHA 4500:(O)-C
34	Chlorine (Residual)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	APHA 4500:(Cl)-B
35	Total Coliform Count	MPN/ 100mL	1280	1010	510	654	250	530	340	210	IS 1622
36	Escherichia coli	MPN/ 100mL	920	840	260	305	190	300	260	150	IS 1622

Table 3-8: Standards of Surface Water Quality Criteria

Class of Water	Designated best use	Criteria
A	Drinking Water Source without conventional treatment but after disinfection	• Total Coliforms Organism MPN/100ml shall be 50 or less • pH between 6.5 and 8.5 • Dissolved Oxygen 6mg/l or more • Biochemical Oxygen Demand 5 days 20°C 2mg/l or less
B	Outdoor bathing (Organized)	• Total Coliforms Organism MPN/100ml shall be 500 or less pH between 6.5 and 8.5 • Dissolved Oxygen 5mg/l or more • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
C	Drinking water source after conventional treatment and disinfection	• Total Coliforms Organism MPN/100ml shall be 5000 or less pH between 6 to 9 • Dissolved Oxygen 4mg/l or more • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
D	Propagation of Wild life and Fisheries	• pH between 6.5 to 8.5 • Dissolved Oxygen 4mg/l or more • Free Ammonia (as N) 1.2 mg/l or less
E	Irrigation, Industrial Cooling, Controlled Waste disposal	• pH between 6.0 to 8.5 • Electrical Conductivity at 25°C micro mhos/cm Max.2250 • Sodium absorption Ratio Max. 26 • Boron Max. 2 mg/L

As per ISI-IS: 2296-1982	
Classification	**Type of use**
Class A	Drinking water source without conventional treatment but after disinfection
Class B	Outdoor bathing
Class C	Drinking water source with conventional treatment followed by disinfection
Class D	Fish culture and wild life propagation
Class E	Irrigation, industrial cooling or controlled waste disposal

Observations:

The baseline quality of water based on the results of the surface water quality monitoring within the study area, it is observed that,

- pH was observed in the range of 7.36 - 8.05 with minimum at Pond, Rema (SW6) and maximum at Pond, Pirkhir (SW5).
- TDS was observed in the range of 381.9 -631.1 mg/L with minimum at Pond, Ramnagar (SW3) and maximum at Pond, Rema (SW6).
- COD was in the range of 16.9-38.8 mg/L with minimum at Satyam Pond (SW7) and maximum at Ganga River Upstream (SW1).
- BOD was in the range of 2.98 – 5.28 mg/L with minimum at Pond, Mannapur (SW4) and maximum at Pond, Pirkhir (SW5).

It is observed from the analysis of the surface water at 8 locations within the study area, which are compared with classes for designated use of River are suitable for “E class” i.e. irrigation, industrial cooling and controlled waste disposal.

3.7.2.1 Ground Water

Table 3- 1 Ground Water sampling locations in the study area

S.No	Locations	Distance & Direction	Co-ordinate
GW1	Project Site	--	25°14'51.54"N 83° 3'34.65"E
GW2	Prabhu Narayan Government Inter College Near Nagar Palika Parishad, Ram Nagar Varanasi, U.P	4.32 km, SW	25°16'32.88"N 83° 1'47.63"E
GW3	Govt. homeopathic hospital Hakanipur Kalan, U.P	4.92 km, SW	25°12'49.22"N 83° 1'41.45"E
GW4	Little Folks School, Ravi Nagar, Mughalsarai, U.P	7.01km, NE	25°17'13.21"N 83° 6'50.41"E
GW5	Godhana	7.24 km, West	25°15'3.59"N 83° 7'52.05"E
GW6	Bauri	6.95 km, SE	25°12'38.05"N 83° 6'54.44"E
GW7	Primary School Fattepur, U.P	8.93 km, SSW	25°10'11.02"N 83° 2'10.18"E
GW8	J D Hospital Dulhipur, Mughalsarai, U.P	6.51 km, NNE	25°18'8.49"N 83° 5'0.24"E

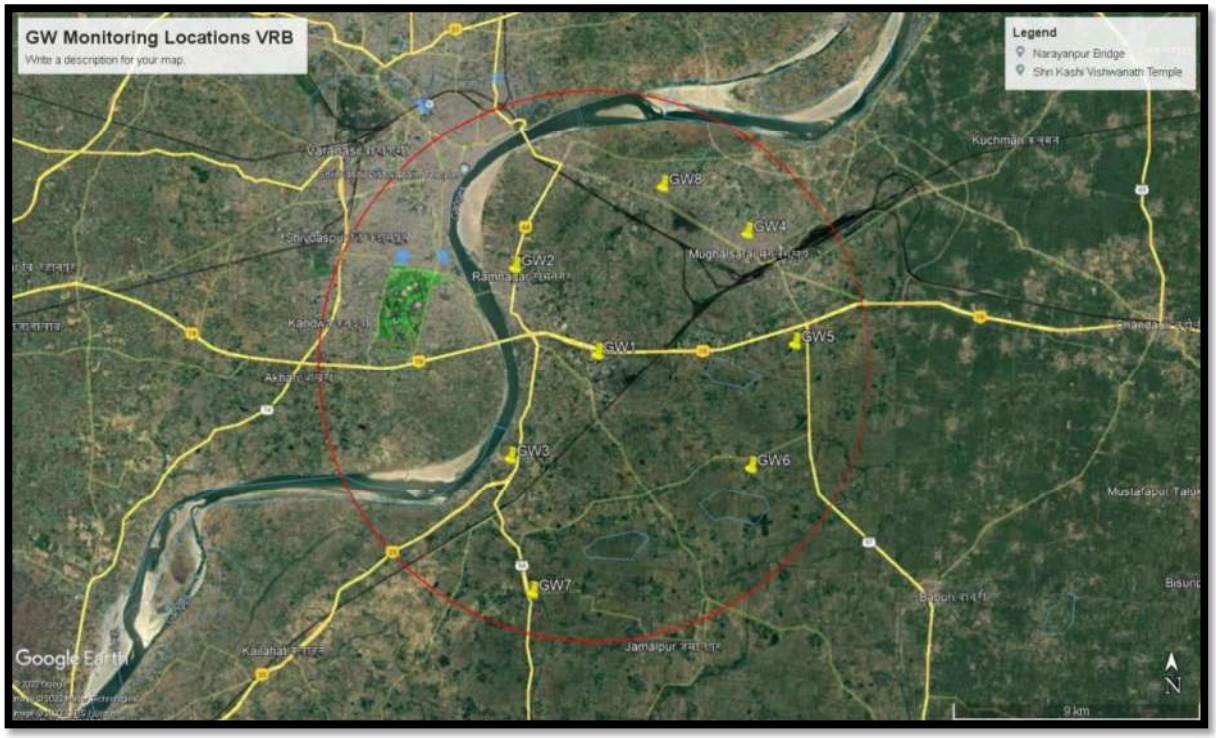


Figure 3-7: Ground water location

Bhole
Google
Type | Degree | DMS
Latitude | 25.2147296 | 25°12'53" N
Longitude | 83.1164369 | 83°6'59" E
07 Dec 2022, 15:00 PM

72MJ+9H5, Katesar, Varanasi, Uttar Pradesh 221008, India
opur...
Google
Type | Degree | DMS
Latitude | 25.2839082 | 25°17'2" N
Longitude | 83.0314483 | 83°1'53" E
08 Dec 2022, 11:07 am
Haze

Figure 3-8: Ground Water sampling photograph

Table 3-9: Analysis Report of Ground Water

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	Drinking Water Standards / Limit (IS:10500 2012)		Test Method
											Desirable	Permissible	
1	Colour	Hazen	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5	15	IS:3025 (Pt-4)
2	Odour	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (Pt-5)
3	pH	---	7.82	7.54	7.06	7.24	7.74	7.42	7.68	6.75	6.5 - 8.5	No Relaxation	IS:3025 (Pt-11)
4	Taste	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (Pt-8)
5	Turbidity	NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	5	IS:3025 (Pt-10)
6	Total Dissolve Solid (TDS)	mg/L	610.3	454.4	523.0	477.1	548.5	325.8	290.3	410.3	500	2000	IS:3025 (Pt-16)
7	Total Alkalinity (CaCO3)	mg/L	198.1	206.6	180.3	158.3	237.7	126.7	142.8	143.6	200	600	IS:3025 (Pt-23)
8	Total Hardness(CaCO3)	mg/L	297.7	287.0	264.6	190.4	320.7	173.1	157.2	252.1	200	600	IS:3025 (Pt-21)
9	Chloride (Cl)	mg/L	121.9	94.4	104	99.1	109.2	88.2	96.4	103.8	250	1000	IS:3025 (Pt-32)
10	Calcium (Ca)	mg/L	56.8	47.2	44	49.5	46.2	49.6	52.8	51.9	75	200	IS:3025 (Pt-40)
11	Mineral Oil	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.5	No Relaxat	IS:3025 (Pt-

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	Drinking Water Standards / Limit (IS:10500 2012)		Test Method
											Desirable	Permissible	
												ion	39)
12	Sulphate (SO4)	mg/L	40.9	31.6	36.9	33.26	38.8	42.66	22.7	34.8	200	400	IS:3025 (Pt-24)
13	Nitrate (NO3)	mg/L	1.36	0.72	1.2	0.75	1.28	1.26	2.81	0.79	45	No Relaxation	IS:3025 (Pt-34)
14	Fluoride (F)	mg/L	0.31	0.33	0.28	0.35	0.30	0.25	0.23	0.36	1	1.5	IS:3025 (Pt-60)
15	Iron (Fe)	mg/L	0.024	0.88	0.15	0.92	0.09	0.96	0.08	0.16	0.3	No Relaxation	IS:3025 (Pt-53)
16	Aluminium (Al)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.2	APHA-3500 (B)
17	Selenium (Se)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	No. Relaxation	APHA-3113 (B)
18	Cyanide (Cn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No. Relaxation	APHA-4500 (C)
19	Copper(Cu)	mg/L	0.14	0.072	0.12	0.07	0.12	0.08	0.04	0.07	0.05	1.5	APHA-3111(B)
20	Magnesium (Mg)	mg/L	37.4	29.44	33.4	30.9	35.11	23.93	25.08	32.3	30	100	IS:3025 (Pt-45)
21	Manganese(Mn)	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.3	APHA-3111(B)

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	Drinking Water Standards / Limit (IS:10500 2012)		Test Method
											Desirable	Permissible	
22	Zinc(Zn)	mg/L	0.63	0.51	0.44	0.53	0.45	0.64	0.66	0.56	5	15	APHA-3111 (B)
23	Cadmium(Cd)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	No. Relaxation	APHA-3111 (B)
24	Lead(Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	No. Relaxation	APHA-3111 (B)
25	Mercury(Hg)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	No. Relaxation	APHA-3112 (B)
26	Nickel (Ni)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	No. Relaxation	APHA-3111 (B)
27	Arsenic(As)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.05	APHA-3111(B)
28	Chromium (Cr+6)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	No. Relaxation	APHA-3500 Cr-B
29	Phenolic Compound (C6H5OH)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	APHA-5530
30	Conductivity (25 °C)	mhos/cm	867.1	674.8	742.7	618.7	782.5	567.12	470.3	741.8	Not Specified	Not Specified	APHA-2510
31	E. Coli	Coli/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Shall Not Be Detectable		IS:1622-1981

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	Drinking Water Standards / Limit (IS:10500 2012)		Test Method
											Desirable	Permissible	
32	Total Coliform	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Shall Not Be Detectable		IS:1622-1981
33	Temperature	°C	16.2	15.43	16.4	15.7	16.17	16.96	16.5	15.2	Not Specified	Not Specified	IS:3025 (Pt-9)
34	Sodium (Na)	mg/L	42.5	41.12	59.1	43.1	62.07	44.64	49.2	45.2	Not Specified	Not Specified	APHA-3500 (Na)
35	Fecal Coliform	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Shall Not Be Detectable		APHA-9221

Observations:

- All the samples were colourless meeting desirable norms (<5 Hazen).
- All the samples meet the desirable standards (pH ranges from 6.75 to 7.82).
- TDS in samples ranges from 290.3 mg/L to 610.3 mg/L. All the samples meet the permissible limit of 2000 mg/L.
- Total Hardness in the water ranges from 157.2 mg/L to 320.7 mg/L. All the samples meet the permissible limit of 600 mg/L.
- Calcium content in the water ranges from 44 mg/L to 56.8 mg/L all the samples meet the permissible limit of 200 mg/L.
- Magnesium content in the water ranges from 23.93 mg/L to 37.4 mg/L. All the samples meet the permissible limit of 100 mg/L.
- Sulphate content in the water ranges from 22.7 mg/L to 42.66 mg/L. The permissible limit of Sulphate is 400 mg/L for drinking water.
- Total alkalinity in the water samples ranges from 126.7 mg/L to 237.7 mg/L. All the samples are within the permissible limit of drinking water (600 mg/L).
- Chloride ranges from 88.2 mg/L to 121.9 mg/L. Which are below permissible limits (1000 mg/l)

3.8 Noise Environment

The physical description of sound concerns its loudness as a function of frequency. Noise, in general, is sound that is composed of many frequency components of various levels of loudness, distributed over the audible frequency range. Various noise scales have been introduced to describe, in a single number, the response of an average human to a complex sound made up of various frequencies at different loudness levels. The most common and universally accepted scale is the 'A' weighted scale which is measured as dB (A). This is more suitable in the audible range of 20 to 20,000 Hz. The scale has been designed to weigh various components of noise according to the response of the human ear. The impact of noise sources in surrounding community depends upon;

Characteristics of noise sources (instantaneous, intermittent or continuous in nature). It can be observed that steady noise is not as annoying as one which is continuously varying in loudness.

The time of day at which noise occurs, for example high noise levels at night in residential area are not acceptable because of sleep disturbance. The location of the noise source w.r.t. noise sensitive area, which determines the loudness and period of exposure.

3.8.1 Monitoring Locations

Eight monitoring locations were selected so as to represent the entire study area. A map of the study area showing the monitoring locations as mentioned in Table 3-10 is presented in Figure 11.

Table 3-10: Noise monitoring Locations

S.No	Locations	Distance & Direction	Co-ordinate
NQ1	Road No.10, Ramnagar Industrial Area	--	25°14'49.73"N 83° 3'34.67"E
NQ2	Vishwa Sundari Rd.	0.56 km, North	25°15'9.26"N 83° 3'39.95"E
NQ3	Milkipur	2.22 km, West	25°14'45.61"N 83° 2'14.47"E
NQ4	Dhara	6.57 km, SSE	25°11'39.67"N 83° 5'19.39"E
NQ5	Alinagar Rd.	8.57 km, ENE	25°16'27.08"N 83° 8'22.84"E

NQ6	NH-44, Ramnagar	4.38 km, NW	25°16'38.58"N 83° 1'52.22"E
NQ7	SH-5A, Sikia	6.95 km, SSW	25°11'29.39"N 83° 1'43.80"E
NQ8	Padao Rd, Bhisauri	7.85 km, NNE	25°18'51.90"N 83° 5'9.08"E

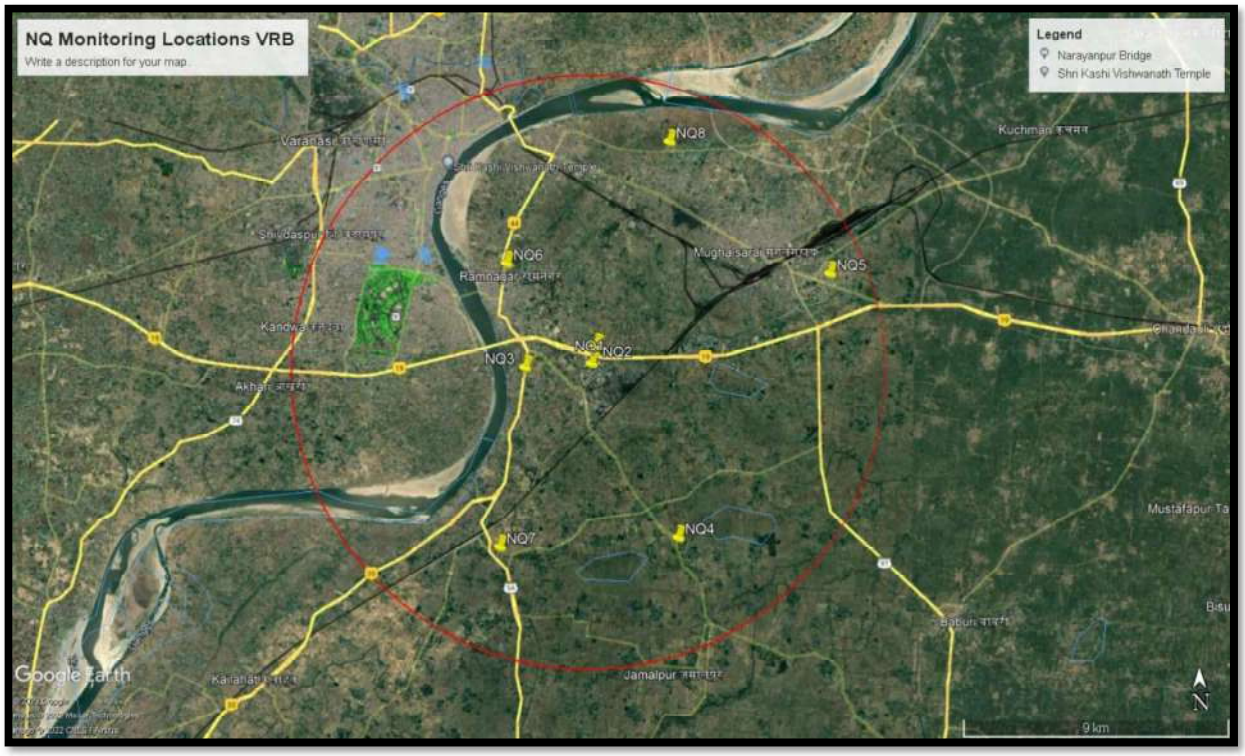


Figure 3-9: Noise monitoring location map

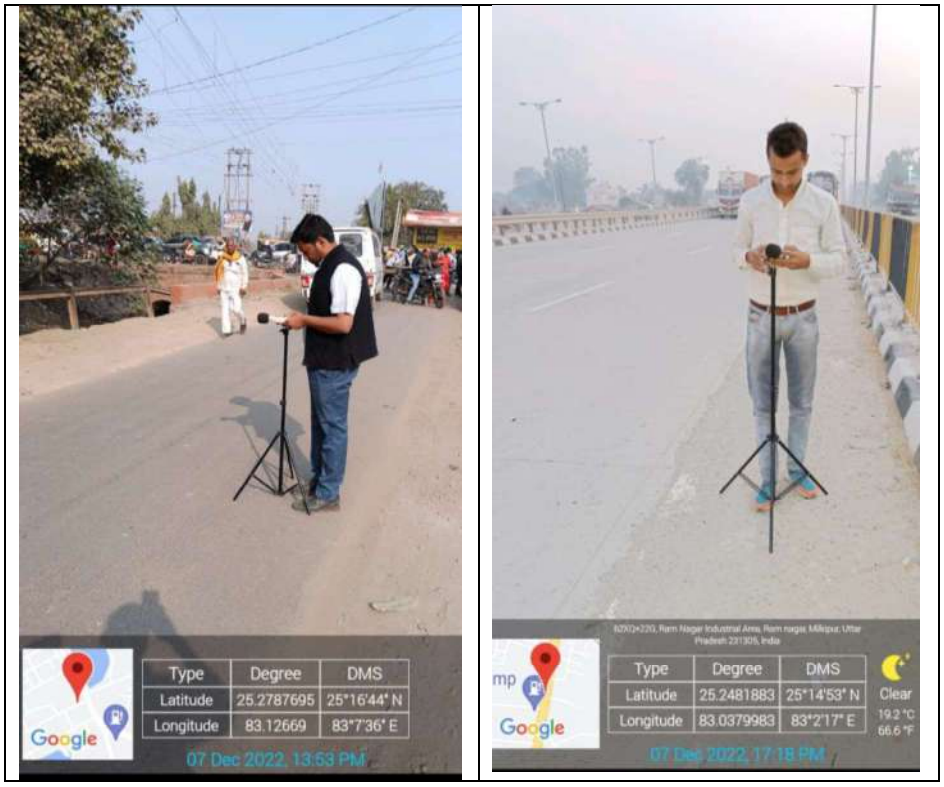


Figure 3-10: Noise monitoring photos

3.8.2 Methodology of data generation

The noise monitoring was carried out at eight locations in day time during and at night time in the study area covering all the areas i.e. industrial, commercial, and residential and silence zones as mentioned in Noise (Pollution and Control) Rules, 2000.

Noise, in general, is sound which is composed of many frequency components of various types of loudness distributed over the audible frequency range. Various noise scales have been introduced to describe, in a single number, the response of an average human to a complex sound made up of various frequencies at different loudness levels. The most common and universally accepted scale is the 'A' weighted Scale which is measured as dB (A). This is more suitable for audible range of 20 to 20,000 Hz. The scale has been designed to weigh various components of noise according to the response of a human ear.

Sound Pressure Level (SPL) measurements were measured at all locations. The readings were taken for every hour for 24 hours. The day noise levels have been monitored during 6 am to 10

pm and night levels during 10 pm to 6 am at all the locations covered in 10-km radius of the study area. The noise levels were measured once during the study period.

These readings were later tabulated and the frequency distribution table was prepared.

Finally, hourly and 24-hourly values for various noise parameters viz. L Day and L night were calculated.

For noise levels measured over a given period of time, it is possible to describe important features of noise using statistical quantities. This is calculated using the percent of the time certain noise levels exceed the time interval. The notations for the statistical quantities of noise levels are described below:

- L10 is the noise level exceeded 10 per cent of the time
- L50 is the noise level exceeded 50 per cent of the time and
- L90 is the noise level exceeded 90 per cent of the time

Equivalent Sound Pressure Level (Leq)

The Leq is the equivalent continuous sound level, which is equivalent to the same sound energy as the actual fluctuating sound measured in the same period. This is necessary because sound from noise source often fluctuates widely during a given period of time.

This is calculated from the following equation:

Leq= L50 + (L10 - L90)2/60

Noise level was recorded at every hour for 10 minutes continuously for 24 hours at ‘A’ response. Then the data was tabulated to get frequency table with different intervals. The ambient noise levels measure for the study is given in Table 3-16.

Table 3-11: Noise monitoring data

S. No.	Test Parameters	Unit	Result	Ambient Noise Standards/Specification (CPCB)
NQ 1 ROAD NO-10,RAMNAGAR INDUSTRIAL AREA				
1	Noise Level Day Time	Leq :dB (A)	72.5	75
2	Noise Level Night Time	Leq :dB (A)	65.3	70
NQ2 VISHWA SUNDARI RD				
1	Noise Level Day Time	Leq :dB (A)	48.2	55
2	Noise Level Night Time	Leq :dB (A)	36.5	45
NQ3 MILKIPUR				
1	Noise Level Day Time	Leq :dB (A)	52.3	55
2	Noise Level Night Time	Leq :dB (A)	40.4	45
NQ4 DHARA				
1	Noise Level Day Time	Leq :dB (A)	46.4	55
2	Noise Level Night Time	Leq :dB (A)	35.6	45
NQ5 ALINAGAR ROAD				
1	Noise Level Day Time	Leq :dB (A)	45.8	55
2	Noise Level Night Time	Leq :dB (A)	38.1	45
NQ6 NH-44,RAMNAGAR				
1	Noise Level Day Time	Leq :dB (A)	47.4	55
2	Noise Level Night Time	Leq :dB (A)	40.5	45
NQ7 SH-5A, SIKIA				
1	Noise Level Day Time	Leq :dB (A)	45.1	55
2	Noise Level Night Time	Leq :dB (A)	34.5	45
NQ8 PADAO RD, BHISAURI				
1	Noise Level Day Time	Leq :dB (A)	52.3	55
2	Noise Level Night Time	Leq :dB (A)	37.2	45

Observations

- The maximum and minimum concentrations for Noise were recorded as 72.5 dB (A) and 45.1 dB (A) respectively in day. The maximum concentration was recorded at Project Site and the minimum concentration was recorded at SH-5A, Sikia.
- The maximum and minimum concentrations for Noise were recorded as 65.3 dB (A) and 34.5dB (A) respectively in Night. The maximum concentration was recorded at Project Site and the minimum concentration was recorded at SH-5A, Sikia.

3.9 Soil Environment

Soils are predominantly sandy loam with clay loam at places with low to medium nutrient status. It is generally alkaline with pH value ranging from 6.3 to 8.2. Traditionally soils in an area are classified on the basis of mode of deposition. Soils are divided into three groups viz. (i) Recent alluvium (ii) Tal and (iii) Older alluvium. The soils of the district have developed on alluvial deposits transported from relatively younger geological formations where physical weathering is predominant and the soils developed in them are generally coarser in texture.

Soil Quality

To understand the soil characteristics**, 08** locations in the study area were selected for soil sampling. For selection of soil sampling locations, the following criterion was considered:

- Soil from agricultural land, park open land, and
- Soil from industrial area, where there is possibility of contamination

Table 3-12: Soil sampling locations

S.No	Locations	Distance & Direction	Co-ordinate
SQ1	Near Project Site	0.22 km, NNE	25°14'57.91"N 83° 3'38.67"E
SQ2	Bhartiya Shishu Mandir School, Ramnagar, Varanasi, U.P	4.55 km, NW	25°16'36.80"N 83° 1'40.24"E
SQ3	Rasulganj	2.40 km, WSW	25°14'23.08"N 83° 2'13.62"E
SQ4	Mathana	5.12 km, SSE	25°12'14.27"N 83° 4'38.35"E
SQ5	Godhana	7.10 km, East	25°15'2.01"N 83° 7'48.15"E
SQ6	Hirdaypur	4.66 km, NE	25°16'48.60"N 83° 5'19.78"E
SQ7	Rewari	6.78 km, SSW	25°11'16.25"N 83° 2'37.95"E
SQ8	Satpokhari, Padao Rd.	7.45 km, NNE	25°18'37.14"N 83° 5'11.84"E

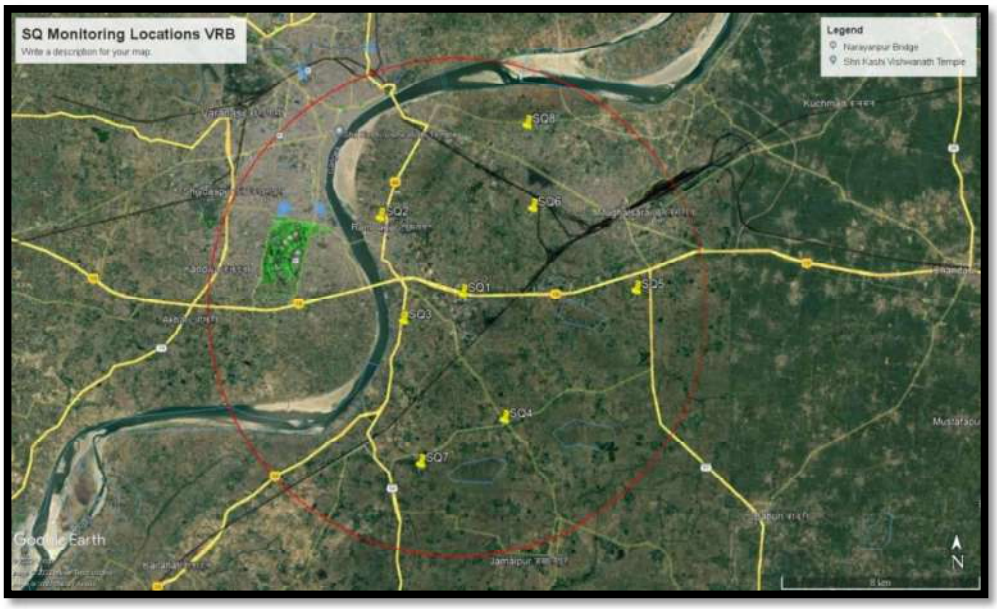


Figure 3-11: Soil Monitoring Location Map

Figure 3-12: Soil monitoring photos

Analysis results of physical and chemical parameters of soil samples are given in Table 3-19 Chemical classification of soil quality as per Indian Council Agriculture Research (ICAR) is given in Table 3-18.

The details of soil sampling locations & result are given in Table 3-14 & Table 3.15. The soil sampling locations are shown in Figure 3-10. Composite sampling of soil up to root depth (10 - 15 cm) was carried out at each location.

Table 3-13: Chemical Classification of Soil Quality

Sr. No.	Soil Analysis Parameters	Classification
1	pH	4.5 Extremely acidic 4.51- 5.50 Very strongly acidic 5.51-6.00 moderately acidic 6.01-6.50 slightly acidic 6.51-7.30 Neutral 7.31-7.80 slightly alkaline 7.81-8.50 moderately alkaline 8.51-9.0 strongly alkaline 9.01 very strongly alkaline
2	Salinity Electrical Conductivity (mmhos/cm) (1ppm = 640 mmho/cm)	Up to 1.00 Average 1.01-2.00 harmful to germination 2.01-3.00 harmful to crops (Sensitive to salts)
3	Organic Carbon (%)	Up to 0.2: very less 0.21-0.4: less 0.41-0.5 medium, 0.51-0.8: on an average sufficient 0.81-1.00: sufficient >1.0 more than sufficient
4	Nitrogen (Kg/ha)	Up to 50 very less 51-100 less 101-150 good 151-300 Better

		>300 sufficient
5	Phosphorus (Kg/ha)	Up to 15 very less 16-30 less 31-50 medium 51-65 on an average sufficient 66-80 sufficient >80 more than sufficient
6	Potash (Kg/ha)	0 -120 very less 120-180 less 181-240 medium 241-300 average 301-360 better >360 more than sufficient

Table 3-14: Results of soil sample analyses report

S. No.	Test Parameters	Unit	SQ-1	SQ-2	SQ-3	SQ4	SQ5	SQ6	SQ7	SQ8	Test Method
1	Texture	…	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay Loam	IS:2720 (Pt-4)
2	Sand	%	53.5	58.2	54.7	52.0	64.2	62.6	67.5	55.1	IS:2720 (Pt-4)
3	Silt	%	26.2	27.5	26.8	31.4	22.3	25.3	20.9	26.7	IS:2720 (Pt-4)
4	Clay	%	20.3	14.3	18.5	16.6	13.5	12.1	11.6	18.2	IS:2720 (Pt-4)
5	pH (1:2 Suspension)	..	7.58	7.51	7.6	7.81	7.23	7.30	7.51	7.36	IS:2720 (Pt-26)
6	Cation Exchange Capacity(CEC)	meq/100	31.8	24.7	36.9	24.9	35.0	28.0	28.0	32.0	IS:2720 (Pt-24)
7	Electrical Conductivity (1:2)	µmho/cm	332.1	332.8	359.8	374.2	320.0	320.0	360.0	346.0	IS:14767
8	Water Holding Capacity(WHC)	%	42.9	35.6	44.4	34.04	40.4	36.0	36.0	40.0	IS 2720 (Part-2)
9	Sodium (Na)	mg/kg	91.5	117.2	97.3	114.4	113.0	88.0	110.0	94.0	APHA-3125B
10	Calcium (Ca)	mg/kg	1061.3	929.4	1084.7	1137.2	1034.7	1020.5	1102.6	1043.0	IS 2720 (Part-23)
11	Magnesium (Mg)	mg/kg	404.5	341.4	413.9	523.4	428.3	389.0	537.0	448.0	ETS/STP/SOIL-08

12	Bulk Density	g/cm3	1.35	1.24	1.40	1.45	1.28	1.30	1.80	1.36	IS 2386 (Part-4)
13	Total Nitrogen (N)	mg/kg	127.6	120.6	116.4	119.2	137.0	127.0	157.5	178.8	APHA, Pt 4500:(N)
14	Phosphorus (PO4)	mg/kg	55.2	46.3	44.7	40.4	52.3	47.2	52.4	57.6	ETS/STP/SOIL -19
15	Potassium (K)	mg/kg	156.7	254.0	162.8	275.8	223.0	193.0	218.0	235.0	APHA-3125B
16	Organic Matter	%	2.9	2.70	3.12	2.28	2.6	2.8	2.46	3.0	IS : 2720 (P-22)
17	Organic Carbon	%	1.4	1.38	1.56	1.14	1.3	1.4	1.20	1.5	BS 1377 -3)
18	Sulphate as (SO4)	mg/kg	2.70	1.24	2.08	2.39	1.20	2.6	2.37	2.0	IS:3025(P-24)
19	Porosity	%	10.15	16.6	10.2	10.4	12.28	21.8	18.6	14.9	IS 13030
20	Manganese,(Mn)	mg/kg	3.3	4.16	3.95	3.5	4.0	3.2	3.4	3.8	ETS/STP/SOIL -18
21	Nickel,(Ni)	mg/kg	2.26	10.19	6.5	4.18	8.6	5.0	2.1	2.5	ETS/STP/SOIL -18
22	Zinc,(Zn)	mg/kg	1.6	1.24	1.97	1.76	1.2	1.6	1.7	1.9	ETS/STP/SOIL -18
23	Lead,(Pb)	mg/kg	2.08	2.56	2.4	2.43	2.4	2.0	2.4	2.4	ETS/STP/SOIL -18

Observations of Results:

Soil texture is sandy loam in most of the sites selected for monitoring. The pH is found in the range of 7.51 to 7.81. Available Nitrogen is 116.4 mg/kg found lowest at Village- Rasulganj and 178.8 mg/kg at Village Satpokhari, Padao Rd. Available Phosphorus 40.4mg/kg found lowest at Mathana and slightly highest 57.6 mg/kg at Village Satpokhari, Padao Rd. Available Potassium lowest at 156.7 mg/kg at Near Project Site and highest 275.8 mg/kg at Mathana village.

3.10 Landuse/Landcover

Landuse Landcover Analysis for VRBA Project

Landcover data highlights the area covered by forests, wetlands, impervious surfaces, agriculture, and other land and water types. Water types include wetlands or open water. Landuse shows how people use the landscape for development, conservation or for other purposes. Therefore its highlights the current scenario as well as predict the impact.

1. **Objectives:** Main objectives are:
   - To prepare the landuse landcover map of study area based on recent satellite imageries.
   - To assess the impact of proposed project on existing landuse and landcover
   - To suggest mitigations measures
2. **Hardware:** The equipment used during the present investigation includes ground truth hand held GARMIN 12 GPS receiver for ground truth collection, besides the visual observation and analysis.
3. **Software:** The following software were applied to extract indicators and maps:
   - **ERDAS Imagine:** The Erdas imagine version 2016 is used to process Landsat-8 satellite data and to extract the required indicators through spatial & spectral analysis.
   - **ArcGIS:** The ArcGIS version 10.3 has been used to prepare the final Maps for indicators through the outcomes of ERDAS software.
4. **Methodology:** The methodology applied for the study involved obtaining satellite images from open source, and then using a range of software to process the images and also by GPS coordinates (ground truthing) for drawing observations. The detailed methodology is explained as below:

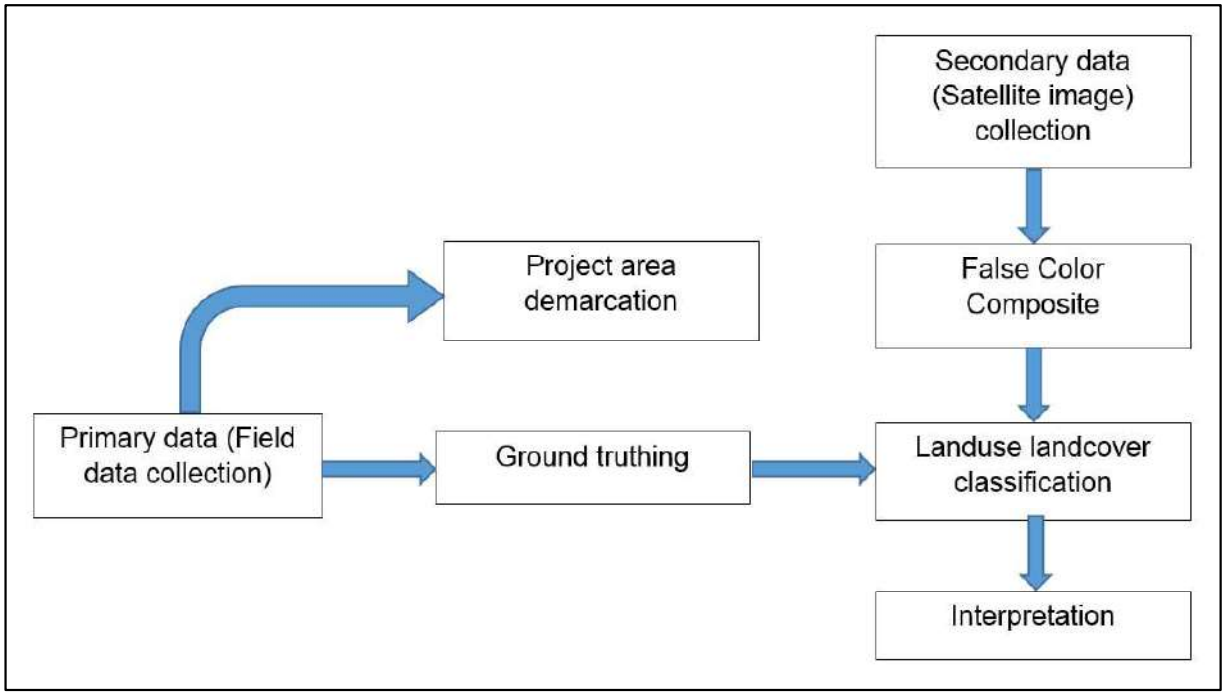


Figure 3-13: Flow Chart: Methodology

- Primary Data: The coordinates along land features of project area is collected with the help of GPS device for ground truthing. This data is primary data. On the basis of this data, landuse landcover analysis is appropriate.
- Secondary Data: Satellite image (secondary data) is required to show the current land features of the project area and buffered area (10 km). Landsat 8 Satellite image is used, which is collected from open source. The path, row, date, resolution of satellite data used were as follows.

Path	142
Row	43
Date of pass	04 April 2022
Resolution (panchromatic)	15 Meter

Landsat 8 Operational Land Imager (OLI) and Thermal Infrared Sensor (TIRS) images consist of nine spectral bands with a spatial resolution of 30 meters for Bands 1 to 7 and 9. The ultra-blue Band 1 is useful for coastal and aerosol studies. Band 9 is useful for cirrus cloud detection.

- **False Color Composite (FCC):** False color (or false colour) refers to a group of color rendering methods used to display images in color which were recorded in the visible or non-visible parts of the electromagnetic spectrum. A false-color image is an image that depicts an object in colors that differ from those a photograph (a true-color image) would show. False-color image sacrifices natural color rendition in order to ease the detection of features. The FCC for 10 km buffer zone of the project area is shown in Figure 3-17.

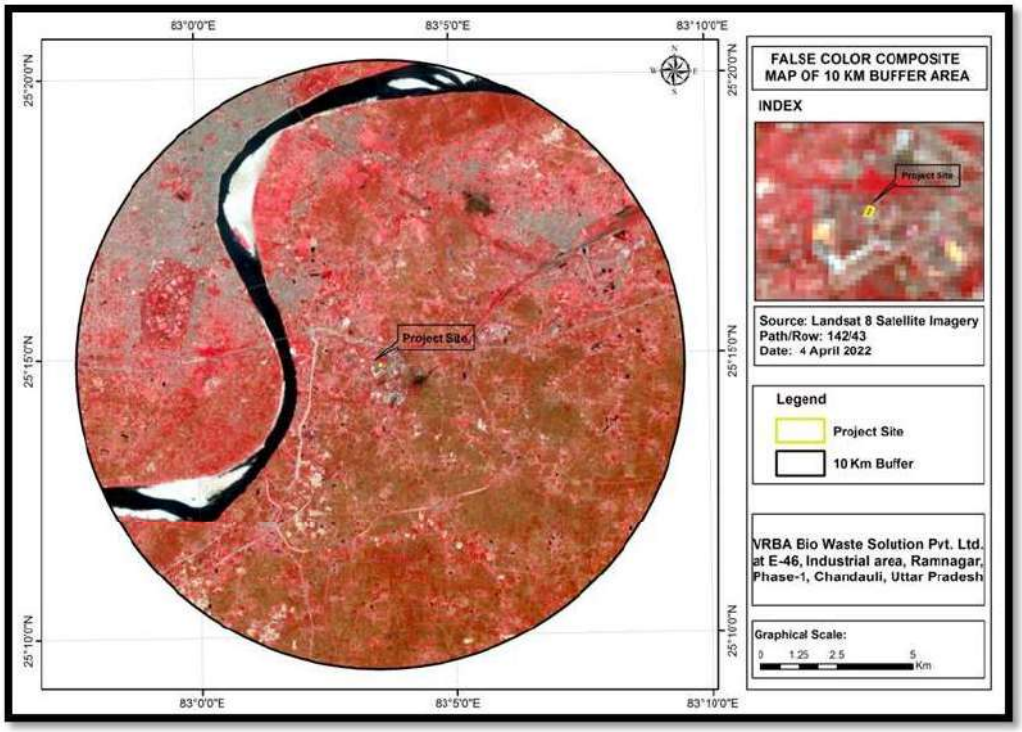


Figure 3-14: Shows the False color Composite Map of the study area

- **Landuse landcover classification & Interpretation:** The classification approach is applied on the basis of various characteristics like colour, texture, shape, association etc. The Landuse landcover map for 10 km buffer zone of the project area is shown in figure 3.

The unsupervised classification approach was obtained for the Landuse and Landcover classification by using ERDAS Imagine software. In this approach, the pixels of the project

area are clustered in several classes on the basis of spatial & spectral variation in pixel value which are following:

I. **Built-up land:** 17.21 per cent of the total project area is covered by built-up land. The entire built-up land comes under rural areas. This area is identified by grey color and square/rectangular shape in the satellite image. Built-up land can be described as an area of intensive use with much of the land covered by structures. Areas included in this category are cities, towns, villages, strip developments along with highways, transportation, power, and communications facilities, and other areas such as those occupied by mills, shopping centers, industrial and commercial complexes, and institutions that may, in some instances, be isolated from built-up areas.

II. **Agricultural land:** 31.61 per cent of the total project area is covered under agricultural land. Agricultural land may be defined as the land that is used primarily for the production of food and fiber. In the satellite imageries, cropland is identified by light pinkish to dark pinkish color or red, fine texture and rectangular/square shape.

III. **Agricultural fallow land:** It is the type of cropland which is not seeded for a season so as to allow the fields become fertile again. The practice of allowing fields to remain fallow dates back to ancient times when farmers realized that using soil over and over again depletes its of its nutrients. Agricultural fallow land covers 41.38 per cent of the total project area.

IV. **Open Land:** Open land is any degraded land or a land which is currently underutilized but can be brought under vegetative cover with reasonable efforts. This type of land covers 1.17 per cent of the total project area. This area is identified by off-white color and rough texture in the satellite image.

V. **River/Water Bodies:** All natural and man-made ponds, reservoirs, river come under this class. A river is a natural flowing watercourse, usually freshwater, flowing towards an ocean, sea, lake or another river. In some cases a river flows into the ground and becomes dry at the end of its course without reaching another body of water. This feature is identified by dark blue to black color, fine texture in the satellite image and cover only 5.17 percent of the total project area.

VI. **Riverbed:** A riverbed or streambed is the channel bottom of a stream or river, the physical confine of the normal water flow. The riverbed of the project area is consist of sand and cover only 2.16 percent of the total project area. This area is identified by white color and fine texture in the satellite image.

VII. **Vegetation:** This type of land covers 1.31 per cent of the total project area.

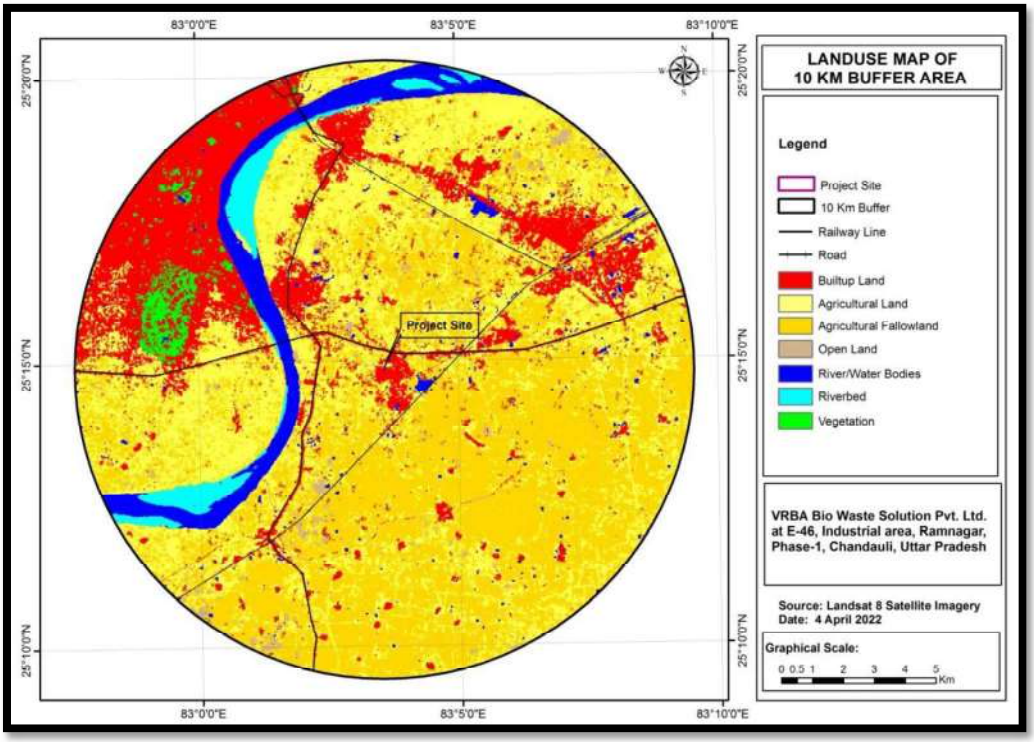


Figure 3-15: shows Landuse landcover classification

On the basis of the landuse landcover classification, the areas of different land features are as follows:

Table 3-15: Landuse Landcover classification of the study area

Class Name	Area (Ha)	Area (%)
Built-up Land	5440.99	17.21
Agricultural Land	9992.65	31.61
Agricultural Fallowland	13080.00	41.38
Open Land	368.91	1.17
River/Water Bodies	1635.48	5.17

Riverbed	681.86	2.16
Vegetation	413.24	1.31
Total	31613.13	100.00

Impact Analysis:

This Construction project will have some anticipated impacts which are as follows

1. Creation of employment, quality shelter and improved infrastructure.
2. The surrounding land use pattern will be changed.
3. Road network will be developed.
4. Impact on the public utilities arising out of the utilities for the project activities.
5. Impact on the natural drainage system and soil erosion.

Mitigation measurement:

Mitigation measures are means to prevent, reduce or control adverse environmental effects of a project, and include restitution for any damage to the environment caused by those effects through replacement, restoration, compensation or any other means. The mitigation measures are as follows:

1. Selection of suitable local plant species for greenbelt development in and around the sites.
2. Top soil conservation plan and its re-utilization depending on its quality
3. Recycling of recyclable non-biodegradable garbage and only non-recyclable portion shall be handed over to local authority to reduce the load on dumping grounds

3.11 Biological Environment

3.11.1 Introduction

Biological study is essential to understand the impact of industrialization and urbanization on existing flora and fauna of the study area. Studies on various aspects of ecosystem play an important role in identifying sensitive issues for under taking appropriate action to mitigate the impact, if required.

The biological study was under taken as a part of the EIA study report to understand the present status of ecosystem prevailing in the study area to compare it with past condition with the help of available data, to predict changes in the biological environment as a result of present activities and to suggest measure for maintaining its health.

A baseline survey was conducted to study floral and faunal diversity of the terrestrial and aquatic environment of the study area within in 10 Km radius of the plant site.

Some of the information was collected from the local habitants. All the collected data were classified to interpret the impact of pollution on the flora and fauna of that region. Survey of the wild plants as well as agriculture crop plants was done and all the available information was recorded. Night survey was also conducted with the help of spotlight to record nocturnal animals, birds and reptiles.

Interpretation of Flora and Fauna:

No Schedule I species was found in the core as well as buffer zone. No endangered or endemic species (as notified in IUCN Red Data Book) are located within the study area. No migratory birds breed in the study area. No Tiger Reserve/ Elephant Corridor/ Turtle breeding place is located within 10 Km radius of the study area. The present baseline floristic study has been carried out to inventories floral composition in the study area. Sampling stations were selected from project site and buffer zone of 10 km radial area around the core zone for carrying out vegetation surveys and an inventory of various floral species. In order to understand the composition of the vegetation, most of the plant species were identified in the field itself whereas the species that could not be identified a specimen was collected along with their photographs for identification later with the help of available published literature and floras of the region. The inventory of flora and fauna is attached as Annexure. The study area has no protected forest or national park or sanctuaries. Therefore, the biodiversity is medium in the study area due to dominance of anthropogenic activity in the study area. No schedule I wild life species or rare and endangered species have been recorded from the study area.

Flora

A floral survey was carried out in the core as well as buffer zone of the proposed project site. The plant Species found in the area are given in table below:

Table 3-2 List of Flora in the Study Area by Site Visit, Inputs from the Locals and Pursued from Secondary Data

Sr. No.	Local Name	Scientific Name	Family
		Trees	
1.	Ardu/Paba	*Ailanthus excelsa*	Simaroubaceae
2.	Amaltas	*Cassia fistula*	Caesalpiniaceae
3.	Amla	*Emblica officinalis*	Phyllanthaceae
4.	Aswatha/Pipal	*Ficus religiosa*	Moraceae
5.	Ashok	*Polyalthia longifolia*	Fabaceae
6.	Bad	*Ficus benghalensis*	Moraceae
7.	Black Siris	*Albizia odoratissima*	Fabaceae
8.	Blue Gulmohar	*Jacaranda mimosisolia*	Fabaceae
9.	Balamkheera	*Kigelia pinnata*	Bignoniaceae
10.	Bel	*Aegle marmelos*	Rutaceae
11.	BadaPilu/ MithaJal	*Salvadora oleoides*	Salvadoraceae
12.	ChotaPilu/ KharaJal	*Salvadora persica*	Salvadoraceae
13.	Desibadam	*Terminalia catappa*	Combretaceae
14.	Dhaura	*Anogeissus latifolia*	Combretaceae
15.	Gulmohar	*Delonix regia*	Fabaceae
16.	Hingot	*Balanitesa egyptiaca*	Simaroubaceae
17.	Imli	*Tamarindus indica*	Fabaceae
18.	Jhinjha	*Bauhinia racemosa*	Caesalpiniaceae
19.	Jungle Jalebi	*Pithecellobium dulce*	Fabaceae
20.	Jamun	*Syzygium cumini*	Myrtaceae
21.	Jackfruit	*Artocarpus heterophyllus*	Moraceae
22.	Khairi	*Dichrostachys cinerea*	Mimosaceae
23.	Khajur	*Phoenix sylvestris*	Arecaceae
24.	Kumta	*Acacia senegal*	Mimosaceae
25.	Karanj	*Pongamia pinnata*	Fabaceae
26.	Kachnar	*Bauhinia tomentosa*	Apocynaceae
27.	Kulu	*Sterculi aurens*	Sterculiaceae
28.	Khejri	*Prosopis cineraria*	Fabaceae
29.	Largestomia	*Lagerstroemia indica*	Lythraceae
30.	Mohin	*Lanneacoro mandelica*	Anacardiaceae
31.	Mango	*Mangifera indica*	Anacardiaceae
32.	Mahua	*Madhuca indica*	Sapotaceae
33.	Molshree plant	*Mimusops Elengi*	Sapotaceae
34.	Mulbery	*Morus alba*	Moraceae
35.	Neem	*Azadirachta indica*	Meliaceae
36.	Palas	*Butea monosperma*	Fabaceae
37.	Shisham	*Dalbergia sissoo*	Fabaceae
38.	Salar	*Boswellia serrata*	Burseraceae

39.	Saptaparni	*Alstonia scholaris*	Apocynaceae
40.	Sal	*Shorea robusta*	Dipterocarpaceae
41.	Sagwan	*Tectona grandis*	Lamiaceae
42.	Tendu	*Diospyros melanoxylon*	Ebenaceae
43.	White Siris	*Albizia procera*	Fabaceae
44.	Yellow Gulmohar	*Peltophorum ferrugineum*	Fabaceae
Shrubs, Herbs, Climbers			
1.	Aak	*Calotropis procera*	Apocynaceae
2.	Bougainvillea	*Bougainvillea glabra*	Nyctaginaceae
3.	Besharam	*Ipomoea carnea*	Convolulaceae
4.	Buida	*Aervato mentosa*	Amaranthaceae
5.	BichhuButti	*Xanthium strumarium*	Asteraceae
6.	Banana	*Musa acuminata*	Musaceae
7.	ChoaBer	*Ziziphus nummularia*	Rhamnaceae
8.	Darkan	*Leucas martinicensis*	Lamiaceae
9.	Dandathor	*Euphorbia neriifolia*	Euphorbiaceae
10.	Donkey berry	*Grewia flavescens*	Tiliaceae
11.	Dhamaso	*Tephrosia purpurea*	Fabaceae
12.	Dhatura	*Datura metal*	Solanaceae
13.	Darkan	*Leucas aspera*	Lamiaceae
14.	Dudhi	*Euphorbia hirta*	Euphorbiaceae
15.	Guava	*Psidium guajava*	Myrtaceae
16.	Gangan	*Grewia tenax*	Tiliaceae
17.	Gudahal	*Hibiscus rosasinensis*	Malvaceae
18.	Ghaneri	*Lantana camara*	Verbenaceae
19.	Harsingar	*Nyctanthes arbor-tristis*	Oleaceaae
20.	Karonda	*Carissa carandas*	Apocynaceae
21.	Khirni	*Wrightia tinctoria*	Apocynaceae
22.	Kheep	*Leptadenia reticulata*	Asclepiadecae
23.	Kikar/Vilayati Babul	*Prosopisjuli flora*	Fabaceae
24.	Kachari	*Cucumis callosus*	Cucurbitaceae
25.	Kantala Indranan	*Cucumis prophetarum*	Cucurbitaceae
26.	Kanti/Gokhru	*Tribulus terrestris*	Zygophyllaceae
27.	Mehndi	*Lawsoniai nermis*	Lythraceae
28.	MotaBer	*Ziziphus mauritiana*	Rhamnaceae
29.	Mallow	*Abutilon indicum*	Malvaceae
30.	Makoi	*Solanum nigrum*	Solanaceae
31.	Nagphani	*Opuntiaficus indica*	Cactaceae
32.	Pasarghatali	*Solanum surattense*	Solanaceae
33.	PiliKateri	*Argemone mexicana*	Papaveraceae
34.	Red Kaner	*Nerium indicum*	Apocynaceae
35.	Ratanjot	*Jatropha curcas*	Euphorbiaceae
36.	Raimunia	*Lantana camara*	Verbenaceae
37.	SafedAak	*Calotropis gigantea*	Apocynaceae

38.	Sitaphal	*Annona squamosa*	Annonaceae
39.	Sadabahar	*Catharanthus roseus*	Apocynaceae
40.	ShankhPusphi	*Convolvulus microphyllus*	Convolvulaceae
41.	Shinio	*Crotalaria burhia*	Fabaceae
42.	Undhokanto	*Achyranthes aspera*	Amaranthaceae
43.	Yellow Kaner	*Thevetia peruviana*	Apocynaceae
Grasses			
1.	Bhurat	*Cenchrusbi florus*	Poaceae
2.	Doob	*Cynodon dactylon*	Poaceae
3.	Kans grass	*Saccharum spontaneum*	Poaceae
4.	Munj	*Saccharum munja*	Poaceae
5.	Weeping grass	*Eragrostis curvula*	Poaceae

Fauna

Faunal survey was carried out in the core as well as buffer zone of the proposed project site. No

Schedule- I fauna as per (IWPA) Indian Wildlife Protection Act, 1972 was recorded in the study area during field survey.

Details of faunal species found in the study area are given in the table below: -

Table 3-16: List of Flora in the Study Area by Site Visit, Inputs from the Locals and Pursued from Secondary Data

Sr. No.	Common Name	Scientific Name	Status according to WPA, 1972
Avifauna (Birds)			
1.	Asian Pied Starling	*Sturnus contra*	Sch. IV
2.	Bank Myna	*Acridotheres ginginianus*	Sch. IV
3.	Blue Rock Pigeon	*Columba livia*	Sch. IV
4.	Black Drongo	*Dicrurus macrocercus*	Sch. IV
5.	Black Winged Stilt	*Himantopushi mantopus*	Sch. IV
6.	Black kite	*Milvus migrans*	Sch. IV
7.	Brahminy Starling	*Sturnuspa godarum*	Sch. IV
8.	Common Myna	*Acridoth erestristis*	Sch. IV
9.	Cattle egret	*Bubulcus ibis*	Sch. IV
10.	Crow pheasant	*Centropus sinensis*	Sch. IV
11.	Common Crested Lark	*Galerida cristata*	Sch. IV

12.	Common Redshank	*Tringa totanus*	Sch. IV
13.	Common Hoopoe	*Upupae pops*	Sch. IV
14.	Domestic Sparrow	*Passer domesticus*	Sch. IV
15.	Domestic Crow	*Corvus splendens*	Sch. V
16.	Indian Pond Heron	*Ardeola grayii*	Sch. IV
17.	Indian Roller	*Coracias benghalensis*	Sch. IV
18.	Indian Cuckoo	*Cuculus micropterus*	Sch. IV
19.	Indian Robin	*Saxicoloides fulicata*	Sch. IV
20.	Indian Koel	*Eudynamys scolopacea*	Sch. IV
21.	Little Egret	*Egretta garzetta*	Sch. IV
22.	Little cormorant	*Micro carboniger*	Sch. IV
23.	Large Grey Babbler	*Turdoides malcomi*	Sch. IV
24.	Pied starling	*Lamprotornis bicolor*	Sch. IV
25.	Pied Kingfisher	*Cerylerudis*	Sch. IV
26.	Rose Ringed Parakeet	*Psittacula krameri*	Sch. IV
27.	Red- Vented Bulbul	*Pycnonotus cafer*	Sch. IV
28.	Spotted Dove	*Spilopelia chinensis*	Sch. IV
29.	Shikra	*Accipiter badius*	Sch. IV
30.	Small Bee Eater	*Merops orientalis*	Sch. IV
31.	White-breasted Kingfisher	*Halcyon smyrnensis*	Sch. IV
		Mammals	
1.	Flying Fox	*Pteropus giganteus*	Sch. V
2.	Indian Mole Rat	*Bandicota bengalensis*	Sch. V
3.	Indian Hare	*Lepusni gricolis*	Sch. IV
4.	Nilgai	*Boselaphustra gocamelus*	Sch. III
5.	Jackal	*Canisaureus*	Sch. II
6.	Jungle Cat	*Felischaus*	Sch. V
7.	Palm Squirrel	*Funambulus pennanti*	Sch. IV
8.	Rhesus macaque	*Macaca mulatta*	Sch. IV
9.	Small Indian Mongoose	*Herpestes auropunctatus*	Sch. II
		Rodent	
1.	House Rat	*Rattusrattus*	Sch. V
2.	Indian Field Mouse	*Musbooduga*	Sch. V
		Reptiles	
1.	Brahminy skink	*Mabuya carinata*	Sch. IV
2.	Common krait	*Bungarus caeruleus*	Sch. IV
3.	Common house gecko	*Hemidactylus frenatus*	Sch. IV
4.	Garden Lizard	*Calotes versicolor*	Sch. IV

5.	Rock Gecko	*Hemidactylus maculates*	Sch. IV
Amphibians			
1.	Common Indian Toad	*Duttaphrynus melanostictus*	Sch. IV
2.	Indian Cricket Frog	*Fejervaryali mnocharis*	Sch. IV
3.	Indian Bull Frog	*Ranatigrina*	Sch. IV
Fishes			
1.	Bhangan or Bata	*Labeo bata*	Cyprinidae
2.	Belgagra	---	Cyprinidae
3.	Catla	*Labeo catla*	Cyprinidae
4.	Rohu	*Labio rohita*	Cyprinidae
5.	Magur	*Clarias batrachus*	Clariidae
6.	Mourola	*Amblypharyngodon mola*	Cyprinidae
7.	Singhi	*Heteropneustes fossilis*	Heteropneustidae

Source: *Survey in Study area*

3.12 Socio- Economic Environment

Socio-economic survey tools provide a means of improving understanding of local resource management systems, resource use and the relative importance of resources for households and villages.

Data Collection: Following steps were considered for the collection of primary data:

1. Identifying of Study Area
2. Site Visit
3. Analysis of Data Collected

The data on socio-economic aspects in the study area has been carried out through the analysis of the secondary data available for the study area.

3.12.1 Methodology

The methodology adopted in the assessment of socio-economic condition is as given below;

- Evaluation of the parameters defining the socio-economic conditions of the population.
- Analysis of the identification of social attributes like population distribution, sex ratio, occupational structure, available public utilities, etc., through literatures like district census hand book.

- Public opinion for the future development in the study area.

Sociological aspects include human settlements, demographic and socio-economic aspects and infrastructural facilities available in the study area. The economic aspects include agriculture, industry and occupational structure of workers.

The studies carried out are descriptive and exploratory in nature and are done by FAE, Socio-Economic.

Table 3-17: Methodologies of social data collection

S. No.	Collection of data	With Effect From
Secondary Sources		
I	Census of India, 2011	Latest Update available from 2012
Primary Sources		Method / Technique
Field observations		Market area survey
Extensive site-specific survey Survey period Type		Non-Probability Random Sampling Target sample of people interviewed of NH-135A, MDR 97E through Open interview Manner and the order of Sub-round/ per monitoring season Residence Shopkeeper etc.

3.12.2 Demographic structure of the study area

Population in Core Zone

Socio-economic status of the population is an indicator of development of the region. Any developmental project of any magnitude will have a bearing on the living condition and the economic bearing of the population in particular and the region as a whole. The section delineates the overall appraisal of the socially relevant attributes. The data on socio-economic aspects in the study area has been carried out through the analysis of the secondary data available for the study area.

Population in Buffer Zone

Chandauli district covers an area of 2541 sq.km. and forms a part of the Ganga Basin and lies in the doab of the river Ganga and Karam Nasha. Earlier it was a part of Varanasi district. The

district lies between latitude 24044'30" N and longitude 83001'30" to 83030'00" E. As per the census of 2011 the population of the district is 1952756.

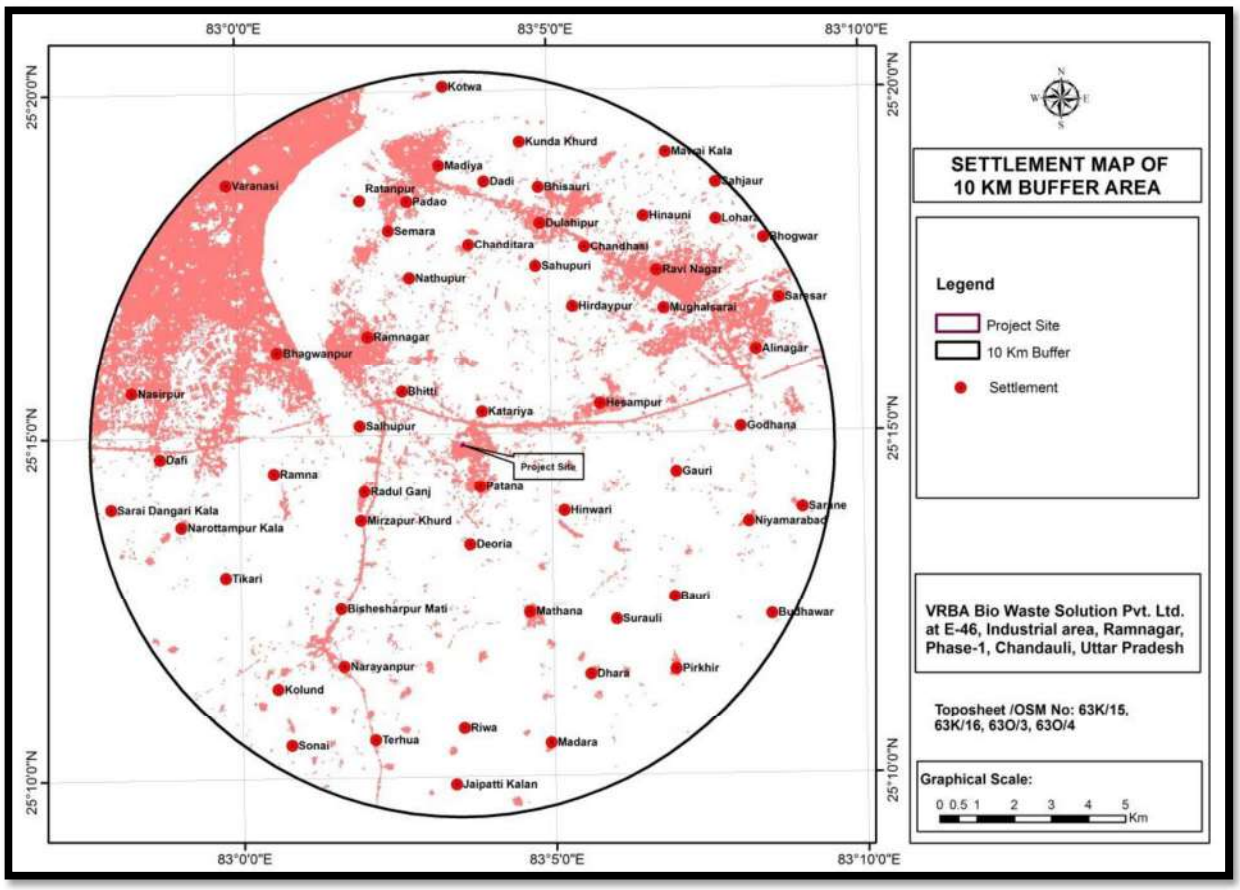


Figure 3-16: Settlement map of the project site

The Total Population of study area is 217337 individuals and 33917 numbers of households. A comparative assessment has been made for the respective demographic aspects, based on the year 2011 data, which has been discussed in the following sections.

The total population of study area is 217337 the percentages of male & female population are 53% & 47% respectively. Breakup of the population for male and female is given in following Table:

Table 3-18: Breakup of the population for male and female

Particulars	Number
No of households	33917
Total population	217337
Male population	114314
Female population	103023
Average family size	6

(Source: As per Census Data 2011)

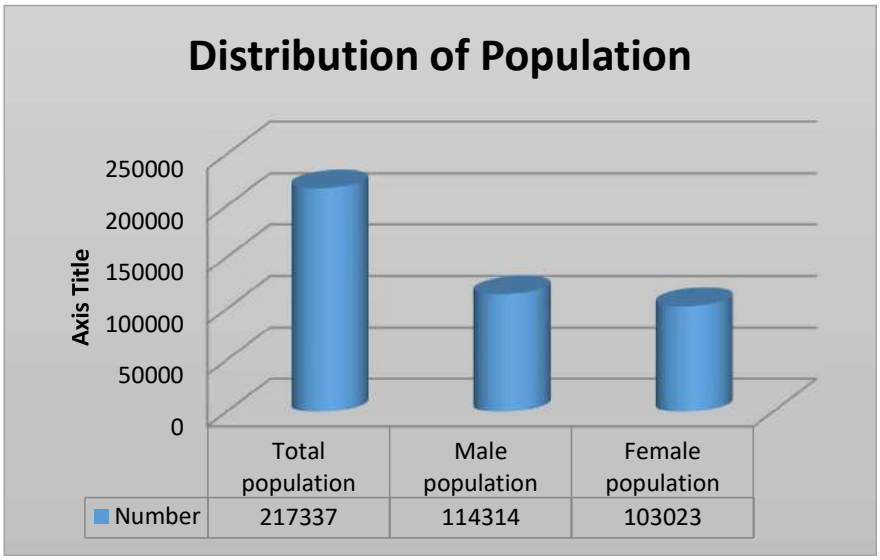


Figure 3-17: Distribution of Population in Study area

3.12.3 Social structure:

In 2011, about 16 % of the total population belonged to Scheduled Castes (SC) and 1% of the total population belonged to Scheduled Tribes (ST). The distribution of population in the study area by social structure is presented in **Table.**

Table 3-19: Distribution of Population by Social structure in Study Area

Particulars	Number
Total Scheduled Castes	34550
Scheduled Castes Male	18345
Scheduled Castes Female	16205
Total Scheduled Tribes	1603
Scheduled Tribes Male	822
Scheduled Tribes Female	781

(Source: As per Census Data 2011)

3.12.4 Literacy levels

The literacy rate is in study area 57% of the total population in 2011. The male literacy rate was 64.94% (of total male population), whereas corresponding figures for the female literacy rate was 49.20% (of total female population) in 2011.The details are presented in **Table** and represented in the form of a bar chart as given in Figure**.**

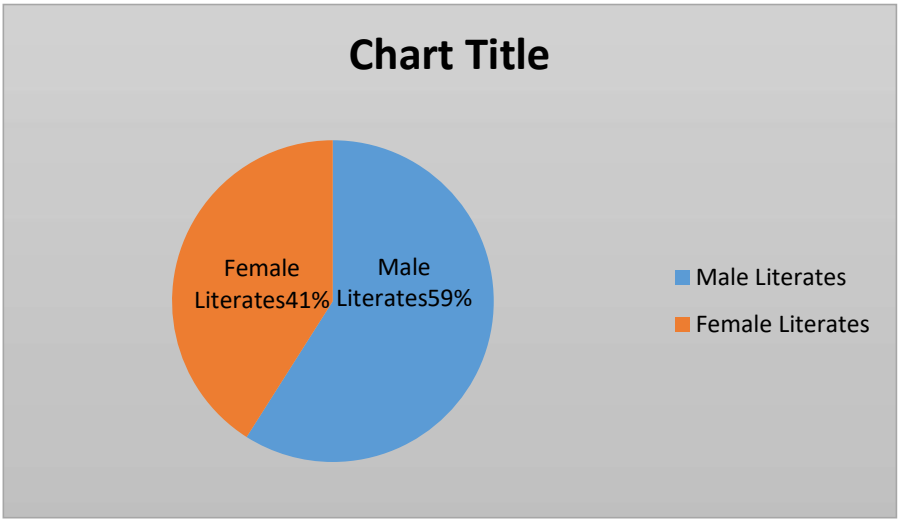


Figure 3-18: Distribution of Literate Male & Female Population in Study Area

Table 3-20: Distribution of Literates in Study Area

Particulars	Number
Total Literates	124939
Male Literates	74242
Female Literates	506978

(Source: As per Census Data 2011)

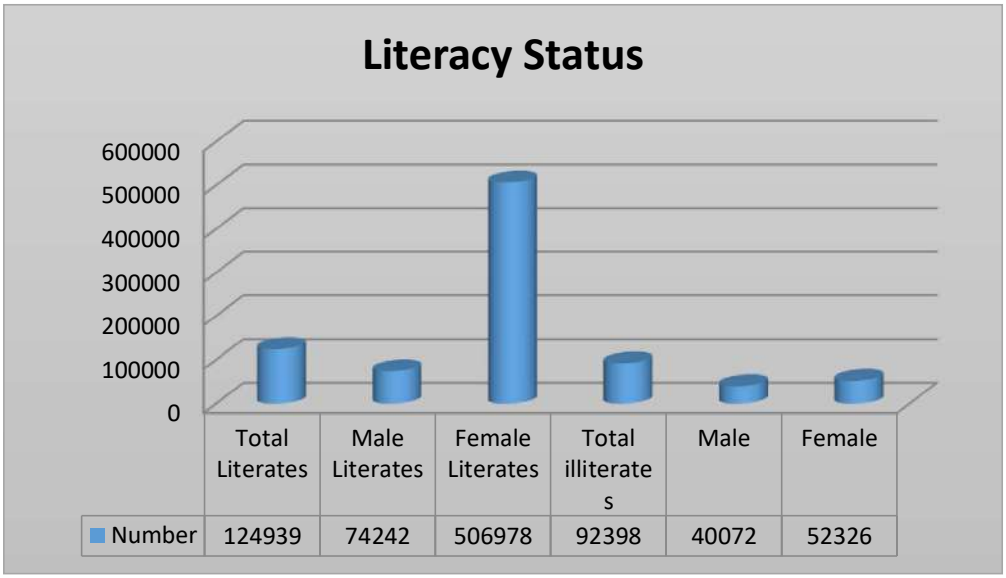


Figure 3-19: Literacy Status of the Study Area

3.12.5 Occupation Pattern of the study area

The occupational structure of the population in the study area has been studied with reference to the total workers and non-workers. Further total workers grouped into two categories main workers and marginal workers. Main workers have been grouped into four categories namely: Cultivators, agricultural laborers, household workers and other workers.

3.12.6 Total workers:

Work is defined as participation in any economically productive activity with or without compensation, wage. Such participation may be physical and/ or mental in nature. Work involves not only actual work but also include supervision and direction of work. It even includes part

time help or unpaid work on farm, family enterprise or its economic activity. All persons engaged in 'work' as defined above are workers.

The number of total workers in the study area is 71140 which are 32.73% of total population. Out of which 75% is male and only 25% is female. Total workers further divided into main workers and marginal workers.

3.12.7 Main workers:

Those workers who had worked for the major part of the reference period (i.e., 6 months or more) are term main workers. Total number of main workers in the study area is 45629 which are 64.13% of total workers and 20.99% of total population.

3.12.8 Marginal Workers

The marginal workers are those workers, who are engaged in some work for a period of less than six months, during the reference year prior to the census survey. Total number of marginal workers in study area is 25511 which are approx. 35.86% of the total workers.

3.12.9 Cultivator

A person is classified as cultivator if he or she is engaged in cultivation of land own or from government or held from private persons or institutions for payment in money, kind or share. Cultivation work includes effective supervision or direction in cultivation. A person who has given out her/his land to another person or institution(s) for cultivation for money, kind or share of crop and who does not even supervise or direct cultivation process is not treated as cultivator. Similarly, a person working on another person's land for wages in cash or kind or combination of both is not treated as cultivator.

Total cultivators in study area are 7958 which are 11.18% of Total workers. The distribution of cultivators is male percentage is 87% male and female percentage is 13%.

3.12.10Agricultural Labourers

A Persons working on the land of others for wages or share in the yield have been treated as agricultural labourers. The total Agriculture workers of this category are about 8515 which are 3.91% of the total population in study area. The distribution of agricultural labours within study area male percentage is 73% and female is 27%.

3.12.11Household Worker

Household industry relates to production, processing, servicing, repairing or making and selling but not includes professions such as a pleader, Doctor, Musician, Dancer, Waterman, Astrologer, Dhobi, Barber, even if such professions, trade or services are run at home by members of the household. The total Household workers of this category are about 23133 (32.51% of total workers) in which 87% are male and 13% are female.

3.12.12 Non-Workers:

The total number of non-workers population is 146197 which are 67.26% of the total population. Out of which 42% is male and 58% is female.

Table 3-21: Occupational Pattern of the study area

S. No.	Particulars	Number of Workers in the study area		
		Total	Male	Female
1.	Total Workers	71140	53614	17526
2.	Main Workers	45629	37630	7999
3.	Marginal Worker	25511	15984	9527
4.	Non-workers	146197	60700	85497
5.	Cultivators	7958	6927	1031
6.	Agricultural Labour	8515	6247	2268
7.	Others Workers	23133	20221	2912

(Source: As per Census Data 2011)

3.12.13Impact Assessment & Conclusion:

The project activity together with inflow of capital, in-migration and employment of local inhabitants has shown positive impact on the overall social and economic condition of the people of the area. The project has provided a direct job opportunity to the local persons as both technical and non-technical workers. Literacy has further increased because of better income and

awareness amongst the people. The project has provided direct employment opportunity to local people. Indirect employment is being generated in trade and other ancillary services. Employment in these sectors is both permanent and temporary or contractual and involvement of unskilled labour. A major part of this labour force is mainly from local villagers who are expected to engage themselves both in agriculture and project activities. This enhances their income and lead to overall economic growth of the area. The following socio-economic changes have taken place due to project activities:

- The project is having a positive employment and income effect, both direct as well as indirect.
- Expected Improvement of infrastructure& transportation.
- The project is having positive impact on consumption behavior by way of raising average consumption and income through multiplier effect.
- The project has brought about changes in the pattern of demand from food to non-food items as sufficient income is being generated.
- People located in the project area and in close vicinity, enjoying positive changes in life style and better quality of life.

3.12.14 Rehabilitation &Resettlement (R&R) Action Plan

There shall not be any displacement of people due to project as the project is modified in the existing site only. No further land acquisition required for the project; hence no R &R Action plan is required. There is no Land Acquisition.

Social infrastructure nearby project site

Nearest Habitation:- Nearest Habitation is Hamidpur (approx. 1.09 Km towards West), Gopalpur (approx. 1.56 km towards WSW), Patana (approx. 1.35 km towards SSE), Ramnagar (approx. 1.27 km towards West) etc. These Villages are densely populated and Nearest Railway Station is Jeonathpur Railway Station (approx. 1.68 Km towards SSE), Pt. Deen Dayal Upadhyaya Railway Station (approx. 7.22 Km towards NNE) and Nearest Airport is Lal Bahadur Shastri International Airport (approx. 30.15 km towards North West).

Educational Facilities: - The study area (of 10.0 km) has Govt. Purb Madhyamik Vidyalaya, Katariya (approx. 1.30 km towards NE), Govt. Primary School, Parorawa, Ramnagar (approx.

2.24 km towards NE), Dayawati Modi Academy, Ramnagar, (approx. 1.46 km towards North-West). There are also private schools in the localities.

Medical Facilities: The study area (of 10.0 km) has Lal Bahadur Shastri Govt. Hospital, Ramnagar (approx. 4.38 km towards North West), Govt. Homeopathic Hospital, Hakanipur Kalan (approx. 4.83 km towards SSW), Asha Medicare & Hospital, Ramnagar industrial area, Hamidpur (approx. 0.78 km towards South- West).

Religious facilities: - Some nearest temple is Katari Devi Temple, Dariyapur, Katariya (approx. 0.68 km towards North East), Maa Bhawani Old Temple, Gopalpur (approx. 1.52 km towards South- West).

Post office & Police Station: - Basant nagar post office industrial area (approx. 0.40 km towards SE) and Chhota Mirzapur Post Office, U.P (approx. 2.79 Km towards WNW) and Police Station Bhiti Ramnagar Varanasi, (approx. 2.64 km towards WNW) and Police Station, Narayanpur (approx. 5.25 km towards SSW)

Social Setup:

The study area is dominated by General caste and other backward community; Agriculture is the predominant occupation however currently there is a wave of change of occupation. There by other worker are increasing in the study area. The immediate surroundings of the projects lack the amenities.

Table 3-22: Social setup of the study area

S.N.	Description	Number	Percentage (%)
1	**Gender wise Total Population of the Study Area**	217337	
	Male	114314	53
	Female	103023	47
	Sex Ratio (No. of females per 1000 males)	901	
2	**Gender wise Total Population (0-6 age group)**	33641	

	Male	17833	53
	Female	15808	47
	Sex Ratio of 0-6 age group population (No. of females per 1000 males)	886	
3	**Total number of Households**	33917	
	Average Household size in the Study Area as a whole	6	
4	**Total no. of villages in the study area**	173	
5	**Total Population of Schedule Caste Community in the Study Area**	34550	16
	Male	18345	53
	Female	16205	47
	Sex Ratio of Schedule Caste population in Study Area (No. Of females per 1000 males)	883	
6	**Total Population of Schedule Tribe Community**	1603	1
	Male	822	51
	Female	781	49
	Sex Ratio of Schedule Tribe population in Study Area (No. Of females per 1000 males)	950	
7	**Total Literates in the Study Area**	124939	57
	Male	74242	59
	Female	50697	41
	Gender gap in literacy rate (%)		19
8	**Total Illiterates in the Study Area**	92398	43
	Male	40072	43
	Female	52326	57
9	**Total Workers in the Study Area**	71140	33
	Male	53614	75
	Female	17526	25

10	**Gender Gap in work participation rate(%)**		51
	Total Non- Workers in the Study Area	146197	67
	Male	60700	42
	Female	85497	58
11	**Total Main Workers in the Study Area**	45629	
	Male	37630	82
	Female	7999	18
12	**Total Main Marginal Workers in the Study Area**	25511	
	Male	15984	63
	Female	9527	37
13	**Total Main cultivator Workers in the Study Area**	7958	
	Male	6927	87
	Female	1031	13
14	**Total Main Agriculture Labour Population in the Study Area**	8515	
	Male	6247	73
	Female	2268	27
15	**Total Main Other Worker Population in the Study Area**	23133	
	Male	20221	87
	Female	2912	13

3.13 Traffic Analysis

Traffic Survey and Projection for Common Biomedical Waste Treatment Facility, Chandauli

The seven days traffic survey has been conducted from 20.12.2022 to 26.12.2022 on the NH-91 bypass road (GT Road bypass) passing through approx. 500m from the project site. Average values have been used for traffic estimation. Since, the GT road bypass is four lane road, the Manual of Standard & Specification for four Laning of Highways (IRC :SP:84-2014) has been used for traffic calculations and projections. A minimum 5% annual increase in the traffic is

taken for the projection. Highest traffic volume however has been observed during working hours and returning hours i.e. 9:00-11:00 AM and 05:00-07:00 PM respectively due to movement of employees of the nearby existing Industries. It is envisaged that the construction will be done in one year.

Table 3-23: Traffic Survey and Projection on GT Road Bypass near Project Site

Classification of Traffic	Adopted PCU Value	Existing Traffic on the GT Road Bypass		Operational Phase on the GT Road Bypass (Dec 2023)		
		ADT	PCU	ADT	Traffic due to Project	PCU
Cars	1	3124	3124	3281	5	3286
Three-Wheeler	1	280	280	294	0	294
Two-wheeler	0.5	2424	1212	2546	24	1285
Buses	3	90	270	95	1	288
LCV	1.5	785	1177.5	825	2	1241
Trucks	3	1365	4095	1434	1	4305
Tractor-Trailer	4.5	112	504	118	0	531
Cycle	0.5	758	379	796	0	398
Rickshaw (Cycle+Battery)	2	320	640	336	0	672
Total PCUs per day			**11681.5**			**12300**

Level of Service (LoS)

The design service volume of four lane highway in PCUs per day in plain area (c=40000 pcu) has been adopted from IRC :SP:84-2014.

Table 3-3 Design Service Volume for 4-lane Highways in PCU/day

Terrain	Design Service Volume in PCU Per Day	
	Level of Service 'B'	Level of Service 'C'
Plain and Rolling	40,000	60,000
Mountainous and Steep	20,000	30,000

The following guidelines of IRC have been followed:

Table 3-24: Guidelines of IRC for Judging LOS Vs Performance

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	B	Very Good
0.4-0.6	C	Good/Average
0.6-0.8	D	Below Average
0.8-1.0	E	Poor
1.0-1.2	F	Very Poor

LoS in Existing Scenario = 11681.5/40000 = 0.292 (B Type, Very Good)

LoS during Operational Phase of the Project = 12300/40000 = 0.307 (B Type, Very Good)

As per the V/C ratio mentioned in the Table 3, it can be easily interpreted that the LoS in the present case and operational phase will be Very Good as the v/c ratio falls between 0.2-0.4 in the existing and operational phase of the project on the GT Road bypass.

4 ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

4.1 General

Environmental Impact Assessment (EIA) is a planning tool generally accepted as an integral component of sound decision making. EIA is to give the environment its due place in the decision making process by clearly evaluating the environmental consequences of the proposed activity before action is taken. Early identification, characterization and quantification of critical environmental impacts allow the public and the government to form a view about the environmental acceptability of a proposed developmental project and what conditions should apply to mitigate or reduce those risks and impacts. The aim is to ensure that potential environmental problems are foreseen and avoided at an early stage in planning cycle so as to preempt problems.

The EIA mechanism is applied to the project in the following order of priority project in the following order of priority:

- Avoid adverse environmental impact
- Minimize and control adverse environmental impact
- Mitigate adverse environmental impact

The environmental impact assessment has been performed to predict the quantitative and qualitative impaction the following broad environments which broadly describe the whole gamut of environment. Further there would be two phases of generation i.e. during the construction phase and the operational phase.

4.1 Potential Impacts

The potential significant environmental impacts associated with the project are grouped as below.

Air Environment

- Impacts on ambient air quality
- Impacts on ambient odor
- Impacts on ambient noise

Water Environment

- Impacts on surface& ground water quality
- Impacts on aquatic life

Land Environment

- Impacts on land use
- Impacts on soil fertility

Socio Economics

- Impacts on infrastructure
- Impacts on employment
- Indirect Impacts
- Impacts on public health and safety
- Impacts on aesthetics

4.2 Prediction of Impacts

The impact assessment is carried out for the following phases and presented in the following paragraphs.

- Impacts during development phase or construction phase
- Impacts during operation phase

4.3 Impacts during Development Phase or Construction Phase

4.3.1 Air Environment

The air environment may be described in terms of parameters of ambient air quality such as ground level concentration of particulate matter (PM10) representing suspended particulates which are less than 10 micron size which easily get into our respiratory tracts. Further the particulate matter (PM2.5) denotes that fraction of finer particulates which are deposited in our lungs and cause respiratory diseases and also affect metabolism.

All of the developmental activity viz. Construction work , operation of diesel driven equipment and machinery, excavations, loading and unloading of materials, haulage of materials, dumping and stacking of construction material and debris cause generation of fugitive dust particulates over the proposed area and in the neighborhood. Further movement of vehicles because both emission of exhaust gases and also wheel laden fugitive dust particulates. The fugitive particulate

load generated daily depends upon the duration of construction activities which may be said to be temporary lasting for a few months. After the completion of this phase all of the sources stated above stop functioning.

4.3.2 Gaseous Pollutants

The gaseous pollutants namely CO, SO_2, and NO_X released due to vehicular exhausts are noxious in nature. As said earlier, the construction phases are temporary and ceases after a few months. As such the load of gaseous pollutants generated shall be for a limited period of time. The deployment of transportation trucks for haulage of building materials and other machinery shall emit gaseous pollutants.

4.3.3 Noise Environment

The construction phase involves developmental activities and entails usage and deployment of machinery and equipment which would generate noise substantially. The assessment of the impacts of noise on the surrounding community depends upon:

- Characteristics of noise source (instantaneous, intermittent, or continuous in nature, with the latter contributing the least to noise pollution);
- There is no blasting or heavy machinery involved in the installation of incinerator hence there is no instantaneous source of noise pollution from the site.
- Intermittent source of noise shall be movement of vehicles used in construction activities. This shall be temporary in nature.

4.3.4 Water Environment

Sources of water pollution on building sites include: diesel and oil; paint, solvents, cleaners and other harmful chemicals; and construction debris and dirt. Silt and soil that runs into natural waterways turns them turbid, which restricts sunlight filtration and destroys aquatic life. Waste water will be generated from cleaning of vehicles, cleaning of equipments etc.

4.4 Impacts during Operation Phase

4.4.1 Air Environment

During this phase, the sources of fugitive dust are due to movement of medical waste laden trucks to and fro the processing plant. Along with the vehicular pollution emissions from the stack of incinerator is be observed.

4.4.2 Air Pollution Impact Prediction through Modeling

Objective

Atmospheric modelling is used by air quality managers to make decisions on effective and efficient ways to implement the National Ambient Air Quality Standards (NAAQS) and improve air quality. Air quality modelling is done to estimate the relationship between sources of pollution and their effects on ambient air quality, predict the impacts from potential emission sources, and simulate ambient pollution concentrations under different policy scenarios. They are critical for determining the relative contributions from different sources, monitoring compliance of air quality regulations, and making policy decisions.

The Air Quality Model

In order to estimate the ground level concentrations due to the emissions from the proposed project, EPA approved American Meteorological Society/Environmental Protection Agency Regulatory Model - AERMOD View 10.0.1 dispersion Model has been used. AERMOD View dispersion Model provides option to model emissions from a wide range of sources that are present at a typical industrial source complex. The model considers the sources and receptors in undulated terrain as well as plain terrain and the combination of both. The basis of the model is the steady state Gaussian Plume Equation, with modifications to model simple point source emissions from stacks that experience the effect of aerodynamic down wash due to nearby buildings, isolated vents, multiple vents, storage piles etc. AERMOD View dispersion model with the following options has been used to predict the cumulative ground level concentrations due to the proposed emissions. Area being rural, the rural dispersion parameters are considered as below:

- Predictions have been carried out to estimate concentration values over radial distance of 10 km around the sources.
- Cartesian receptor network has been considered.
- Emission rates from the sources were considered as constant during the entire period.
- The ground level concentrations computed were as in basis without any consideration of decay coefficient.
- Calm winds recorded during the study period were also taken into consideration.

- 24-hour mean meteorological data, extracted from the meteorological data collected during the study period as per guidelines of IMD/CPCB has been used to compute the mean ground level concentrations to study the impact of proposed activity.
- Stability class was evaluated based on wind direction fluctuation.
- The mathematical equations used for the dispersion modelling assumes that the earth surface acts as a perfect reflector of plume and physico-chemical processes such as dry and wet deposition and chemical transformation of pollutants are negligible.
- Washout by rain is not considered.
- Source of emission is continuous and at steady state.

Emission Calculation

An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. The general equation for emissions estimation is:

$$E = A \times EF \times (1 - ER/100)$$

Where;

E = emissions in (gm/sec);

A = activity rate (Tonnes/Hr);

EF = emission factor (Kg/Tonnes), and

ER = Overall emission reduction efficiency, %

Sources of Pollution/Emission

Point Source:

1. DG Set of 1 x 82.5 KVA
2. Incinerator – 300 kg/hr

Emission rate of pollutants from operation of DG sets are computed based on research paper of Emission Inventory of Air Pollutants from Diesel Generator Used at Selected Locations in Jaipur

City, India *by Suthar Gaurav et al.* International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES) Volume 4, Issue 12, December-2018.

Emission rate for Incinerator of the Bio Medical Waste is calculated based on the Source Apportionment Study by CPCB. As per the emission factors published in the above documents, the emission rate has been computed and is provided below.

Table 4-1: Emission rate

S.No.	Source	Stack Height, m	Exit Velocity, m/s	Internal Diameter. m	Maximum Working Hours per day
1	Incinerator (300 KG/HR)	30	8.5	0.2	2
2	DG Set 82.5 KVA	15	6.5	0.1	2

- **Air Pollution Control Device**
  - Venturi Scrubber in Incinerator to control NOx emission.
  - Not Applicable as only DG sets will be operated as back-up power supply and the operation will be limited to max 2 hr per day when there will be no power supply.

Table 4-2: Air Pollution Control Device Emission

Source	Avrg Fuel Consumption,	Emission Rate			
		PM10, g/sec	NOx, g/sec	SO2, g/sec	CO, g/sec
DG 82.5 KVA	15 L/Hrs	0.012	0.189	0.085	0.13
Incinerator	300 kg/hr	0.194	0.074 (APCD-Venturi Scrubber)	0.091	0.25

Quantitative estimation of impacts on air environment

An attempt has been made to predict the incremental rise of various ground level concentrations (GLCs) above the baseline status in respect of air pollution due to Incinerator and DG sets operations. The mathematical model used for predictions in the study is USEPA approved AERMOD View 10.0.1 software which is designed for point source, line source and area sources

for the prediction of impacts due to Incinerator and DG set operations. For estimation of the GLC in worst case scenario, the Incinerator and DG Sets operations are assumed to be carried out on the flat terrain. The predicted GLC computed using AERMOD View developed by Lakes Environment model is plotted on isopleths and are shown in Figure given below.

Meteorological Data

The meteorological data recorded continuously during season of **Post-Monsoon Season (October-December 2022)** on hourly basis for wind speed, wind direction, relative humidity, precipitation and temperature and the same is processed to extract the 24-hour mean meteorological data as per the guidelines of IMD and MoEF for application of AERMOD Version 10.0.1 model. Stability classes computed for the mean hours is based on the guidelines issued by CPCB on modelling. Mixing heights representative of the region have been taken from the available published literature.

Stability Classification

Wind direction fluctuation method (CPCB PROBES/70/1997-1998) is adopted for hourly stability as determined by wind direction fluctuation method as suggested by Slade (1965).

$$\sigma_{\Theta} = Wdr/6$$

Wdr: the overall wind direction fluctuation or width of the wind direction in degrees, over the averaging period.

σ_{Θ} : the standard deviation of wind direction fluctuation.

The stability classes are as detailed below:

Table 4-3: Slades Stability Classification based Wind direction fluctuation

Stability Class	σ_{Θ} (degree)
A (Extremely Unstable)	>22.5
B (Moderately Unstable)	22.4-17.5
C (Slightly Unstable)	17.4-12.5

D (Neutral)	12.4-7.5
E (Slightly Stable)	7.4-3.5
F (Stable)	<3.5

Dispersion Parameters

The area is classified as urban when more than 50% of land inside a circle of **3 km** radius around the source can be considered built up with heady or medium industrial, commercial or residential units. The site is located **out of the city**, the area is considered **rural** and dispersion coefficient for **rural** are used in the modelling.

Table 4-4: Brigg`s Dispersion Parameters σy (m) and σz (m) (100m<x<10000m)

S.No.	Stability Class	σ_y(m)	σ_z(m)
For Rural Conditions			
1	A	$0.22x(1+0.0001x)^{-0.5}$	0.2x
2	B	$0.16x(1+0.0001x)^{-0.5}$	0.12x
3	C	$0.11x(1+0.0001x)^{-0.5}$	$0.08x(1+0.0002x)^{-0.5}$
4	D	$0.08x(1+0.0001x)^{-0.5}$	$0.06x(1+0.0015x)^{-0.5}$
5	E	$0.06x(1+0.0001x)^{-0.5}$	$0.03x(1+0.0003x)^{-1}$
6	F	$0.04x(1+0.0001x)^{-0.5}$	$0.016x(1+0.0003x)^{-1}$
For Urban Conditions			
1	A-B	$0.32x(1+0.0004x)^{-0.5}$	$0.24x(1+0.001x)^{-0.5}$
2	C	$0.22x(1+0.0004x)^{-0.5}$	0.20X
3	D	$0.16x(1+0.0004x)^{-0.5}$	$0.14x(1+0.0003x)^{-0.5}$
4	E-F	$0.11x(1+0.0004x)^{-0.5}$	0.08x(1+0.0015x)

Where x is the downwind distance in meters.

Mixing Height

As site specific mixing height were not available, mixing height based on CPCB publication, "Spatial Distribution of Hourly Mixing Depth over Indian Region", PROBES/88/2002-03 has been considered for model to establish the worst-case scenario.

Monthly Wind Speed and Wind Direction

The weather is one of the main factors affecting the air quality. Weather can help to clear away pollutants from atmosphere to improve air quality, or it can make air pollution extremely worse by helping to form highly polluted regions. The concentration of air pollutants in ambient air is governed by the meteorological parameters such as atmospheric wind speed, wind direction, relative humidity, and temperature. Rainfall can effectively remove atmospheric particulate pollutants, and the removal rate of PM10 is greater than the removal rate of PM2.5. In general wind speed more than 7 m/s can lift dust. Heavier particles will settle near the source area, with the smaller ones settling farther away. The site-specific weather data has been collected by installation of weather monitoring station at site.

Table 4-5: Weather Monitoring Data of the Site

Months	Relative Humidity, %	Rainfall, mm	Mean Wind Speed, m/sec	Wind Directions (blowing from)	Avrg Temperature (degree Celsius)
October	56%	38	3.15	West	31
November	43%	12	3.24	North West	28
December	38%	10	2.96	North West	22

Table 4-6: Meteorological Parameters (Oct-Dec 2022)

Meteorological Parameters (Oct-Dec 2022)			
Parameter	Min. Value	Max. Value	Mean Value
Temperature (°C)	4.2	37.5	22.5
Wind Speed (m/s)	1.5	14.3	3.15
Relative Humidity (%)	21	75	48
Solar Radiation (W/m2)	5000	5500	5300
Rainfall	Total rainfall (mm)	No. of rainy days	Average annual rainfall (mm)
	60	12	1019

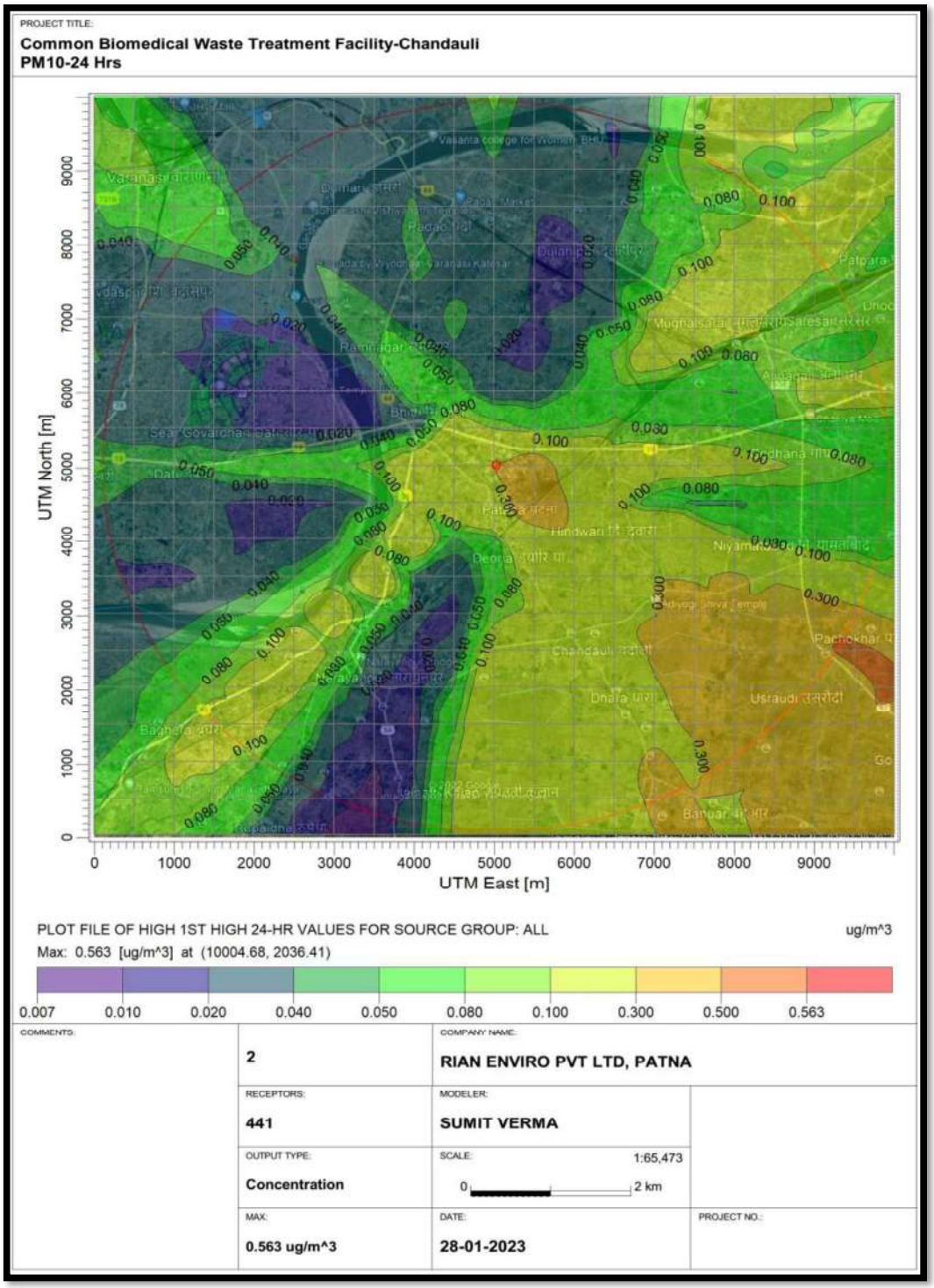


Figure 4-1: PM 10 Isopleth

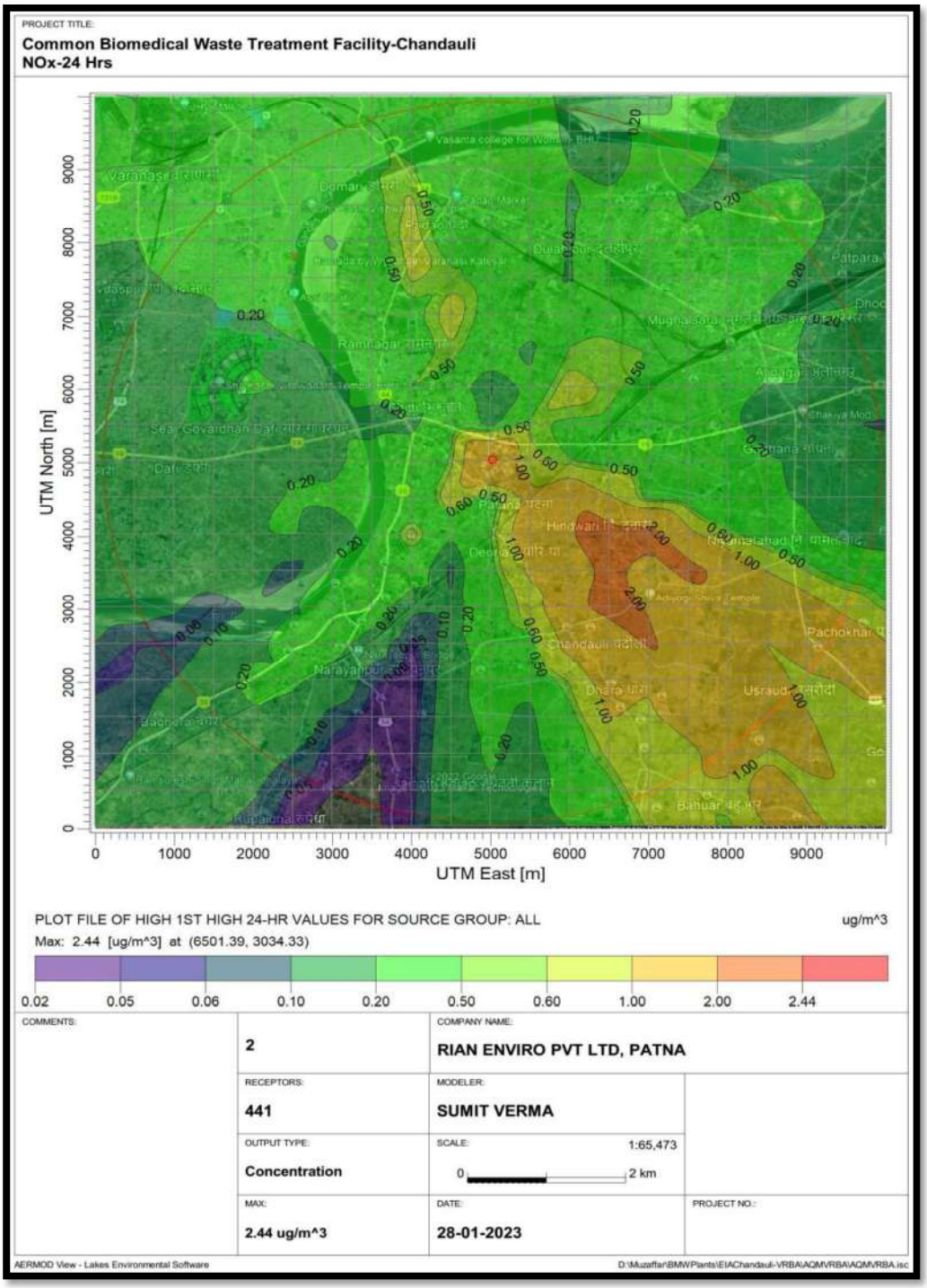


Figure 4-2: NOX Isppleth

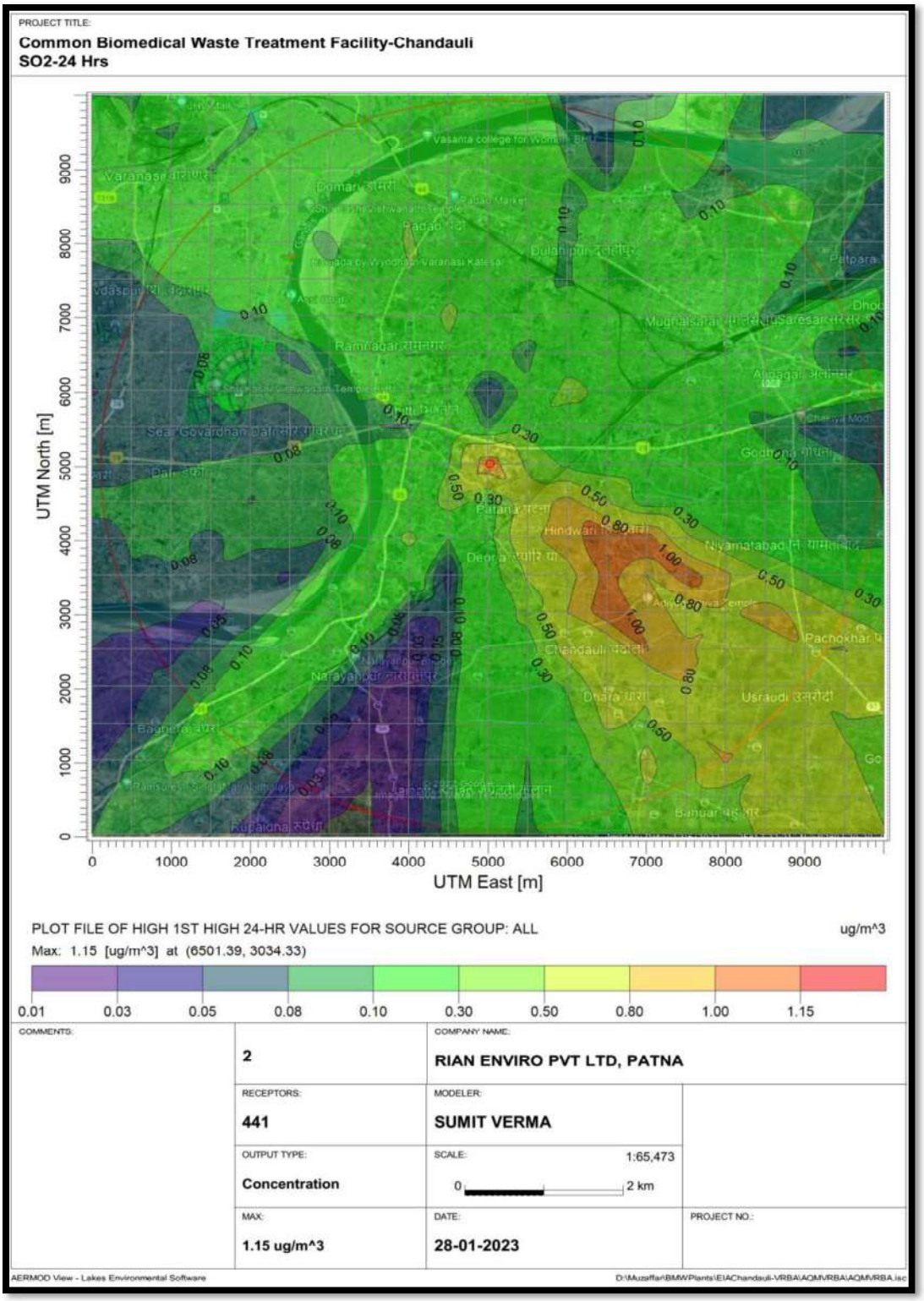


Figure 4-3: SO2 Isopleth

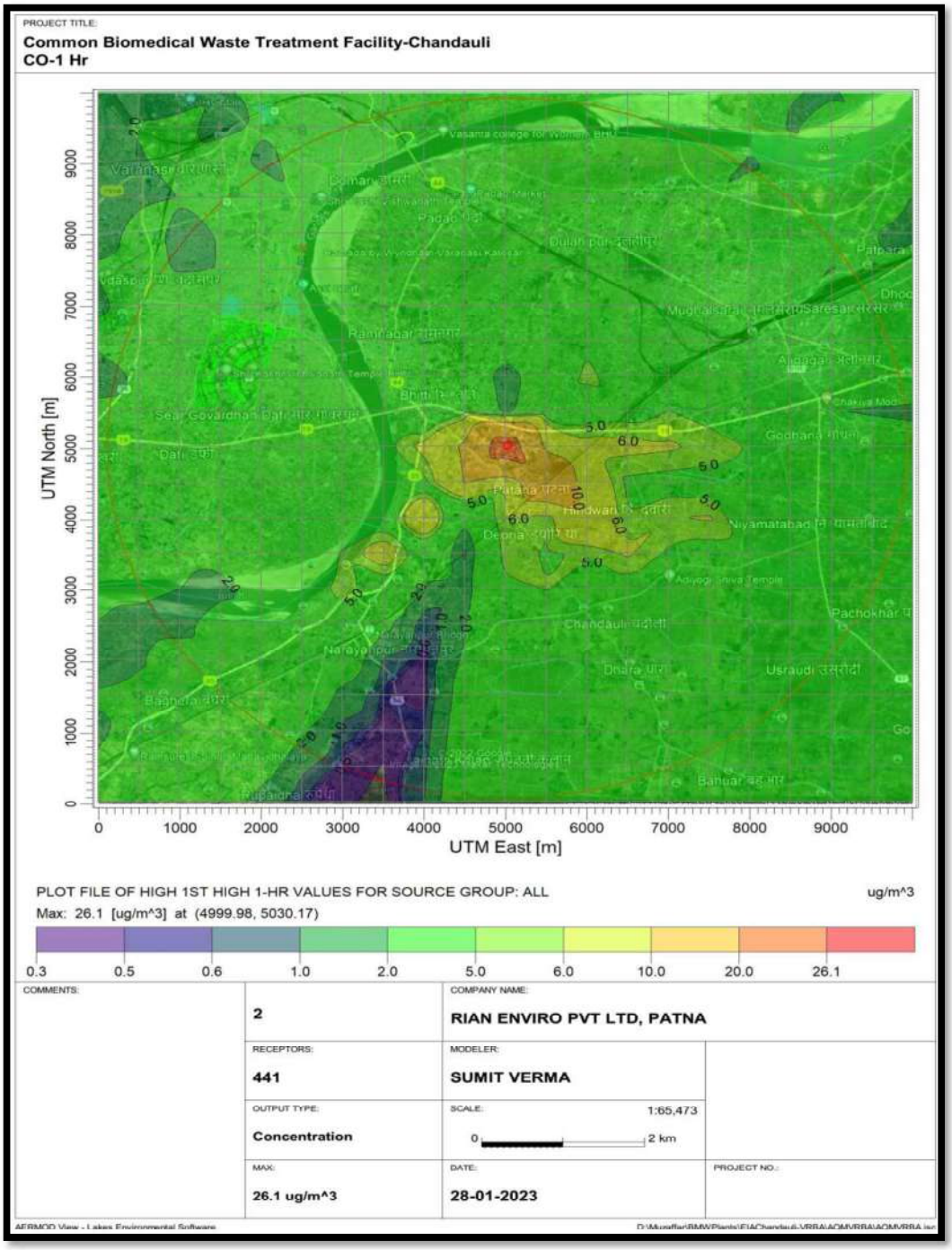


Figure 4-4: CO Isopleth

4.4.3 Gaseous Pollutants

The gaseous pollutants Particulate matter, Nitrogen Oxides NO and NO2, HCl, Total Dioxins and Furans, Hg and its compounds will be emitted from the incinerator.

4.4.4 Noise Environment

This phase shall see a lesser usage of machinery and equipment than the construction phase and as such the noise generated by various machineries shall be comparatively lesser than the levels during Construction Phase for example in the case of working of shredders.

4.4.5 Water Environment

As the whole process is somewhat dry in nature the probable source of waste water generation will be from venturi scrubbers, cleaning of equipments and vehicles. In general the impact can also be understood with the help of impact matrix which is given as.

4.5 Mitigation of Impacts

4.5.1 Air Environment

4.5.2 Installation of ACPDS

Air pollution control devices are a series of devices that work to prevent a variety of different pollutants, both gaseous and solid, from entering the atmosphere primarily out of industrial smokestacks. These control devices can be separated into two broad categories - devices that control the amount of particulate matter escaping into the environment and devices that control acidic gas emissions. It is important to understand that the extraction methods for each specific type of pollutant can differ, so the only the major methods are discussed. Although complex, these devices have shown to be effective in the past with the overall levels of emissions for many pollutants dropping with the implementation of these control devices.

Table 4-7: Air Pollution Sources, Fuel Consumption and Chimney Height Details

SI. No.	Stack attached	Fuel used	Fuel consumption	No. of stacks	Stack height	Air pollution control Unit	Predicted emissions
1.	Proposed Green insulated DG set of capacity 82.5 KVA (01 No.)	HSD	15.0 Lit/hr Approx.	01	1.5 m above from nearest Building	Stack	SO_2, NOx, SPM

					HT		
2.	Incineration Unit	HSD	300kg/hr Approx.	01	30 m AGL	Venturi Scrubber & Stack	SO_2, NOx, SPM, Flue Gas

In the current project ventruri scrubbers are to be used for mitigation of the impact to be caused by installation of incinerator.

4.5.3 Venturi Scrubber

A **venturi scrubber** is designed to effectively use the energy from the inlet gas stream to atomize the liquid being used to scrub the gas stream. This type of technology is a part of the group of air pollution controls collectively referred to as wet scrubbers.

4.5.4 Process description

A **venturi scrubber/quenching** consists of a converging section, a throat (the narrowest part of the venture tube) and a diffuser. The dust/gas mix flows through the venturi tube and reaches top speed in the throat section. Thereafter, the mixture passes into the diffuser where the speed drops again. Liquid is added to the gas flow either in the throat section or prior to it. Intensive mixing takes place between the gas and the liquid in the throat section of the venture tube. Due to the high speed realized by the gas and liquid, water is released in fine water droplets.

The venturi scrubber itself has a low volume. The dimensions of the installation are primarily determined by the droplet separator, which can be a few times larger than the scrubber.

Venturi scrubbers can be used to remove small particles (< 1 μm) from a gas stream. However, they can also be used for larger particles, though energy use is relatively high in such cases. Even at very high pressure drops, some types of dust cannot be separated. In some venturis it is possible to vary the width of the throat section, thus allowing the separator to be adjusted for varying flow volumes – thus retaining a high yield.

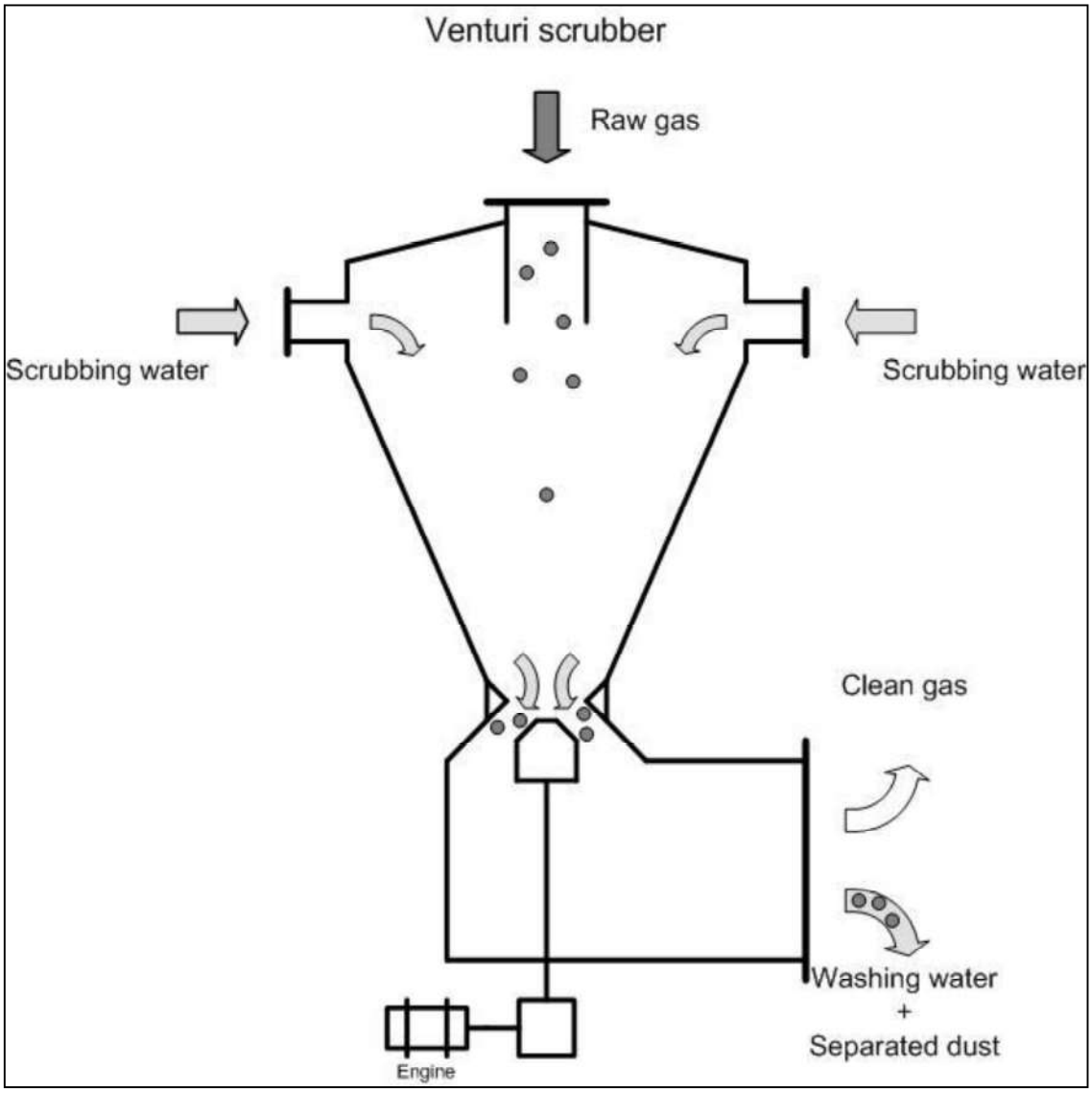


Figure 4-5: Design of Venturi Scrubber

4.6 Gaseous Pollutants

The use of Bharat Stage –IV compliant diesel machinery shall reduce the air pollution in various qualitative and quantitative aspects effectively. Also it shall ensure lesser consumption of diesel which shall be cost effective too.

4.6.1 Noise Environment

The following measures shall enable to minimize and control noise pollution due to operations in the landfill site.

- Periodic maintenance of the machineries and equipment as well as the haul trucks/tractors involved shall be done as per the manual requirement.
- The operators, semiskilled workers and drivers of the vehicles and machinery involved shall be trained for the job requirements and their skills shall be updated and monitored regularly for smoother functioning for maintaining clean environment.
- A dense green belt with fast growing floral species as recommended by CPCB with climatologically adaptability shall be developed along the periphery of the landfill site.
- The development of the green belt shall be such that bushes and shrubs shall be placed inwards towards the site while the taller species shall be placed on the outer area towards the boundary. This shall ensure development of a barrier both for noise and dust particulates. The fully developed green belt shall present an appealing landscape and would be scientific also in purpose.

Also the natural wall will act as a barrier for noise. As there are no major sources of noise pollution critical impacts to neighboring communities and wild animals is not envisaged.

4.6.2 Water Environment

The wastewater discharge from various operations from venturi scrubbers, cleaning of equipments, cleaning of vehicles and usage of water in toilets will be discharged either in public sewer or will be used for landscaping only after processing through proper effluent treatment plant.

Waste water (4.75 KLD) is being generated from the Industrial Process will be subjected to Proposed ETP (Capacity- 10.0 KLD). Treated water from (3.90 KLD) will be reused in scrubber for cooling purpose and green belt purpose.

The entire system shall be a zero discharge system in terms of wastewater discharge from the process as recirculated through ETP.

Domestic Wastewater shall be treated in a soak pit/septic tank.

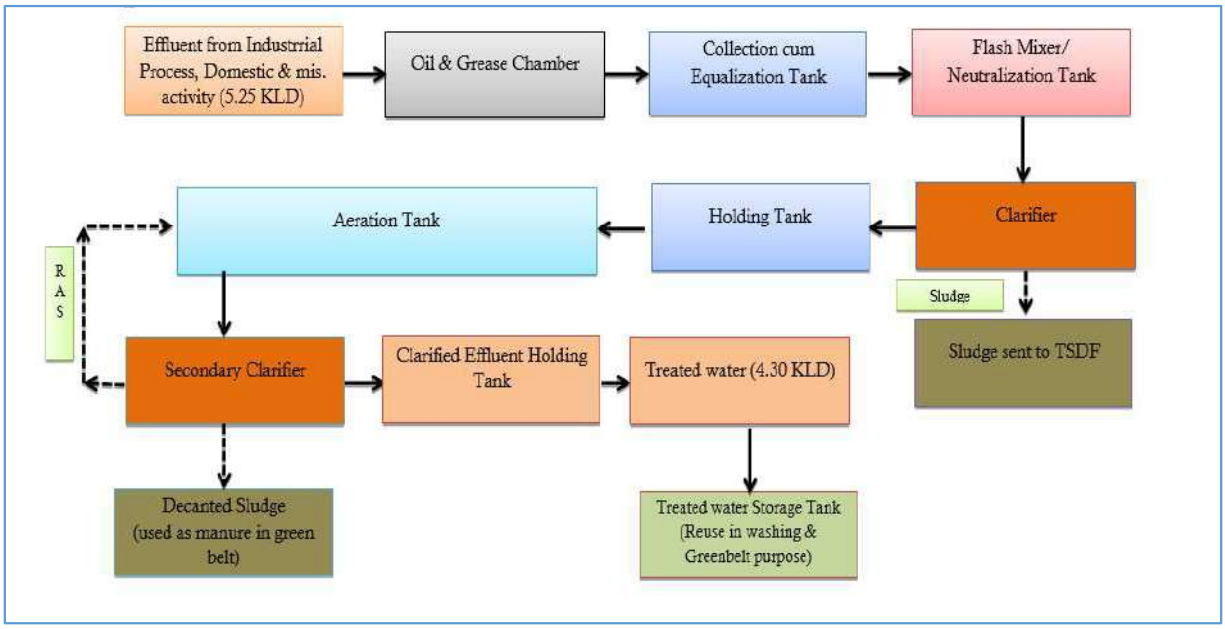


Figure 4-6: Schematic Flow Diagram of Proposed STP cum ETP (10.0 KLD)

4.7 Waste Generation and Its Management

Table 4-8: Details of Solid waste

Total No. of Employees	20
Assuming per capita solid waste generation rate as 0.2 kg/capita/day	
Quantity of solid waste generated	4.0 kg/day
Organic solid waste : 60 % of the total waste	2.40 kg/day
Inorganic solid waste : 40 % of the total waste	1.60 kg/day
Disposal of domestic solid waste	Domestic wastes are segregated at source, collected in bins and composted.

The domestic wastes (4.0 kg/day approx.) will be segregated at source and collected in bins & disposed as per CPCB Norms.

Ash from incinerator (5.0 MTPA approx.) and flue gas cleaning residue will be send to TSDF / Co processing industries.

4.7.1 Hazardous Waste Generation and Its Management

Table 4-9: Hazardous Waste Generation and Its Management

Sl. No.	Source	Quantity of hazardous waste Generated (Approx.)	Category according to Schedule I of hazardous waste	Treatment/ Disposal
1.	Spent Oil from DG set	5.0 MTPA	5.1	Handed over to authorized recyclers/re-processors
2.	Discarded Containers /Barrels	100 Nos./Annum	33.1	Handed over to authorized recyclers/re-processors
3.	Sludge from Wet Scrubbers	1.0 MTPA	37.1	Send to TSDF / Co processing industries.
4.	Ash from incinerator and flue gas cleaning residue	5.0 MTPA	37.2	Send to TSDF / Co processing industries.

4.8 Ecology and Biodiversity

There is no notified/protected ecologically sensitive area including national park, sanctuary, Elephant/Tiger reserves existing in the study area. The impact due to proposed activity on the ecological parameters like natural vegetation, cropping pattern and aquatic life, forests and species diversity is as summarized below.

The site of proposed Common Biomedical waste treatment facility, which is a non-agriculture land and there will not be any cutting of the plantation at the site. During construction phase, due to generation of fugitive dust emission there will be slight impact on natural vegetation of the surrounding area. Emission shall be within limit by incorporating EMP provisions. Therefore, the adverse impact over any of the ecological components of the environment is negligible.

Since the proposed project activity is on non-agricultural land, it is not likely to alter the crop production and pattern of the area, either during the construction phase or the operation phase. Further, the necessary environmental protection measures will be planned under EMP e.g. air pollution control systems designed to take care of even emergency releases of the gaseous pollutants like PM, SO2 and NO2 regular environmental surveillance, etc; so as not to have any short-term or cumulative effect on the crops and the natural vegetation of the area.

The details of Flora/Fauna species and the wildlife habitat in the area covering 10 km radius have been collected to determine the existence of rare and/ or endangered species. There is no reserved forest, national park or sanctuary within 10 km radius of the plant.

4.9 Land Environment

Potential impacts on land environment due to the identified activities are given below:

- Change in Land Use Pattern
- Change in people‘s activity due to changed land-use
- Nuisance effect

As the project site is on non-agriculture land so impact on land use shall be of no significance. However, positive impact will be there as project proponent will provide the employment to the workers from nearby villages, which will further affect (positively) the occupational structure of the Area.

4.9.1.1 Mitigation Measures

- Necessary efforts will be made during preparation of site to minimize disruption of current land use to the extent possible.
- Proper restoration of site will be carried out to bring the physical terrain, soils and vegetation, as closely possible, to their original condition.

- Temporary new approach roads can be constructed and existing roads can be improved, if required, for smooth and hassle free movement of personnel as well as machines and machineries.
- Optimization of land requirement through proper site layout design will be basic criteria at the design phase.

5 ANALYSIS OF ATERNATIVE

The proposal is for setting up of Common Biomedical Waste Treatment and Disposal Facility (CBWTF) includes Incinerator, Autoclave, Shredder and Effluent Treatment Plant at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110 by VRBA Bio Waste Solution Pvt. Ltd. It is proposed to utilize 0.202 ha land for setting up of Biomedical Waste Treatment Facility. Proposed project of setting up of the Common Bio-medical Waste Treatment Facility for treatment of 5 tone per day of bio medical waste, includes Incinerator, Autoclave, Shredder, Storage and Effluent Treatment Facility.. The proposed project is meeting the guidelines of CBWTF issued by MoEFCC.

5.1 Site Selection

Environmentally sound management of biomedical wastes would require common bio medical waste management facilities for health care facilities spread all over the country, as it is not possible to have waste management facility for each unit. Hence common facilities become more necessary in the wake of our country, which either have no funds or space for development of biomedical waste management facility. The proposed project is going to be established in E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110 and the land was owned by VRBA Bio Waste Solution Pvt. Ltd. and was diverted for the purpose of biomedical waste treatment facility, so no alternate sites were considered. The proposed project site is meeting site selection criteria of CPCB guidelines. The following areas have to excluded or rejected (knock out Criteria) for this type of industries.

1. Areas with unstable geological features like unstable or weak soils; organic soil, soft clay or clay-sand mixtures, soils that lose strength with compaction or with wetting, clays with a shrink-swell character, sand subjected to subsidence and hydraulic influence.
2. Subsidence: e.g. owing to subsurface mines, water, oil or gas withdrawal or solution prone subsurface.
3. Wet lands.
4. Historical migration zones.
5. Flood prone areas
6. Area with 500 m from water supply zone and within 200 m from property line
7. Natural depression and valleys where water contamination is likely

8. Areas of ground water recharge and extremely high water table zone
9. Unique habitation areas, close to national parks with scenic beauty and formerly used landfills
10. Areas with high population, unique archaeological, historical, paleontogical and religious interests,
11. Agricultural and forests lands and existing dump sites,
12. Atmospheric conditions that would prevent safe disposal of an accidental release
13. Major natural hazards, e.g. volcanic activity, seismic disturbance, etc.
14. Sensitive locations, e.g. storing flammable or explosive materials, airports
15. An unfavorable local hydro-geological situation, e.g. springs or drinking water well within very close proximity to the chosen area
16. Extremely bad access i.e. no existing access roads to the selected site which may involve Long distance more than 5 km from main roads.
17. Great differences in altitude between the area of waste collection and the selected site.

6 ENVIRONMENTAL MONITORING PROGRAM

6.1 Introduction

An environmental monitoring plan provides a delivery mechanism to address the adverse environmental impacts of a project during its execution, to enhance project benefits, and to introduce standards of good practice to be adopted for all project works. An environmental monitoring program is important as it provides useful information and helps to:

- Assist in detecting the development of any unwanted environmental situation, and thus, provides opportunities for adopting appropriate control measures, and
- Define the responsibilities of the project proponents, contractors and environmental monitors and provides means of effectively communicating environmental issues among them.
- Define monitoring mechanism and identify monitoring parameters.
- Evaluate the performance and effectiveness of mitigation measures proposed in the Environment Management Plan (EMP) and suggest improvements in management plan, if required,
- Identify training requirement at various levels.

6.2 Need for Environmental Monitoring

- Verify and support compliance with applicable Central & State environmental laws, regulations, permits, authorization, consent to operate, protocols and orders.
- Monitoring is essential because it gives a final signal about the success of treatment.
- Establish baselines and charaterize trends in the physical, chemical, and biological condition of environmental media / matrix.
- Identify potential environmental problems and evaluate the need for remedial actions or measures to mitigate the problems.
- Detect, characterize, and report unplanned releases.
- Evaluate the effectiveness of flue gas from incinerator & leachate treatment and control, and pollution abatement programs.
- Determine compliance with commitments made in environmental impact statements, Form V – environmental statements, assessments

- EMS- ISO: 14001, safety analysis reports, or other official documents or for due diligence.

M/s VRBA Bio Waste Solution Pvt. Ltd. is established with the objective to prevent environment pollution hazard and to observe existing laws on environment and pollution control.

M/s VRBA Bio Waste Solution Pvt. Ltd. has adequate qualified and experienced staffs and NABL accredited lab for monitoring of environmental parameters.

6.3 Aim of Environmental Monitoring

During operation of the proposed CBWTF, environmental monitoring of the following parameter shall be carried out:

1) Air quality
2) Water & waste water quality
3) Noise levels
4) Soil quality

To evaluate the effectiveness of environmental management programme, regular monitoring of important environmental parameters will be taken up to find out any deterioration in environmental quality. Monitoring of the proposed project will be regularly conducted. The schedule, duration & parameters to be monitored are given in **Table 6.1.**

Table 6-1: Monitoring Schedule of Environmental Parameters

Sr. No.	Particulars	Duration of Sampling	Important Monitoring Parameters
1	Air Pollution and Meteorology		
	Air Quality		
	A. Stack Emission		
		Once in a every three month	Respirable Particulate Matter (PM_{10}),Fine particulate ($PM_{2.5}$)Sulphur dioxide (SO_2), Oxides of nitrogen (NO_x), Hydro Cloric acid (HCl).
	B. Ambient Air Quality		
	-	Once in a Six month	Respirable Particulate Matter (PM_{10}),Fine particulate ($PM_{2.5}$)Sulphur dioxide (SO_2), Oxides of nitrogen (NO_x),

Sr. No.	Particulars	Duration of Sampling	Important Monitoring Parameters
2.	Water Environment		
	A. Ground Water		
	-	Once in a season	pH, Colour, TDS, TSS,Conductivity, Turbidity, TOC, Sulphates,Chlorides, Color, Total Hardness (as $CaCO_3$),Total Alkalinity (as $CaCO_3$),TKL, Chlorides (as Cl), Nitrate, (as NO_3), Fluoride, Lead (as Pb), Cadmium (as Cd), Copper (Cu), total Chromium (as Cr), Mercury (as Hg),Nickel (as Ni), Cyanide (as CN),Manganese (as Mn), Iron (as Fe), Zinc (as Zn), BOD, COD, and Pesticides (Organo Chlorine, Organo Nitrogen, Synthetic Pyrethrold, Carbamates)
	B. Surface Water		
	-	Once in a season	pH, Colour, TDS, TSS,Conductivity, Turbidity, TOC, Sulphates,Chlorides, Color, Total Hardness (as $CaCO_3$),Total Alkalinity (as $CaCO_3$),TKL, Chlorides (as Cl), Nitrate, (as NO_3), Fluoride, Lead (as Pb), Cadmium (as Cd), Copper (Cu), total Chromium (as Cr), Mercury (as Hg),Nickel (as Ni), Cyanide (as CN),Manganese (as Mn), Iron (as Fe), Zinc (as Zn),BOD, COD, and Pesticides (Organo Chlorine, Organo Nitrogen, Synthetic Pyrethrold, Carbamates)
3	Noise Environment		
	Noise	Once in a Six month	Noise level in dB(A)leq
4.	Soil Environment		
	Soil at project site	Once in six months at project site	Analysis of pH, TDS, Conductivity, TOC,Fluoride, Lead (as Pb), Cadmium (as Cd), Copper (Cu), Total Chromium (as Cr), Mercury (as Hg),Nickel (as Ni), Cyanide (as CN),Manganese (as Mn), Arsenic (as As), Zinc (as Zn), Poly Aromatic Hydrocarbon (as PAH)

7 ADDITIONAL STUDIES

7.1 Public Hearing

The proposed project is exempted from Public Hearing as per revised guideline of CBWTF. The project falls in industrial area.

7.2 Risk Assessment

7.3 Biomedical Waste:

The waste produced by hospitals is known as 'biomedical waste'. This waste is different from all other waste, mainly because of its hazardous nature. Since this waste is directly generated from the human body and animals, it is the content more than the quantity which makes it dangerous and risky. Hospitals are institutions that form a part of the category of emergency services. They are frequented by people from every layer of the society. Despite technological advancement, and the progress made in terms of knowledge, there has been no reduction in the amount or form of waste produced by hospitals. Strict prohibition of reuse of medical equipment only adds to the problem. Naturally, this has led to an increase in the use of disposable medical supplies, causing an increase in the quantity of biomedical waste. The hazardous nature of biomedical waste came to the limelight in the 1980s and the 1990s. Till then, it was not considered a life-threatening issue. In the 1980s and 1990s, the exposure to HIV and Hepatitis B virus increased the awareness of biomedical waste. It also brought forth the potential risks involved in bio-medical waste. Not only is biomedical waste a risk to the society and the environment, but people who collect, segregate and dispose it are at potential risk from this waste too. Needles, blades and other sharp instruments that are not disposed of properly or not disinfected can infect them or harm them. Also, the high temperatures and toxic gases released during waste disposal pose a health hazard to the workers. Surprisingly, 80% out of the total quantity of biomedical waste is non-hazardous. Only 15% is harmful or infectious. If biomedical waste is allowed to mix with municipal solid waste and dumped in the garbage bins meant for other waste, then the entire mass becomes infectious and can pose a potential risk to the nearby residents. Since this will be disposed of at landfills, the environment will also be harmed. If incinerators are not operated properly, environmental degradation is inevitable. Considering the hazardous nature of biomedical waste and the risks associated with it, the Ministry of Environment and Forests notified new the Biomedical Waste Management Rules in 2016 superseding earlier notifications. The BMW

Rules, clearly define various terms including 'biomedical waste', 'occupier' and biomedical waste treatment facility. They cover important areas like treatment and disposal, segregation, packaging, transportation and storage of biomedical waste. They clearly state that the government of every state will establish a prescribed authority.

7.3.1 Effective Biomedical waste disposal at CBWTF can be ensured by:

- Training the hospital staff on safe biomedical waste handling practices
- Segregating and storing on a regular basis and not as and when needed.
- Making it mandatory for all healthcare facilities to register with the CBWTF for effective biomedical waste management and disposal.
- Ensuring that biomedical waste is not mixed with other waste as it damages the equipment used for its disposal.
- Transporting biomedical waste to the disposal plant during the night to avoid heavy traffic and crowded places.
- Monitoring hospitals and also CBWTF periodically (CPCB & PCB) to ensure proper biomedical waste handling and disposal.

Risk Management at CBWTF Segregation refers to the basic separation of different categories of waste generated at source and thereby reducing the risks as well as cost of handling and disposal.

Segregation is the most crucial step in biomedical waste management. Effective segregation alone can ensure effective bio-medical waste management. The BMWs must be segregated in accordance to guidelines laid down under schedule 1 of BMW Rules, 2006.

7.3.2 How does segregation help?

- Segregation reduces the amount of waste needs special handling and treatment
- Effective segregation process prevents the mixture of medical waste like sharps with the general municipal waste.
- Prevents illegally reuse of certain components of medical waste like used syringes, needles and other plastics.
- Provides an opportunity for recycling certain components of medical waste like plastics after proper disinfection.
- Recycled plastic material can be used for non-food grade applications.

- Of the general waste, the biodegradable waste can be composted within the hospital premises and can be used for gardening purposes.
- Recycling is a good environmental practice, which can also double as a revenue generating activity.
- Reduces the cost of treatment and disposal (80 per cent of a hospital's waste is general waste, which does not require special treatment, provided it is not contaminated with other infectious waste) Proper labeling of bins The bins and bags should carry the biohazard symbol indicating the nature of waste to the patients and public. Label shall be non-washable and prominently visible.

Collection

The collection of biomedical waste involves use of different types of container from various sources of biomedical wastes like Operation Theatre, laboratory, wards, kitchen, corridor etc. The containers/ bins should be placed in such a way that 100 % collection is achieved. Sharps must always be kept in puncture-proof containers to avoid injuries and infection to the workers handling them. Storage once collection occurs then biomedical waste is stored in a proper place. Segregated wastes of different categories need to be collected in identifiable containers. The duration of storage should not exceed for 8- 10 hrs in big hospitals (more than 250 bedded) and 24 hrs in nursing homes. Each container may be clearly labeled to show the ward or room where it is kept. The reason for this labeling is that it may be necessary to trace the waste back to its source. Besides this, storage area should be marked with a caution sign.

Transportation

The waste should be transported for treatment either in trolleys or in covered wheelbarrow. Manual loading should be avoided as far as for as possible. The bags / Container containing BMWs should be tied/ lidded before transportation. Before transporting the bag containing BMWs, it should be accompanied with a signed document by Nurse/ Doctor mentioning date, shift, quantity and destination. Special vehicles must be used so as to prevent access to, and direct contact with, the waste by the transportation operators, the scavengers and the public. The transport containers should be properly enclosed. The effects of traffic accidents should be considered in the design, and the driver must be trained in the procedures he must follow in case of an accidental spillage. It should also be possible to wash the interior of the containers

thoroughly. Personnel safety devices the use of protective gears should be made mandatory for all the personnel handling waste.

Gloves:

Heavy-duty rubber gloves should be used for waste handling by the waste retrievers. This should be bright yellow in color. After handling the waste, the gloves should be washed twice. The gloves should be washed after every use with carbolic soap and a disinfectant. The size should fit the operator.

Aprons, gowns, suits or other apparels:

Apparel is worn to prevent contamination of clothing and protect skin. It could be made of cloth or impermeable material such as plastic. People working in incinerator chambers should have gowns or suits made of non-inflammable material.

Masks:

Various types of masks, goggles, and face shields are worn alone or in combination, to provide a protective barrier. It is mandatory for personnel working in the incinerator chamber to wear a mask covering both nose and mouth, preferably a gas mask with filters.

Boots:

Leg coverings, boots or shoe-covers provide greater protection to the skin when splashes or large quantities of infected waste have to be handled. The boots should be rubber-soled and anti-skid type. They should cover the leg up to the ankle.

Cleaning Devices

Brooms:

The broom shall be a minimum of 1.2 m long, such that the worker need not stoop to sweep. The diameter of the broom should be convenient to handle. The brush of the broom shall be soft or hard depending on the type of flooring.

Dustpans:

The dustpans should be used to collect the dust from the sweeping operations. They may be either of plastic or enameled metal. They should be free of ribs and should have smooth contours, to prevent dust from sticking to the surface. They should be washed with disinfectants and dried before every use.

Mops:

Mops with long handles must be used for swabbing the floor. They shall be of either the cloth or the rubber variety. The mop has to be replaced depending on the wear and tear. The mechanical-screw type of mop is convenient for squeezing out the water.

Vacuum cleaners:

Domestic vacuum cleaners or industrial vacuum cleaners can be used depending on the size of the rooms.

Storage Devices

Dustbins:

It is very important to assess the quantity of waste generated at each point. Dustbins should be of such capacity that they do not overflow between each cycle of waste collection. Dustbins should be cleaned after every cycle of clearance of waste with disinfectants. Dustbins can be lined with plastic bags, which are chlorine-free, and color coded as per the law. Handling devices Trolleys the use of trolleys will facilitate the removal of infectious waste at the source itself, instead of adding a new category of waste.

Wheelbarrows:

Wheelbarrows are used to transfer the waste from the point source to the collection centers. There are two types of wheelbarrow – covered and open. Wheelbarrows are made of steel and provided with two wheels and a handle. Care should be taken not to directly dump waste into it. Only packed waste (in plastic bags) should be carried. Care should also be taken not to allow liquid waste from spilling into the wheelbarrow, as it will corrode. These are ideal for transferring debris within the institution. Wheelbarrows also come in various sizes depending on the utility.

Chutes:

Chutes are vertical conduits provided for easy transportation of refuse vertically in case of institutions with more than two floors. Chutes should be fabricated from stainless steel. It should have a self-closing lid. These chutes should be fumigated everyday with formaldehyde vapors. The contaminated linen (contaminated with blood and or other body fluids) from each floor should be bundled in soiled linen or in plastic bags before ejecting into the chute. Alternately, elevators with mechanical winches or electrical winches can be provided to bring down waste containers from each floor. Chutes are necessary to avoid horizontal transport of waste thereby

minimizing the routing of the waste within the premises and hence reducing the risk of secondary contamination.

7.4 Occupational Health Hazards

The health hazards due to improper waste management can not only affect the occupants in institutions, but also spread in the vicinity of the institutions. Occupational health concerns exist for janitorial arid laundry workers, nurses, emergency medical personnel, and refuse workers. Injuries from sharps and exposure to harmful chemical waste and radioactive waste also cause health hazards to employees in institutions generating bio-medical waste. The problem of occupational health hazards due to bio-medical waste is not publicized as there is lack of information. Hence, the Bio-Medical Waste Management Rules. 2016 prescribe a form to report such incidences in order to develop a database. There is plenty of scope for research in this field. Proper management of waste can solve the problem of occupational hazards to a large extent.

The health hazards due to improper bio medical waste management can affect:

- The occupants in institutions and spread in the vicinity of the institutions
- People happened to be in contact with the institution like laundry workers, nurses, emergency medical personnel, and refuse workers.
- Risks of infections outside hospital for waste handlers, scavengers and (eventually) the general public
- Risks associated with hazardous chemicals, drugs, being handled by persons handling wastes at all levels
- Injuries from sharps and exposure to harmful chemical waste and radioactive waste also cause health hazards to employees.

Management of bio medical waste for refuse workers:

Employees who handle medical waste are considered to have occupational exposure. In general, the employers require to develop exposure control plans, to adopt engineering controls and work practices that minimize exposures, to provide hand washing facilities and personal protective equipment, to provide training to workers, to provide hepatitis B vaccines free of charge, to provide medical evaluation and follow-up to exposed workers, and to keep medical and training records.

- Employers are required to employ "engineering and workplace controls" wherever possible to minimize or eliminate employee exposure.
- Engineering controls either remove the hazard or isolate the worker from exposure. An example of an engineering control is the use of a ventilated cab on earth-moving equipment to protect workers from dust and aerosols.
- Employers are required to examine, maintain, and replace engineering controls on a regular basis to insure their effectiveness.
- Personal Protective Equipment Appropriate personal protective equipment must be used to reduce risk of worker exposure.
- Employers must make readily available at no cost to employees appropriate specialized clothing or equipment to protect against exposure to blood and other potentially infectious materials.
- Personal protective equipment must prevent such materials from passing through to an employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the equipment is in use.
- Personal protective equipment consists of, but is not limited to, gloves, face shields, masks, and eye protection, gowns, aprons, and similar items.
- Employers must ensure that appropriate personal protective equipment is used and used correctly.
- Employers must also see to it that personal protective equipment is properly cleaned, laundered, repaired, replaced, or disposed as needed, at no cost to the employee.

The employer must ensure that employees observe precautions for handling and using personal protective equipment, including:

- removal of garments penetrated by blood and other infectious material as soon as possible;

- placing contaminated protective equipment in designated areas or containers for storing, washing, decontaminating, or discarding each day or shift;

- Replacing gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised;
- Utility gloves may be decontaminate for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, etc.;
- Wearing appropriate face and eye protection such as goggles, glasses with solid side shields or chin-length face shields when splashes, sprays, spatters, or droplets of infectious materials pose a hazard to the eyes, nose, or mouth.

Hand washing and Hygiene

- Employers must provide hand washing facilities that are readily accessible to all employees. When this is not feasible, they must provide antiseptic towelettes.
- Employers must ensure that employees wash their hands as soon as possible after removing gloves and other personal protective equipment, or after contact with potentially infectious material.

7.5 Disposal Methods for Medical Waste at Health Care Facilities

- The rules provide requirements for handling contaminated sharps, including a requirement that they be placed in closed, puncture-resistant, leak proof, color-coded (or biohazard-labeled) containers prior to disposal. If the container can leak, it must be placed in a second closed, leak proof container.
- Blood and other potentially infectious material (other than sharps) must be placed in leak proof, color-coded (or biohazard-labeled) container before it leaves the facility. If outside contamination occurs, or if the container is punctured, it must be placed in another leak proof, labeled or color-coded container.
- Disposal of medical wastes must be in accordance with all applicable federal, state, and local regulations.
- Training all persons with a potential for exposure must be provided with adequate training and information including general explanation of the modes of transmission, symptoms, epidemiology, warning signals relating to possible exposure, and procedures to follow if exposure occurs.

- Hepatitis B Vaccine Covered employers must make available, free of charge, and at a reasonable time and place, the hepatitis B vaccine and vaccination series to all employees who are at risk of occupational exposure.
- If an Exposure Incident Occurs Employees should immediately report exposure incidents. The employer is responsible for establishing the procedure for evaluating exposure incidents.

Recordkeeping

- The employer must keep medical records and records of training sessions. Medical records must be kept confidential (though an employee and his or her representative may see and copy his own record on request) and must be maintained for thirty (30) years after employment has ended.
- Training records, including the dates, content, names and qualifications of trainers, and names and job titles of trainees, must be kept for three (3) years.

Safe work practices to be followed by every worker in the bio medical facility:

- Each waste handling facility should have standard operating procedures (SOPs) for accepting, rejecting, and handling medical waste
- Follow your employer's SOPs and your supervisor's instructions about reporting and handling medical wastes.
- Be alert to potential hazards.
- Wear person protective equipment under circumstances in which you might be exposed. Boots should have steel toes and puncture-resistant soles.
- 6" lace-up boots provide added protection for the ankles.
- Gloves should be worn whenever the hands may come in contact with hazards; leather provides better protection than rubber against punctures.
- Arms and other skin surfaces should be covered whenever the skin might be exposed to infectious agents.

- Safety glasses and hard hats may also provide protection to the head and face from splashes.
- Special equipment, such as respirators, face shields, dust masks, boot covers, or impervious clothing may be necessary if a spill occurs, if splashing or splattering is expected, or if another unusual hazard arises.
- Cover all cuts, abrasions, and other areas of non-intact skin while on duty.
- Avoid physical contact with medical wastes, whether they are in red bags or sharps containers or not.
- If you are required to move these items-for example, to separate them for pickup-use a shovel or other implement.
- Never handle any wastes with your bare hands.
- Be aware of the possible presence of medical wastes when handling all wastes and when cleaning all machinery and equipment, and try to avoid contact.
- In particular, be aware that sharps can become stuck in the wheels and tracks of landfill vehicles, and can pose hazards to operators and maintenance workers.
- Where possible, use some implement or cleaning method other than your hands.
- If you do have to use your hands to clean or maintain equipment, make sure that you are wearing gloves that minimize the chance of being cut, and NEVER REACH WHERE YOU CAN'T SEE.
- Avoid handling personal items, like pens, combs, etc., while wearing gloves.
- Always wash your hands after removing your gloves, even if the gloves have not been cut or punctured.
- Always wash before eating, drinking, smoking, or putting anything in your mouth, and before leaving work.
- Change your clothes and boots immediately after work so that you do not contaminate family members.
- If you come in contact with infectious waste (for example, if you are splashed with blood or blood-containing bodily fluids), wash your hands and any exposed skin thoroughly in warm water and soap, or in waterless antiseptic cleaner, if soap and water are unavailable.

- Remove clothing, boots, and gloves that have been in contact with infectious waste as soon as possible, taking care to avoid contact with exposed skin surfaces. Use gloves to remove other items of clothing.
- The risk of disease from clothing soiled with medical waste is very low, but it should still be handled as little as possible. While wearing gloves, place it in a leak proof bag prior to cleaning. Soiled clothing should be handled with gloves and laundered according to manufacturer's instructions. Boots and leather goods may be brush-scrubbed with soap and hot water to remove contamination.

Report All Exposures Immediately

With proper preventative care, safe work practices, prompt reporting of exposures, and post-exposure medical attention and follow-up, there is little likelihood that medical waste will harm you on the job.

7.6 Disaster Management

Since times immemorial India has been highly prone to natural calamities.

Disasters are characterized as:

- They are disruptive to individuals and communities.
- They are not part of day to day experience and are outside normal life expectations.
- They are unpredictable in occurrence and effects can be of sudden onset.
- They require a response for which normal local resources may be inadequate.
- They have a wide range of effects and impacts on the human and physical environment.

Disaster Management Cycle

Three major functional areas were recognized as necessary components of a comprehensive approach; prevention, response and recovery. Without these areas, the key responsibilities of agencies include:

Planning: - The analysis of requirements and the development of strategies for resource utilization.

Preparedness: - The establishment of structures, development of systems and testing and evaluation by organizations of their capacity to perform their allotted roles

Co-ordination:- The bringing together of organizations and resources to ensure.

Objectives

Disaster Management Plan is a comprehensive plan, which optimally utilizes men, material and available resources to prevent loss to lives and minimizes loss to property. It ensures fastest approach for rescue and rehabilitation. Disaster Management Plan guides the entire machinery engaged in relief operation and induces courage amongst the community to face the eventuality boldly.

The key objectives of the Disaster Management Plan are:

- To improve the preparedness for disaster through risk assessment and vulnerability analysis.
- To evolve a suitable mitigation strategy so as to minimize the impact of disaster in terms of men and material loss.
- To give professional guidance to the relief machinery engaged in relief operations.
- To create awareness amongst the community to face the disaster in case of an eventuality.
- To involve the voluntary organizations & NGO's in awareness creation and in relief operations.
- To enable quick restoration of the public service system affected by the disaster.
- To prevent the spread of post-disaster epidemics.

Identification and Prioritization of Hazards

- Earthquake
- Terrorist Attack
- Fire
- Chemical Hazards.
- Flood
- Accidents (Road, Railways, Air, Building Collapse)

- Road Blockade

7.6.1 Disaster Management Strategy

Optimum strategy is to be followed in accordance with the comprehensive District Disaster Management Plan to combat the effects of the disaster and to minimize the loss of life and property. Different stakeholders from district administration, public, NGO sector, civil defense, interest groups are required to play a major role in disaster mitigation. Broadly it has been divided into three major strategies viz Pre-Disaster Phase, Impact Phase and Post Disaster Phase.

1. Pre-Disaster Phase- Preparedness in "No Disaster Situation".

In the Pre-Disaster Phase – prevention, Mitigation and Preparedness activities are undertaken. The key activities are: -

- Formation of the District Disaster Management Committee.
- Formulation of District Disaster Management Plan for running year.
- Risk Assessment and Vulnerability Analysis.
- Resource Inventory.
- Allocation of responsibilities to the individual actors/Groups/Institutions/Organizations.
- Training and capacity building etc.

2. Impact Phase- Emergency Relief Measures

This phase includes measures taken immediately after the disaster.

The key activities are:-

- Rescue operation/Evacuation by teams (already identified) and providing basic infrastructure and movement to rescue centers.
- Functioning of District Control Room (DCR) & other Sub Divisional/Block/Tehsil/Line Departmental Control Rooms.
- Coordination meeting with officials at District Control Room at each 12 hours interval to take stock of the situation.
- Management of Rescue Shelters

- Monitoring Disaster Management by ensuring a line of control through Police & Paramilitary forces, Civil Defense, Fire services, Civilians, PSUs, NGOs etc
- Administration of Relief

3. Post Disaster Phase- Damage Assessment and Long term relief.

All measures at this stage aim at speedy return of the affected areas to normalcy and to mitigate the long-term consequence of the disaster.

The key activities are:-

- Assessment & enumeration of damage.
- Developing a Reconstruction and Rehabilitation plan.
- Monitoring Relief Operation organized by outside agencies/ UN Agencies/ Red Cross/ NGOs/ PSUs/ other states etc through District Administration.
- Restoration of Communication- Roads, Railways, Electronic Communication etc.
- Maintenance of Law & Order.
- Provision of Medical facilities, Minimum sanitation, drinking water, free kitchen etc.
- Removal of debris and disposal of carcasses.
- Meeting officers of both District level and Field level in every 24 hours to take stock of the situation.
- Collection of Information and submission of daily situation report to Government through District Collector.
- Documentation of the entire event – Black & white/ Audio & Video.

In disaster situations, a quick rescue and relief mission is inevitable; however damage can be considerable minimized if adequate preparedness levels are achieved. Indeed, it has been noticed in the past that as and when attention has been given to adequate preparedness measures, the loss to life and property has considerably reduced.

The team members & workers will be trained according to the identified natural disaster by an experienced training professional so that loss of lives and property is at its minimum at operational as well as construction phase.

7.7 Social Impact Assessment

The impacts of development projects occur in different forms. While significant benefits result for the society, the project area people may often bear the brunt of adverse impacts. This can happen, for example, when they are forced to relocate to make way for such interventions. There is now a growing concern over the fate of the displaced people. This has given rise to the need to understand beforehand the implications of adverse project impacts so that mitigation plans could be put in place in advance.

In the current project of biomedical waste plant the major benefit to the society will be in the form of proper disposal of infectious bio medical waste i.e. in public of city beautiful will be safe against the harmful infectious waste that can cause serious epidemic to the society.

Along with the safe guarding against the threat of bio medical waste various employment opportunities will be generated from the implementation of the project like plant operators, drivers, direct and in direct employment opportunities.

8 PROJECT BENEFITS

8.1 Physical Infrastructure

The beneficial impact of proposed project on the civic amenities will be substantial after the commencement of project activities. The basic requirement of the community needs will be strengthened by extending healthcare to the community, building/strengthening of existing roads in the area which will help in uplifting the living standards of local communities.

8.2 Employment Opportunities

The project will create opportunities for employment. Skilled and unskilled manpower will be needed. Secondary jobs are also bound to be generated to provide day-to-day needs and services to the work force. This will also temporarily increase the demand for essential daily utilities in the local market. Due to this proposed project, relevant to this project other job opportunities may generate which will improve the socio economic status of the area. Neighboring villagers of the project will get its benefits more by giving preference to them in relation to direct employment associated with the various project activities. Construction and operation phase of the proposed project will involve a certain number of laborers, contractors and construction workers. There is a possibility that local people will be engaged for this purpose. The operation phase will involve a number of skilled and unskilled workers.

The total 20 manpower will be required for this project. There is a possibility that local people will be engaged for this purpose to the extent possible and hence improve the existing employment scenario of the region. First preference will give to localize people for all kind of required employment in the project and especially for unskilled employment the company will take localize people.

8.3 Socio-Economic Development Activities

An obligation, beyond that required by the law and economics, for a firm to pursue long term goals that are good for society the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as that of the local community and society at large. The basic amenities viz. roads, transportation, electricity, proper sanitation, medical facilities etc will be developed as far as possible; and overall the proposed project will change/improve the socio-economic conditions of the area.

8.4 Corporate Social Responsibility (CSR)

The Company shall continue to have among its objectives the promotion and growth of the national economy through increased productivity, effective utilization of material, manpower resources and continued application of modern scientific and managerial techniques, in keeping with the national aspiration; and the company shall continue to be mindful of its social and moral responsibilities to consumers, employees, shareholders, society and the local community. The company shall earmarks ~ 2% of total project cost for social development and welfare measures in the surrounding villages like education, health facility, infrastructure facilities, etc, this fund shall be utilized over a period of 5 years.

9 ENVIRONMENT COST & BENEFIT ANALYSIS

9.1 Environmental Cost and Benefit Analysis

The upcoming project will generate direct and indirect employment opportunities for the local people. The project will create employment including skilled as well as semi-skilled staff directly or indirectly. The secondary employment in the form of providing services to the employed manpower will also be developed in the neighboring villages.

The organization will also provide the helping hand in the development of the nearby villages by arranging regular medical checkup camp for the employees.

The project will generate a fair amount of direct, indirect and induced employment in the study region. The local economy will receive a boost due to employee spending and services generated by applicant.

10 ENVIRONMENTAL MANAGEMENT PLAN

10.1 Introduction

An environmental management plan (EMP) has been prepared for the proposed facility, to minimize negative impacts and is formed on the basis of prevailing environmental conditions and likely impacts of this project on various environmental parameters. This plan will also facilitate monitoring of environmental parameters. Preparation of EMP is required for the formulation, implementation and monitoring of environmental protection measure. EMP includes schemes for proper and scientific treatment and disposal mechanism for air, liquid and solid hazardous pollutants. Apart from this, green belt development, safety aspect of the workers, noise control, fire protection etc. are also included in it. The various components of the EMP are outlined in subsequent sections.

10.2 Purpose of Environmental Management Plan

Various purposes of the environmental management plan are:

- To treat and dispose of all the pollutants viz. air, liquid, gaseous and solid waste so as to meet statutory requirements (Relevant Pollution Control Acts) with appropriate technology.
- To support and implement work to achieve environmental standards and to improve the methods of environmental management.
- To promote green-belt development.
- To encourage good working conditions for employees.
- To reduce fire and accident hazards.
- Budgeting and allocation of funds for environment management system.
- To adopt cleaner production technology and waste minimization program.

10.3 Details of Environmental Management Plan

10.4 During Construction Phase

Air Environment

Construction phase will be for a short period and hence the impacts will also be for a short and temporary period. During construction activities, mainly emission of dust and gases from

movement of vehicles and construction activity is expected. However, following measures will be taken to reduce / contain such emissions:

- Water will be sprinkled on loose top soil to prevent re-suspension of dust into ambient air due to movement of vehicles etc.
- Separate civil construction material storage yard will be created within the site and it will be enclosed.
- Transport vehicles and construction equipments / machineries will be properly maintained to reduce air emissions.
- Vehicles and equipments will be periodically checked for pollutant emissions against stipulated norms.
- Idle running of vehicles will be minimized during material loading / unloading operations
- Exhaust vent of D.G. set will be kept at proper height to ensure quick dispersal of gaseous emissions
- All construction workers will be provided appropriate PPEs like dust mask, ear plug,

10.5 Water Environment

There will be no housing facilities at site for construction workers and hence a major source of impact on water environment will be avoided. Proper and sufficient sanitary facilities will be provided to construction workers to maintain all hygienic conditions at site. Storm water drains compatible with the local hydrological pattern of the area which will be provided to carry-off, any run-off or storm water from the premises. Care shall be taken during construction work and will not create any obstruction / dips in the topography which can lead to accumulation of water within premises leading to undesirable consequences like health and hygiene problems etc.

10.6 Solid Waste

Main solid waste generation during construction phase will be construction debris like rubble, brick bats, steel scrap, wooden scrap, sand, gravel etc. However, these materials are inert in nature and will not result into leaching of any substance or constituent. These materials will be properly sorted and will be used within premises for filling of low lying areas. Wooden scrap, steel scrap will be given to scrap dealers. On completion of civil work, all debris etc. will be completely removed from the site to avoid any incompatibility with future use.

The end products of incineration ie ash shall be disposed through authorized TSDF .The autoclaved plastic waste shall sent to registered recycler strictly according to laws and under expert supervision.

10.7 Noise Environment

Following measures are proposed during construction period to mitigate adverse impacts:

- Construction machinery and vehicles will undergo periodic maintenance to keep them in good working condition.
- All machineries to be used for construction purpose will be of highest standard of reputed make and compliance of noise pollution control norms by these equipments will be emphasized by company.
- Feasibility of putting up acoustic enclosure / temporary barrier around areas with high noise levels will also be explored.
- All construction workers working in high noise areas will be provided appropriate PPEs like ear muffs and made to wear them during working hours.
- Possibility of raising green belt along with construction activity will also be explored so as to serve as a noise barrier.

10.8 Land Environment

Following steps are proposed to take care of impact of construction activity on project land area:

- On completion of civil works, all debris etc. will be completely removed from site to avoid any incompatibility with future use.
- Other materials like paint, diesel etc. will be properly stored and handled to prevent any spillage on land.
- All the wastes will be stored at a designated site within the premises to prevent scattered discharge on land.

ECOLOGY

Proposed facility will not involve any trees cutting exercise so, there will be no major impact on ecology is anticipated.

10.9 Socio-Economic

As there will be no temporary housing colony for construction workers, neither socio - economic impact due to the same is envisaged. Overall socio - economic effect of construction phase will be positive due to direct and indirect employment opportunity for the local livings. Local people will be employed for construction work to the maximum extent possible.

10.10 During Operation Phase

Air Environment

The air pollutants in the plant may be classified broadly into particulate matter like dust, fumes etc. and gases like Sulphur dioxide, Nitrogen oxide and Hydrogen chloride etc. The measure to control the air pollution will ensure the ambient air quality standards as laid down by Central Pollution Control Board for industrial areas. The system proposed for air pollution control will provide acceptable environment condition in the working areas and abate air pollution in the surrounding area of the plant. The technological equipment and processes have been selected with the above objectives. Depending on quality of emission from different sources, suitable air pollution control system will be provided. The chimney height will be as per CPCB norms to ensure ground level concentration of different pollutants within permissible limit. Once the hopper lid and enclosure door is closed, shredder operates as a closed system. This also avoids any dust generation etc.

Following measures are proposed to mitigate negative impact of operation phase of the project on the surrounding air environment:

- Height of all the stacks will be as per statutory requirement.
- All the stacks will have stack monitoring facility (SMF) consisting of sampling port-hole, platform and access ladder.
- Adequate spares of critical components of dust collection systems will be kept to ensure trouble - free operations and continuous compliance to emission norms.
- A comprehensive plan for fugitive emission control based on CPCB guidelines will be followed.
- Transport vehicles will be properly maintained to reduce air emissions.
- Vehicles will be periodically checked for pollutant emissions against stipulated norms.

- Idle running of vehicles will be minimized during material loading / unloading operations.

10.10.1Control and Monitoring of Secondary Fugitive Emissions

Fugitive emissions from the proposed facility would be insignificant as there will be air pollution due to activities like handling of biomedical waste, transfer points of biomedical waste and movement of vehicles. These operations generate a few quantity of dust. Good housekeeping, proper maintenance, wetting of dusty areas, use of enclosed storage wherever feasible etc., would considerably reduce fugitive dust. For effective prevention and control of fugitive emissions has implemented following:

- Enclosures are provided for all the loading and unloading operations, if possible.
- All transfer points are fully enclosed.
- Airborne dust is controlled by sprinkling of water.
- Preventive measures are employed to minimize dust build up on road.
- Maintenance of air pollution control equipment is done regularly.
- All the workers are provided with the dust mask.
- Green belt will be developed around the plant to arrest the fugitive emissions.
- Regular training is given to the personnel operating and maintaining fugitive emissions control systems.

10.10.2Water Environment

Total water requirement for the proposed facility would be 11 KLD which will be sourced from Bore well. Water conservation measures shall be taken to optimize the fresh water requirement. Moreover, record of water consumption for different usages shall be maintained.

10.10.3Noise Environment

Following precautionary measures will be adopted to control the noise level:

- Noise generating sources and their platforms will be maintained properly to minimize noise vibrations generated by them.
- Personnel working near the noisy machines in different plant locations, will be provided with well-designed ear muffs / plugs (effective noise reduction 10-15 dBA)
- Green belt will be developed to act as a noise barrier.
- Noise barriers / shields in the form of walls, beams will be provided around the units wherever found feasible.

- Training to personnel will be imparted to generate awareness about effects of noise and usage of protective gears.

10.10.4 Land Environment

Treated effluent will be utilized for gardening/plantation after ensuring norms specified by pollution control board by which impact on soil and ground water will be insignificant.

10.10.5 Solid Waste

Solid wastes shall be generated in the form of Incineration ash from Incinerator, ETP sludge from ETP process and used oil from the plant utility. Following steps shall be taken;

- Incineration ash from incinerator will be disposed to the nearest authorized TSDF site.
- Incineration ash and ETP sludge will be sent to authorized TSDF site
- Used oil will be properly stored and it will be re-used as lubricants in the machineries within the premises only.
- Record of solid waste generation and disposal shall be maintained.
- All Necessary precaution shall be taken during handling, loading and unloading of solid waste.

Socio - Economic Environment

Management Plan for the socio-economic aspects can be prepared by managing all the other aspects like Air pollution, water pollution, Noise pollution, etc. When all pollutions will be managed properly and socio economic status of the area will be improved through CSR activities then only socio-economic environment will be managed properly**.**

General Considerations

For good housekeeping of the proposed facility, following measures will be planned:

- Maintaining cleanliness of roads to prevent accumulation of dust and waste material.
- Inculcating positive attitude among employees for good house-keeping.
- Maintaining hygienic conditions in canteens, near drinking water source and toilets.

Recycle/reuse/recover: Wastewater generated from the proposed facility shall be reutilized in the gardening and green belt development after giving suitable treatment. The Incineration ash shall be disposed to nearest authorized TSDF site.

Energy conservation: Reduction in usage of traditional light bulbs with Light Emitted Diode (ELDs) means reduction in usage energy consumption. Usage of Solar energy at different locations in the plant like parking light, roadside light etc. will be explored.

10.11 Environmental Management Cell

In addition to preparing an EMP, it is also necessary to have a permanent organizational set up to ensure its effective implementation. Hence, proposed facility will create a team consisting of officers from various departments to co-ordinate the activities concerned with management for reporting of noncompliance / violations of environmental norms and implementation of the environmental control measures. This team will undertake the activity of monitoring the stack emissions, ambient air quality, noise level, etc. either departmentally or by appointing external agencies wherever necessary. Regular monitoring of environmental parameters will be carried-out to find out any deterioration in environmental quality and also to take corrective steps, if required, through respective internal departments. The Environmental Management Cell will also collect data about health of workers, green belt development etc. EMC will have qualified employees for hazardous operations and monitoring of the occupational injury to works as well as impact on the worker.

The cell will also be responsible for monitoring of the plant safety and safety related systems which include:

- Checking of safety related operating conditions.
- Visual inspection of safety equipments.
- Preparation of a maintenance plan and documentation of maintenance work specifying different maintenance intervals and the type of work to be performed.

Other responsibilities of the cell will include followings:

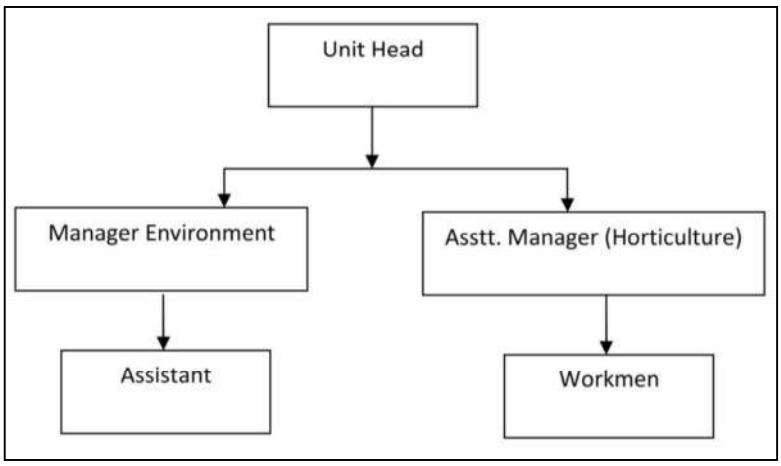
- Conduct and submit annual Environmental Audit. A SPCB registered agency will be retained to generate the data in respect of air, water, noise, soil and meteorological data and prepare the Environmental Audit report. Timely renewal of Consolidated Consents & Authorization (CC & A) will also be taken care of.

- Submitting environmental monitoring report to SPCB. Data monitored by the cell will be submitted to the Board regularly and as per the requirement of SPCB. The cell will also take mitigative or corrective measures as required or suggested by the Board.
- Keeping the management updated on regular basis about the conclusions/results of monitoring activities and proposes measures to improve environment preservation and protection.
- Conducting regular safety drills and training programs to educate employees on safety practices. A qualified and experienced safety officer will be responsible for the identification of the hazardous conditions and unsafe acts of workers and advise on corrective actions, organize training programs and provide professional expert advice on various issues related to occupational safety and health.
- Conducting safety and health audits to ensure that recommended safety and health measures are followed.

They manage mental manpower will comprise of the following:

The Company already has the technocrats and specializes people in the respective field of management of Common Bio Medical Waste Treatment Facility are as below:

Table 10- 1 Details of Organizational Setup



Similarly beside of the above, the Company is already having the existing operational staff and would deploy other technical and qualified manpower i.e. engineers and Supervisors for the

operation & monitoring of the plant sections during the up-gradation and installation of the incinerator plant at Common Bio Medical Waste Treatment Facility.

10.12 Budgetary Provisions for EMP

Adequate budgetary provisions have been made by project proponent Management for execution of environmental management plans. The details of capital and recurring (per annum) budget earmarked for pollution control / monitoring equipment; operation and maintenance of pollution control facilities, for greenbelt development and maintenance.

Table 10-1: Cost for EMP during construction phase

Sr. No.	Particulars	Approx. Capital Cost (Rs Lac)	Approx. Recurring Cost (Rs Lac)	Items Covered
1.	Toilets for workers	1	0.1	Toilets with septic tank
2.	Wind breaking curtains	0.5	0.1	Wind breaking walls at vulnerable areas
3.	Sprinklers for suppression of dust	0.5	0.2	Sprinklers, Pipeline
	Total	**2**	**0.4**	

Table 10-2: Cost for EMP during Operational phase

Sr. No.	Particulars	Approx. Capital Cost (Rs Lac)	Approx. Recurring Cost (Rs Lac)
1.	APCD (Ventury Scrubber)/quenching	25.00	1.5
2.	Effluent Treatment Plant	10.00	1.0
3.	Green Belt	2.00	0.50
	Total	**37**	**3**

11 SUMMARY AND CONCLUSION

11.1 Project Details

Medical care is vital for our life and health, but the waste generated from medical activities presents a real problem. Improper management of waste generated in health care facilities causes a direct health impact on the community, health care workers, and the environment. Indiscriminate disposal of biomedical waste (BMW) or hospital waste and exposure to such waste pose serious threats to the environment and human health; hence, such waste requires specific treatment and management prior to its final disposal. Awareness about the need of BMW management among the health care personnel is of paramount importance.

11.2 Project Requirement

The general break down of the requirement of the project is as follows.

Table 11-1: Project Requirements

<table>
<tr><td>1.</td><td>Total area of the Plant</td><td>0.202 ha</td></tr>
<tr><td>2.</td><td>Capital Cost</td><td>Rs. 2.784 Crores</td></tr>
<tr><td>3.</td><td>Location</td><td>E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110</td></tr>
<tr><td>4.</td><td>Coordinates of the Site</td><td><table><tr><th>S.No</th><th>Latitude</th><th>Longitude</th></tr><tr><td>01</td><td>25°14'52.018"N</td><td>83° 3'34.395"E</td></tr><tr><td>02</td><td>25°14'51.725"N</td><td>83° 3'35.335"E</td></tr><tr><td>03</td><td>25°14'50.168"N</td><td>83° 3'34.688"E</td></tr><tr><td>04</td><td>25°14'50.137"N</td><td>83° 3'33.546"E</td></tr></table></td></tr>
<tr><td rowspan="3">5.</td><td colspan="2">Water Requirement/Source</td></tr>
<tr><td>Water Requirement (KLD)</td><td>Total – 11.00 KLD
Fresh – 7.10 KLD
Recycled – 3.90 KLD</td></tr>
<tr><td>Source of water</td><td>Ground water Supply (Water will be abstracted only after getting NOC from CGWA)</td></tr>
</table>

11.2.1 Waste Water Generation

Entire waste water generated from the facility will be treated through proposed ETP and treated water will be use development of internal green belt development purposed to follow zero discharge concept.

11.2.2 Air Emission & Air Pollution Control Measures

The air emission from the proposed facility would be SPM, SO2, NOX and HCl from Incinerator stack. To control air emission Venturi scrubber as a pollution control system with adequate stack height will be installed.

11.2.3 Solid Waste Generation & Disposal

Incineration ash, used oil and ETP sludge will be generated from proposed facility. Used oil will be re-used as a lubricant in the machineries within the premises only. Incineration ash and ETP sludge will be sent to authorize land filling site.

11.2.4 Baseline Environment

The baseline environmental quality of Air, water, soil, noise, socioeconomic status and ecology has been assessed in the period of 1st October 2022 to 31st December 2022 in a study area of 10 km radial distance from the project site

The ambient air quality monitoring was carried at 8 locations to monitor PM10, PM2.5, SO2 and NOx concentration, which are found well below the NAAQS of CPCB.

Total 8 nos. of ground water, 8 nos. surface water samples were collected from the study area. The result of the all water sample collected shows that the water quality of the area is good. Values of the parameters found within the permissible limit of Indian standards/specifications for Drinking water.

Background noise levels were measured at 8 locations. Noise levels found within norms at all the location. Land use within 10 km radius of the study area has been determined with the help of satellite imagery, and broadly consists of settlements, Industrial land, Tank/River, land with scrub, land without scrub, area and predominant land use.

During the eco-biological study, endangered and endemic species is not observed in the stud area.

The total population of the study area was 217337 as per census 2011. All the villages were having almost all the infrastructure facilities like, educational, drinking, sanitation, health, etc.

11.2.5 Environmental Impacts during Construction Phase

During construction phase there will be minor reversible impact envisage on the air, water and noise environment.

11.2.6 Environmental Impact during Operation Phase & Mitigation Measures

Due to this proposed project, there will be minor increment in the air pollution due to the air emissions like, PM, SO2, NOx and HCl from the stake attached to incinerator facility. Entire waste water generated from the process will be reused for the internal green belt development to follow Zero discharge concept. Solid waste generated in the form of incineration ash, used oil and ETP sludge will be disposed as per guideline to reduce impact on soil environment.

A regular monitoring of the environment parameters like air, water, noise and soil, etc. will be carried out periodically as recommended.

11.3 Corporate Social Responsibility (CSR)

Rs. 0.055 Cr which is 2% of total project cost has been allotted for social development and welfare measures like education, health facility, infrastructure facilities, etc, this fund shall be utilized over a period of 5 years.

11.4 Environmental Management Plan

The management team is very much concern about environmental issues. All the environmental components will be looked out by Environmental Management Cell (EMC). Mitigation of environmental impacts has to be implemented according to the suggestions and will be monitored regularly to prevent any lapse.

Company has committed to implement all the pollution control measures to protect the surrounding environment. The project can definitely improve the regional, state and national environment and reduce health hazards. Projects like this will certainly improve the living standard of local people. The implementation of this project will definitely improve the physical and social infrastructure of the surrounding area.

12 DISCLOSURE OF CONSULTANTS

12.1 Introduction

The EIA/EMP Report for Environmental Clearance for Proposed Common Biomedical waste Treatment Facility by M/s VRBA Bio Waste Solution Pvt. Ltd. is located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110 has been prepared by Environment Management Division of M/s India Glycols Limited, Kashipur. The company has a team of dedicated and well-experienced professional including Engineers, Technologists and Environmentalists with in-depth knowledge and profound experience in the field of Environment Management. The company was accredited by NABET, QCI for the EIA consultancy services & the details are as follows:

Name of the Consultant	Environment Management Division of M/s India Glycols Limited, Kashipur
Address	A- 1 Industrial Area, Bazpur Road, Kashipur, Uttarakhand. Email: ashutosh.gautam@indiaglycols.com Tel: 9837242463
Accreditation Date	06/18/2021
Accreditation Validity	19/07/2024
Certificate Number	NABET/EIA/2124/IA0078

Name of the Laboratory	**ENVIRO-TECH SERVICES**
Laboratory Address	Plot No. 1/32, South Side G.T. Road Industrial Area Ghaziabad (UP)-201001.
E-mail	etslab2012@gmail.com
Website	www.etslab.in

12.2 EIA Team

The EIA Team engaged in the preparation of EIA report consist of professionals with multidisciplinary skills and relevant experience required for undertaking the projects. This EIA/EMP report has been prepared under the guidance of the following Coordinator & Functional Area Experts.

EIA Coordinator: Muzaffar Ahmad

Signature:

Date: - 06-02-2023

Functional Area Experts Engaged:

S. No.	Functional Area	Name of the experts	Involvement Period and Task	Signature
1.	SHW	Mr. Mayur Sharma (Team Member)	Inventory of Municipal Solid Waste, suggesting treatment options viz; organic waste convertor technology.	
2.	SC	Mr. Deepak Sati	Proposing the soil management practices during construction and operation phase of project.	
3.	AP	Dr. Chakresh Pathak	Collected the meteorological data and AAQ data through secondary sources and suggested air pollution control station around Core and Buffer Zone.	
4.	NV	Dr. Chakresh Pathak (Noise Only) & Mr. Sarang Khati	Collected the ambient noise data through secondary sources and suggested Noise pollution control measures during	

			both phases of project	
5.	AQ	Mr. Sarang Khati	Prediction of air pollution and its management.	
6.	WP	Mr. Muzaffar Ahmed	Estimating water requirements based on population, suggesting wastewater treatment/disposal schemes and developed the plan for rain water harvesting	
7.	LU	Mr. Radhakrishnamoorthy Periyaswamy	Collection of secondary data as well as drafting of report with respect to Geological Aspect.	
8.	Geo		Collection of secondary data as well as drafting of report with respect to Geological Aspect.	
9.	HG		Collection of secondary data as well as drafting of report with respect to Hydro-geological condition in around the study.	
10.	EB	Mr. Deepak Sati	Generating the ground truthing ecological assessment with secondary data from different departments, earmarking rare and endangered species.	
11.	SE	Mr. Rajveer Singh Yadav & Dr. Aditya Gautam	Collected the primary and Secondary data, livestock inventory/ impacts, identified village-wise amenities/ needs.	
12.	RH	Dr. Rajeev Kumar Sharma	Identification of hazards materials, Fire accidents	

			from Diesel storage and lethality damages, DMP and EPP for onsite & offsite were provided	

Team Members:

Sr. No	Name of the Team Members	EC/FAE/TM	Functional Area
1.	Mr. Rahul Kumar	TM	SE
2.	Mr. Mayur Sharma	TM	EB & SHW
3.	Mr. Shashikant Sharma	TM	EB

DECLARATION BY THE HEAD OF THE ACCREDITED CONSULTANT ORGANIZATION/AUTHORIZED PERSON

I, Sudhir Agarwal, hereby, confirm that the above-mentioned experts prepared the Final EIA Report for the proposed Proposed Common Biomedical waste Treatment Facility by **M/s VRBA Bio Waste Solution Pvt. Ltd. is located at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110**.

I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement.

Date: 06-02-2023

Signature:

Name: Sudhir Agarwal

Designation: Head

Name of the EIA Consultant Organization: Environment Management Division of M/s India Glycols Limited, Kashipur

The accreditation certificate by NABET, QCI for M/s India Glycols Limited and Notification of MoEF&CC recognized laboratory engaged is presented below in Figure respectively.

QCI

NABET

Quality Council of India

National Accreditation Board for Education & Training

Certificate of Accreditation

Environmental Management Division of India Glycols Ltd.

A- 1 Industrial Area, Bazpur Road, Kashipur, Udham Singh Nagar, Uttarakhand-244713

Accredited as Category – 'B' organization under the QCI-NABET Scheme for Accreditation of EIA Consultant Organizations: Version 3 for preparing EIA/EMP reports in the following sectors:

Sl. No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1.	Mining of minerals -opencast mining only	1	1 (a) (i)	B
2.	Thermal power plants	4	1 (d)	B
3.	Synthetic organic chemicals industry	21	5 (f)	A
4.	Distilleries	22	5 (g)	A
5.	Bio-medical waste treatment facilities	32A	7 (da)	B
6.	Building and construction projects	38	8 (a)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in IA AC Minutes dated June 1, 2021 and supplementary assessment minutes dated August 13, 2021 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/21/1979 dated September 24, 2021. The accreditation needs to be renewed before the expiry date by Environmental Management Division of India Glycols Ltd., Kashipur following due process of assessment.

Sr. Director, NABET	*Certificate No.*	*Valid till*
Dated: September 24, 2021	NABET/EIA/2124/IA0078	July 19, 2024

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environmental Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), UTTAR PRADESH)

To,

The Director
VRBA BIO WASTE SOLUTION PRIVATE LIMITED
Lane No- 3, N1/66-R-25
Shiv Prasad Gupt Colony Lanka -221005

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/UP/INFRA2/417371/2023 dated 08 Feb 2023. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC23B057UP110406**
2.	**File No.**	7624-7222
3.	**Project Type**	New
4.	**Category**	B
5.	**Project/Activity including Schedule No.**	7(d)(a)Common Bio-Medical Waste Treatment Facility
6.	**Name of Project**	Proposed Common Bio Medical Waste Treatment Facility (CBWTF) by VRBA Bio Waste Solution Pvt. Ltd. at E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, 221110
7.	**Name of Company/Organization**	VRBA BIO WASTE SOLUTION PRIVATE LIMITED
8.	**Location of Project**	UTTAR PRADESH
9.	**TOR Date**	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 22/11/2023

(e-signed)
Ajay Kumar Sharma
Member Secretary
SEIAA - (UTTAR PRADESH)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.
Vineet Khand-1, Gomti Nagar, Lucknow- 226010
E-Mail- doeuplko@yahoo.com, seiaaup@yahoo.com
Phone no- 0522-2300541

Reference- MoEFCC Proposal no- SIA/UP/INFRA2/417371/2023 & SEIAA, U.P. & File no-7624-7222

Sub: Environmental Clearance for Proposed Common Biomedical Waste Treatment Facility at Khasra No.- E-46, Industrial Area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, M/s VRBA Bio Waste Solution Pvt. Ltd.

Dear Sir,

This is with reference to your application / letter dated 08-02-2023 & 20-02-2023 on above mentioned subject. The matter was considered by 788rd SEAC in meeting held on 19-09-2023 and 767th SEIAA meeting held on 26-10-2023.

A presentation was made by the project proponent along with their consultant M/s Environment Management Division of M/s India Glycols Limited, Kashipur to SEAC on 19-09-2023.

Project Details Informed by the Project Proponent and their Consultant

The project proponent, through the documents and presentation gave following details about their project –

1. The environmental clearance is sought for Common Biomedical Waste Treatment Facility at Khasra No.- E-46, Industrial Area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh, M/s VRBA Bio Waste Solution Pvt. Ltd.
2. Standard terms of reference in the matter were issued through online Parivesh Portal on 24/08/2022 and EIA report submitted on 08/02/2023.
3. Salient features of the project as submitted by the project proponent:

S.No.	Parameters	Description
1.	Identification of Project	The Proposed project of CBWTF falls under Category B-1, schedule 7(da) as per the EIA Notification 14th Sep, 2006 and subsequent amendments dated 1st December, 2009 & 17th April, 2015.
2.	Project Proponent	M/s VRBA Bio Waste Solution Pvt. Ltd.
3.	Brief description of nature of the project	Biomedical waste is generated from all health care institutions; nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks etc. The responsibility of collection, treatment and safe disposal of all types of solid wastes rests with the generator. A Common Bio-medical Waste Treatment Facility (CBWTF) is proposed to be set up where bio-medical waste, generated from a number of healthcare units, will be suitably treated as per the prescribed procedure & norms laid down in the regulation. Proposed project of setting up of the Common Bio-medical Waste Treatment Facility includes Incinerator, Autoclave, Shredder and Effluent Treatment Plant.
5.	Proposed plant capacity	Proposed Capacity of CBWTF: Equipment | Capacity | Number

		Incinerator: 300 kg/hr, 1 Autoclave: 1000 Litre/Batch, 1 Shredder: 150 kg/hr, 1 Chemical Disinfection Tank: 1500 Ltr, 1 Effluent Treatment Plant: 10 KLD, 1
6.	Category of Projects	Category "B1" and Schedule- 7(da)
7.	Number of working days	365
8.	Total Plot Area	0.553 acres
9.	Khasra Number	E-46 & Khasra no. 148/5
10.	Location	E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh & Khasra no. 148/5, Singhitali Ramnagar, Industrial Estate, Phase-2, Chandauli.
11.	Coordinates of the Plant	1. 25°14'51.96"N 83° 3'34.33"E 2. 25°14'51.66"N 83° 3'35.31"E 3. 25°14'50.22"N 83° 3'34.70"E 4. 25°14'50.14"N 83° 3'33.53"E
12.	Elevation	78m-80 m
13.	Nearest habituated area	Hamidpur, Approx. 1.09 km towards West
14.	Nearest Main Public Road	SH-19 is about Approx. 0.57 Km towards North.
15.	Nearest Railway station/Airport	Jeonathpur Railway Station, approx. 1.68 km in SSE direction. Pt. Deen Dayal Upadhyaya Railway Station, approx. 7.22 km in NNE direction Lal Bahadur Shastri International Airport, approx. 30.15 km in North West direction
16.	Nearest water body	Ganga River, approx. 2.99 km in West direction
17.	Water requirement	Water requirement for the proposed CBWTF project is 11 KLD. Fresh- 7.10 KLD Recycled- 3.90 KLD
18.	Source of water	Ground water Supply (Water will be abstracted only after getting NOC from CGWA).
19.	Wastewater Generation	Waste water generated from the treatment of Biomedical waste during autoclaving, washing of floors, and domestic purpose etc. is 5.25 KLD and it shall be treated in effluent treatment plant and reuse in process
20.	Man Power	During Construction phase, the labors and workers will be hired from nearby villages. Total 20 persons are proposed to hire for plant operation including officers, skilled and unskilled workers.
21.	Air Pollution Control Device	Wet Scrubber, Cyclone and Bag Filter
22.	Nos. of Stack	2
23.	Power requirement	DG Set of 82.5 KVA is proposed for the project and lines will be taken from the authorized electricity board. ~ 1% of the total power load will meet through solar energy.
24.	Alternative site	No Alternative site is examined

25.	Land form, Land use and land ownership	The land for project is E-46, Industrial area, Ramnagar, Phase-1, Chandauli, Uttar Pradesh.
26.	Conclusion T	The estimated cost of the Project is Rs. 2.80 Cr.

4. Water calculation details:

S. No.	Requirement for	Water Consumption	Process Losses	Waste water generation	ETP losses	Recycled/ Reuse
A.	Process (Scrubbing)	2.40	1.40	1.00	0.20	0.80
B.	Steam Generation (Autoclaving)	0.20	0.05	0.15	0.05	0.10
C.	Miscellaneous i.e., Floor washing, Vehicle washing etc.	3.80	0.20	3.60	0.60	3.0
D.	Domestic Purpose	0.60	0.10	0.50	0.00	0.00
E.	Green Belt	4.0	4.0	0.00	0.00	0.00
Total (KL/Day)		11.0 7.10 (Fresh) + 3.90 (Recycle)	5.75	5.25	0.85	3.90

- Waste water (4.75 KLD) is being generated from the Industrial Process will be subjected to Proposed ETP (Capacity- 10.0 KLD). Treated water from (3.90 KLD) will be reused in scrubber for cooling purpose and green belt purpose.
- The entire system shall be a zero discharge system in terms of wastewater discharge from the process as recirculated through ETP.
- Domestic Wastewater shall be treated in a soak pit/septic tank.

5. Solid waste details:

Total No. of Employees	20
Assuming per capita solid waste generation rate as 0.2 kg/capita/day	
Quantity of solid waste generated	4.0 kg/day
Organic solid waste: 60 % of the total waste	2.40 kg/day
Inorganic solid waste : 40 % of the total waste	1.60 kg/day
Disposal of domestic solid waste	Domestic wastes are segregated at source, collected in bins and composted.

6. Hazardous waste details:

Sl. No.	Source	Quantity of hazardous waste Generated (Approx.)	Category according to Schedule I of hazardous waste	Treatment/ Disposal
1.	Spent Oil from DG set	5.0 MTPA	5.1	Handed over to authorized recyclers/re-processors
2.	Discarded Containers /Barrels	100 Nos./Annum	33.1	Handed over to authorized recyclers/re-processors
3.	Sludge from Wet Scrubbers	1.0 MTPA	37.1	Send to TSDF / Co processing industries.
4.	Ash from incinerator and flue gas cleaning residue	5.0 MTPA	37.2	Send to TSDF / Co processing industries.

7. There is no any litigation pending against project till dated 19/09/2023.
8. The project proposal falls under category–7(da) of EIA Notification, 2006 (as amended thereof).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 19-09-2023 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 26-10-2023 discussed the matter and recommended grant of environmental clearance on the proposal as above alongwith specific and following standard environmental clearance conditions: -

Additional Conditions:

1. Proposed CBWTF shall comply with the revised guidelines (location criteria) for Common Bio-medical Waste Treatment and Disposal Facilities issued by CPCB on December 21st 2016 with respect to establishment of new CBWTF.
2. In compliance with the Hon'ble Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs. GoI and others) anti-smog guns shall be installed to reduce dust during excavation.
3. Proponent shall comply with the action plan for CSR submitted by PP at the time of EIA presentation. Compliance report of investment under CSR to be submitted regularly to the Directorate, UPPCB and District Administration.
4. The project proponent should develop green belt in the premises of CBWTF unit as per the plan submitted. PP shall also follow the guidelines of CPCB/UPPCB for green belt as per the norms.
5. Proposed CBWTF shall comply with the guidelines for Bio-medical Waste Treatment and Disposal, transportation & storage facilities etc. issued by CPCB from time to time.

Standard Environmental Clearance Conditions prescribed by MoEF&CC:

I. Statutory compliance:

1. The project proponent shall obtain forest clearance under the provisions of the Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
2. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
3. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and be approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
4. The project proponent shall obtain Consent to establish/Operate under the provisions of the Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
5. Transportation and handling of Bio-medical Wastes shall be as per the Biomedical Wastes (Management and Handling) Rules, 20016 including section 129 to137 of Central Motor Vehicle Rules1989.
6. The project shall fulfill all the provisions of hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration — 2005, issued by CPCB Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
7. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
8. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

1. The project proponent shall install an emission monitoring system including Dioxin and furans in monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online serves and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
3. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3% or their loss on ignition is less than 5% of the dry weight of the material.
4. Venture scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50 mg/Nm3.
5. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply with prescribed standards. All necessary air pollution control devices (quenching, Venturi scrubber, mist eliminator) should be provided for compliance with emission standards.
6. Masking agents should be used for odour control.

III. Water quality monitoring and preservation:

1. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognized under Environment (Protection) Act, 1986 or NAB L accredited laboratories.
2. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
3. Process effluent/any waste water should not be allowed to mix with storm water.
4. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from the competent authority shall be obtained for use of fresh water.
5. A sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
6. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
7. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
8. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
9. Rain water runoff from the hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

1. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during daytime and 70 dB(A) during night-time.

V. Energy Conservation measures:

1. Provide solar power generation on roof tops of buildings, for the solar light system for all common areas, street lights, parking around the project area and maintain the same regularly;
2. Provide LED lights in their offices and residential areas

VI. Waste management:

1. Incinerated ash shall be disposed of at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
2. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
3. A certificate from the competent authority handling municipal solid wastes should be obtained,

indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from the project.

4. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016
5. No landfill site is allowed within the CBWTF site.
6. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCR/SPCB.

VII. Green Belt:

1. Green belt shall be developed in the area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public bearing and Human health issues:

1. Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
2. Proper parking facility should be provided for employees & transport used for collection & disposal of waste materials.
3. Necessary provision shall be made for fire-fighting facilities within the complex.
4. An emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
5. An emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or the environment from fires, explosions or any unplanned sudden or gradual release of hazardous waste or hazardous waste constituents to air, soil or surface water.
6. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
7. Occupational hearth surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.1I I dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. A copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with the responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority. The year-wise funds earmarked for environmental protection measures shall be kept in a separate account and not be diverted for any other purpose. Year rise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
5. A self-environmental audit shall be conducted annually. Every three years third-party environmental audit shall be carried out.

X. Miscellaneous:

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance with the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at the environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
6. The criteria pollutant levels namely; SPM, RSPM, SP, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
7. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
8. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during Public hearings and also that during their presentation to the Expert Appraisal Committee.
10. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
11. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
12. The Ministry may revoke or suspend the clearance if the implementation of any of the above conditions is not satisfactory.
13. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.
14. The Regional Office of this Ministry shall monitor compliance with the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
15. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
16. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for Chandauli In case of violation; it would not be effective and

would automatically be stand cancelled.

The project proponent has to ensure that the proposed site in not a part of any no-development zone as required/prescribed/identified under law. In case of the violation this permission shall automatically deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

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

Copy, through email, for information and necessary action to –

1. **Additional Chief Secretary, Department of Environment, Forest and Climate Change, Government of Uttar Pradesh, Lucknow (email – psforest2015@gmail.com)**
2. **Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, 3rd Floor, Prithvi-Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 (email – sudheer.ch@gov.in)**
3. **Deputy Director General of Forests (C), Integ rated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020 (email – rocz.lko-mef@nic.in)**
4. **District Magistrate, Chandauli.**
5. **Member Secretary, Uttar Pradesh Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (email – ms@uppcb.com)**
6. **Copy to Web Master for uploading on PARIVESH Portal.**
7. **Copy for Guard File.**

(Ajay Kumar Sharma)
Member Secretary, SEIAA

ANNEXURE NO. R/7

Uttar Pradesh Pollution Control Board
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

204130/UPPCB/Varanasi(UPPCBRO)/CTO/both/CHANDAULI/2024 **Date: 02/04/2024**

To,

M/s

V R B A BIO WASTE SOLUTIONS PVT LTD

E-46, PHASE-1 AND KHASRA NO- 148/5 SINDHITALI, PHASE-2, RAMNAGAR INDUSTRIAL AREA, CHANDAULI,CHANDAULI,221110

Application Id- 25066798

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule-6(2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 notified under Environment (Protection) Act, 1986 as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

CCA is hereby granted to **V R B A BIO WASTE SOLUTIONS PVT LTD** located at **E-46, PHASE-1 AND KHASRA NO- 148/5 SINDHITALI, PHASE-2, RAMNAGAR INDUSTRIAL AREA, CHANDAULI,CHANDAULI,221110**. subject to the provisions of **the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA V R B A BIO WASTE SOLUTIONS PVT LTD **granted for the period from 27/02/2024 to 31/12/2028** and valid for manufacturing of following products.

S No	Product	Quantity	Unit

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	01 KLD	Septic Tank	Industrial Drain
Industrial	07 KLD	ETP	Industrial Drain

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

Industrial Effluent Quality Standard

S.No.	Parameter	Standard
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	COD (mg/L)	As per E(P)A Rules, 1986
4	TSS (mg/L)	As per E(P)A Rules, 1986
5	Oil & Grease (mg/L)	As per E(P)A Rules, 1986

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality.In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	TSS (mg/L)	As per E(P)A Rules, 1986
4	Fecal Coliform (MPN/100ml)	As per E(P)A Rules, 1986

3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	Double Chambered Incinerators (300 Kg/Hr)	Diesel Oil	1	Particulate Matter	As per E(P)A Rules, 1986
2	62.5 KVA DG Set	Diesel Oil	2	Sulphur Dioxide	As per E(P)A Rules, 1986

Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	1	Particulate Matter	As per E(P)A Rules, 1986
2	2	Sulphur Dioxide	As per E(P)A Rules, 1986

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	**Industrial Area**		**Commercial Area**		**Residential Area**		**Silence Zone**	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

4. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 :-

The Factory Manager of M/s V R B A BIO WASTE SOLUTIONS PVT LTD. is hereby granted an authorization to operate a facility for collection and storage of Hazardous wastes. The authorization is granted to operate a facility for generation, collection and storage of hazardous wastes within factory premises for following category of wastes:-

S.No.	**Category of Hazardous Waste as per the Schedules I, II and III of these rules**	**Authorised mode of disposal or recycling or utilisation or co-processing, etc.**	**Quantity(ton/annum)**
1	**36.1 (Sludge from Wet Scrubbers)**	**Through TSDF**	**1.0 MTPA**
2	**Cat. 36.2 (Ash from Incinerator and Flue Gas Cleaning Residue)**	**Through TSDF**	**5.0 MTPA**

The authorization shall be in force and shall be valid upto 31/12/2028. The authorization is subject to the conditions stated below and such conditions as may be specified in the rules for the time being in force under Environment (Protection) Act, 1986.

Terms and conditions of Hazardous Waste authorization :-

(i) The authorization shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

(ii) The authorization and its renewal shall be produced for inspection at the request of an officer authorized by the SPCB.

(iii) The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the SPCB.

(iv) Any unauthorized changes in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.

(v) It is the duty of the authorized person to take prior permission of the SPCB to close down the facility.

(vi) An application for the renewal of an authorization shall be made as laid down under these rules.

(vii) The unit shall comply with any other conditions specified in the guidelines issued by the MoEF or CPCB/SPCB from time to time.

(viii) The authorization is valid for temporary storage of Hazardous Waste within premises only.

(ix) The authorized agency shall ensure that on-line data with regard to quantity and nature of hazardous chemicals being used in the plant as well as air emission and waste generated within premises is displayed on Display Board of size 6x4 feet outside the main factory gate within premises

(x) It is duty of the authorized person to take prior permission of this Board to close and cleanup the facility for treatment, storage and disposal of hazardous waste.

(xi) The applicant shall maintain record of hazardous waste in Form-3 and shall submit annual return in Form-4 on or before the 30th day of June following to the financial year to which that return relates.
(xii) In no case any hazardous waste shall be disposed off on land, in any drain, or into any water stream. All spillage must also be safely collected and stored.
(xiii) Before the hazardous waste is stored or dumped in the facility, applicant must conduct a detailed physical and chemical analysis of hazardous waste sample and report to the Board.
(xiv) Dried hazardous sludge from the process in the plant shall be stored in double lined HDPE pit constructed with R.C.C. or such material which does not react with the waste contained in it.
(xv) The storage area should be fenced properly and Sign/Notice Board indicating 'Danger' and 'Hazardous' shall be displayed at appropriate position both in Hindi and English.
(xvi) The industry shall store non-ferrous metal waste, used oil/spent oil waste in sealed drums placed on impervious floor under covered shed. Hazardous waste if required shall be sold only to Registered Recyclers/Re-processors.
(xvii) In case of any transportation of hazardous waste, the details in Form-10 of the Hazardous and Other Wastes Rules, 2016 shall be submitted to the Board.

5. Essential documents to be submitted by the Industry/Unit as Applicable:-

(i) Annual return in Form-4 and Waste Disposal Manifest in Form-10 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and Third Party Audit Report.
(ii) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
(iii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

6. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
7. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.
8. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.
9. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.

5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

Specific Conditions:-

1. This consent is valid for CBWTF at E-46, Phase-1 (Area-1771 Sqmt) and Development of Office, Parking for Vehicles at Khasra No- 148/5 Sindhitali, Phase-2 (Area-250.8241 Sqmt), Ramnagar Industrial Area, Block-Chakiya, District- Chandauli, Uttar Pradesh, Pin No.- 221110 by M/s VRBA Bio Waste Solution Private Limited having Double Chambered Incinerators of capacity 300 Kg/Hr, Autoclave 1000 Liter/Batch, Shredder 150 Kg/Hr and Chemical Disinfection Tank 1500 Liter.

2. The CBWTF shall submit the flue gas monitoring report from incinerator and treated effluent quality report from the ETP after commissioning of CBWTF within 01 month from the issuance of this CTO.

3. The all conditions mentioned in the environmental clearance issued by SEIAA vide EC Identification No.- EC23B057UP110406 dated 22.11.2023 shall prevail on this CCA.

4. Separate Energy meter shall be installed for recording the electricity consumption in the operation of the ETP and a log book is maintained.

5. ETP shall be operated and maintained to ensure that the treated effluent shall meet the prescribed standards.

6. Proper and regular operation of GPS equipments, installed in all the vehicles plying to collect and transport Bio Medical Waste, shall be ensured.

7. The CBWTF shall submit the valid NOC from U.P. Ground Water Board for Abstraction of Ground Water within 03 months failing which this CTE would be deemed cancel.

8. CBWTF will strictly comply with the CPCB guidelines dated 21.12.2016 for setting up the Common Bio Medical Waste Treatment Facility.

9. CBWTF will comply with the emission Standard for treatment and disposal of Common Bio medical waste by incineration as per Schedule-II of BMW Rules 2016.

10. Transportation and handling of Bio-medical Wastes shall be as per the Biomedical Waste (Management and Handling) Rules, 2016.

11. Record w.r.t. operational parameter of autoclave such as temperature, pressure etc. as well as records for validation test conducted to check efficiency of autoclave shall be maintained.

12. The incinerator is operated in accordance with Bio-Medical Waste Management Rules, 2016 w.r.t. maintenance of temperature for primary and secondary chamber of incinerator.

13. The water generated from scrubbing system of incinerator shall be treated through ETP and treated water shall be recycled for scrubbing purpose and for irrigation in the premises. No effluent shall be discharged directly or indirectly outside the premises.

14. Discarded medicine will be disposed in incinerator as per BMW Rule, 2016 and sharp pit shall be provided for disposal of waste sharp as per CPCB Guidelines.

15. The CBWTF will comply with the Bio Medical Waste Management Rules 2016 and annual report shall be submitted.

16. The CBWTF will comply with the provisions of Hazardous and Other waste (Management and Trans boundary Movement) Rules, 2016.

17. The facility will ensure bar coding system to be adopted by member of healthcare facility in accordance with Bio Medical Waste Management Rules 2016.

18. The CBWTF will comply with the Guideline of CPCB and will only cater to beds which are in addition to 10,000 beds admissible to pre-existing CBWTFs located within 75 km radius.

19. CBWTF will comply with the relevant provisions of Environmental Laws.

20. Latest attested copy of Balance sheet/Audited C.A. Certificate indicating (Fixed Assets + Current Assets-Current Liabilities) for the financial year 2018-2019 should be submitted to verify the consent fee payable by the industry.

21. All Non-Chlorinated plastic Bags shall be used as per BIS standards and prevailing Plastic Waste Management Rules, 2016.

22. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.

23. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety

measures must be followed in handling of wastes and the staff must be properly trained.

24. It is brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Tran boundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.

25. The applicant must file returns on prescribed Form- 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.

26. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigate and remedial measures taken.

27. The authorized person/agency shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.

28. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.

29. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorization/Registration issued under the Rule – 7 of Hazardous and Other Wastes (Management and Tran boundary Movement) Rules, 2016.

30. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.

31. It is the mandatory duty of the authorized person/agency to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.

32. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.

33. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.

34. Used oil will be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.

35. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.

36. Details of raw material (which is Hazardous waste) and product along with quantity shall be sent within a month.

37. You shall become the member of any common TSDF for S.L.F. which has been authorized by UPPCB and send the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within one/three month of this letter.

38. The unit shall ensure that H.W. is regularly sent to Authorized common TSDF and shall not store for more than 90 days in accordance with under rule 8 of HOWM Rules, 2016.

39. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to UPPCB for each category of waste sent to TSDF/Incinerator.

40. This authorization/Registration is valid till the industry is having valid consent as per the provisions of Air(Prevention and Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act, 1974.

41. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.

42. The industry shall submit the colored photo graph of display board within 15 days.

43. Closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be from the date of issuance of closure order revocation, with additional conditions mentioned in the closure revocation order.

44. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this CCA and attract action under the provisions of Environment (Protection) Act, 1986.

GHAN SHYAM Digitally signed by GHAN SHYAM Date: 2024.04.05 11:57:45 +05'30'

Chief Environmental Officer, Circle-6

Copy to:

Regional Officer, U.P. Pollution Control Board, Varanasi for information and necessary action

GHAN SHYAM Digitally signed by GHAN SHYAM Date: 2024.04.05 11:57:59 +05'30'

Chief Environmental Officer, Circle-6

मिशन LiFE - पर्यावरण के लिए जीवन शैली

(Lifestyle For Environment)

जनसहभागिता का सन्देश

- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

UTTAR PRADESH POLLUTION CONTROL BOARD

TC-12V, Vibhuti Khand,Gomti Nagar, Lucknow-226010

Phone:0522-2720828, 2720831 Fax:0522-2720764

Email: info@uppcb.com Website: www.uppcb.com

FORM III
(See Rule 10)
AUTHORISATION

(AUTHORISATION FOR OPERATING A FACILITY FOR COLLECTION, RECEPTION, TREATMENT, STORAGE, TRANSPORT AND DISPOSAL OF BIOMEDICAL WASTES)

1. File no. of authorisation and date of issue: No:- 25090105 and Date:-02/04/2024

2. M/s V R B A BIO WASTE SOLUTIONS PVT LTD, RATAN DEO SINGH an occupier or operator of the facility located at E-46, PHASE-1 AND KHASRA NO- 148/5 SINDHITALI, PHASE-2, RAMNAGAR INDUSTRIAL AREA, CHANDAULI,CHANDAULI,221110 is hereby granted an authorisation for:

Generation, segregation		**Collection**	✓
Storage	✓	**Transportation**	✓
Reception	✓	**Use**	
Recycling	✓	**Offering for sale**	
Packaging		**Transfer**	✓
Treatment or Processing or Conversion		**Disposal or destruction**	✓
Any other form of handling			

3. M/s V R B A BIO WASTE SOLUTIONS PVT LTD is hereby authorized for handling of biomedical waste as per the capacity given below:

(i) Number of beds of HCF:

(ii) Number of health care facilities covered by CBMWTF:

(iii) Installed treatment and disposal capacity: Double Chambered Incinerators of capacity 300 Kg/Hr, Autoclave 1000 Liter/Batch, Shredder 150 Kg/Hr and Chemical Disinfection Tank 1500 Liter

(iv) Area or distance covered by CBMWTF: 75 Km Radius

(v) Quantity of Biomedical waste handled, treated or disposed:

4. This authorisation shall be in force for a period of Five Years Years from the date of issue.

4.1 The authorization shall be valid for till 31/12/2028

5. This authorisation is subject to the conditions stated below and to such other conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986

GHAN SHYAM

Digitally signed by GHAN SHYAM
Date: 2024.04.12 11:16:42 +05'30'

Chief Environmental Officer, Circle-6

Terms and Conditions of Authorisation

1. The authorisation shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.

3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the prescribed authority.

4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. It is the duty of the authorised person to take prior permission of the prescribed authority to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.

6. The Unit will file the renewal application at least 2 months prior to the expiry of this Order

Specific Conditions:

1. This authorization is valid for M/s. M/s VRBA Bio Waste Solution Private Limited, at E-46, Phase-1 (Area-1771 Sqmt) and Development of Office, Parking for Vehicles at Khasra No- 148/5 Sindhitali, Phase-2 (Area-250.8241 Sqmt), Ramnagar Industrial Area, Block-Chakiya, District- Chandauli, Uttar Pradesh, Pin No.-221110 having Double Chambered Incinerators of capacity 300 Kg/Hr, Autoclave 1000 Liter/Batch, Shredder 150 Kg/Hr and Chemical Disinfection Tank 1500 Liter. In Case of any changes, enhancement etc., No Objection Certificate shall be obtained from the Board.

2. The Authorization shall comply with provisions of the Environment (Protection) Act 1986 and the rules made there under.

3. The Authorization or its renewal shall be produced for inspection at the request of an officer, Authorized by the prescribed authority.

4. The Authorized person shall not rent, lend, transfer or otherwise transport the bio-Medical waste without obtaining prior permission of the prescribed authority.

5. It is duty of the Authorized person to take prior permission of the Board to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.

6. Any unauthorized change in personnel, equipment or working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.

7. Bio- Medical waste shall not be mixed with other waste.

8. Bio- Medical waste shall be segregated into containers/ bags at the point of generation in accordance with schedule II. Prior to its storage, transportation, treatment and disposal. The Containers shall be labeled according to schedule III.

9. No untreated bio medical waste shall be kept stored beyond a period of 48 hours.

10. You shall submit an annual report to the U.P. Pollution Control Board in form IV by 30th June every year. And include information about the categories and quantities of Bio Medical waste during the preceding year.

11. You shall maintain record related to the generation, collection, reception storage, Transportation, treatment and disposal and/or any form of handling of Bio Medical Waste in accordance with rule and guidelines, all records shall be subject to inspection and verification by the Board at any time.

12. It is within the power and functions of U.P. Pollution Control Board to modify/ revoke the terms and conditions of Authorization and issued under the Rule 7 (8) of the Bio-Medical waste Management Rules, 2016.

13. You are herby directed to comply the stipulated above mentioned conditions and submit the compliance report and steps taken in this regard within a month so that capacity of the facility may be verified failing which the authorization may be revoked and necessary legal proceeding shall be initiated.

14. The Bio medical waste shall not be disposed in open place in the premises.

15. The CBWTF shall maintain logbook for the disposal of bio medical waste.

16. The CBWTF shall install bar code system within 15 days.

17. Discarded medicine shall be disposed in incinerator as per BMW Rule, 2016 and sharp pit shall be provided for disposal of waste sharp as per CPCB Guidelines.

18. The CBWTF shall comply with the Bio Medical Waste Management Rules 2016 and annual report shall be submitted.

19. The CBWTF shall comply with the provisions of Hazardous and Other waste (Management and Trans boundary Movement) Rules, 2016.

20. The facility shall ensure bar coding system to be adopted by member of healthcare facility in accordance with Bio Medical Waste Management Rules 2016.

21. The CBWTF shall obtain the State Ground Water Department permission for withdrawal of ground water and also comply with the CGWA guidelines for recharging of ground water.

22. The Facility shall develop and maintain green belt as per the guidelines issued by the Board vide office order dated 16/02/2018, which is available on Board's Website- www.uppcb.com.

23. Separate space for untreated Bio Medical Waste shall be maintained by facility as per CPCB guidelines/Bio Medical Waste Management Rules 2016.

24. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.

25. The CBWTF shall connect OCEMS to CPCB server before commissioning of the plant.

26. Onsite emergency plan approved by the competent authority shall be submitted to board.

27. The CBWTF shall comply with the Guideline of CPCB and shall only cater to beds which are in addition to 10,000 beds admissible to pre-existing CBWTFs located within 75 km radius. If any modification is required as per BMW rules, 2016 it will done and inform to the Board.

28. The CBWTF shall abide by orders / directions issued by Hon'ble Supreme Court Hon'ble High Court, Hon'ble National Green Tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.

29. The CBWTF shall produce a MoU with the nearest CBWTF as an alternate arrangement in case of closure/any emergency before CTO.

30. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this authorization and attract action under the provisions of Environment (Protection) Act, 1986.

GHAN SHYAM Digitally signed by GHAN SHYAM Date: 2024.04.12 11:17:05 +05'30'

Memo No.: 25090105 Dated:02/04/2024

Copy To:

Regional Officer, U.P. Pollution Control Board, Varanasi for information and necessary action.

GHAN SHYAM Digitally signed by GHAN SHYAM Date: 2024.04.12 11:16:56 +05'30'

Chief Environmental Officer, Circle-6

मिशन LiFE - पर्यावरण के लिए जीवन शैली

(Lifestyle For Environment)

जनसहभागिता का सन्देश

- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
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- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

Sr. No.	HCF Name	Membership No.	Contact Person	No of Bed	Address Line 1	PinCode	LookupTypeOfHCF_GovtID
1	CHANDAULI EYE CARE AND ENT CENTER	CHL-00483	ARUN KUMAR	10	ALOK VIDAYALAY,INDARA NAGAR, CHANDAULI 232103	232103	BH
2	AASHIRWAD POLYCLINIC	Bho-00482	DEVENDRA KUMAR	10	VISHESAR PUR,JAGANNATHPUR, GOPIGANJ,SANT RAVIDAS NAGAR 221303	221303	CL
3	RENOVA BONE AND JOINT CARE	VNS-00481	DR. ABHISHAK MISHRA	0	B38\9 OPPOSITE AKASHWANI,ANNUPURANA HOTAL,MAHMURGANJ VARANASI 221010	221010	CL
4	NEW GLOBAL DIAGNOSTIC CENTER	CHL-00480	MD.DILSHAD	0	WARD NO. 4,LALPUR ROAD CHAKIA ,CHANDAULI 232103	232103	PL
5	TARAKASHI MEMORIAL HOSPITAL AND TRAUMA CENTER	VNS-00479	S K VERM	30	BELA, PAHADIA ROAD VARANASI	221006	BH
6	SEVA SADAN CARE CENTER	CHL-00478	MUKESH KUMAR MAURYA	0	THANA ROAD SAMRATH BHAWAN, DHANAPUR CHANDAULI 232105	232105	CL
7	IMPULSE HOSPITAL	VNS-00477	SHIBBU SINGH	10	66,K RUDRA NAGAR COLONY,BHULLANPUR, BLW ROAD VARANASI 221108	221108	BH
8	UMEED HOSPITAL	MZP-00476	LAL MUHAMMD	5	MAHUAT BELAN BARAUDHA	231211	NH
9	NAVJIVAN HOSPITAL SURGICAL MEDICAL AND MATERNITY CENTER	MZP-00475	BRIJESH KUMR	100	KAILHAT CHUNAR MIRZAPUR	241005	BH
10	NEUBERG COLLECTION CENTER CHITAIPUR	VNS-00474	SHIV SHANKAR SINGH	0	CHUNAAR ROAD CHITAIPUR, VARANASI, 221202	221202	PL
11	NEUBERG COLLECTION CENTRE MAHMOORGANJ	VNS-00473	RITWIK SINGH	0	NEAR PADMINI HOTEL,MAHMOORGANJ SIGRA ROAD, VARANASI 221005	221005	PL
12	KALYANI KNEE & SHOULDER CLINIC	VNS-00472	TANAY	10	UMARHA MARKET GHAZIPUR ROAD VARANASI 221007	221007	BH
13	NEW LAXMI PATHOLOGY	CHL-00471	AMAN YADAV	0	DHANAPUR,CHANDAULI 232105	232105	PL
14	HINDUSTAN PATHOLOGY	CHL-00470	SADDAM KHAN	0	ALUMIL ROAD, CHAKIA TIRAHA, CHANDAULI 232101	232101	PL
15	NAVEEN CHARITABLE HOSPITAL	MZP-00469	AKHILESH KUMAR BHASKAR	5	RAJPUR KUSHA JIGNA	231313	NH
16	NEW AJANTA DIAGNOSTIC CENTRE	MZP-00468	NEERAJ KUMAR TRIPATHI	0	REHARA CHUNGI NAGAR PALIKA KARYALAY KE SAMNE	231307	PL
17	AJANTA PATHOLOGY	MZP-00467	SURAJ KUMAR TRIPATHI	0	GAIPURA CHAURAHA, INFRONT OF ARYAVART BANK	231302	PL
18	MATESHWARI HOSPITAL	MZP-00466	Shushil RAI	5	GURU SANDI MIRZAPUR 231001	231001	BH
19	NEW RAJAT X RAY PATHOLOGY CENTER	MZP-00465	DEELIP GUPTA	0	JILA HOSPITAL ROAD, NEAR AGRWAL STATIONARY MIRZAPUR 231001	231001	PL
20	FAGUIYA PATHOLGY CENTER	CHL-00464	SEEMA KUSHWAHA	0	FAGUIYA, CHANDAULI 232104	232104	PL
21	TEJAS LIFE CARE HOSPITAL	CHL-00463	BIRENDER KUMAR SINGH	20	MATHELA,CHAHINIYA, CHANDAULI 232109	232109	BH
22	DR. R.N. VISHWKRMA CLINIC	CHL-00462	DR. RN VISHWKRMA	0	WARD NO. 4,KABIR NAGAR, CHIKIYA,CHANDAULI 232103	232103	CL
23	GANGA SEWA SADAN HOSPITAL	VNS-00461	SUSHILA MAURYA	100	CHANDPUR CHAURAHA,VARANASI 221106	221106	BH
24	SHIV SHARDA MEMORIAL HOSPITAL U/C MEERA CHARITABLE TRUST	VNS-00460	SHAURAV PRATAP SINGH	49	SH15/101-DA2 MAUJA BHARLAI SHIVPUR VARANASI 221009	221009	BH
25	TRUE CARE HOSPITAL	CHL-00459	NEHA SINGH	25	HAMIDPUR,RAMNAGAR,CHANDAULI 221008	221008	BH
26	ORIANA HOSPITAL PVT.LTD.	VNS-00458	SUMIT	100	B27/35-9A,RAVINDRAPURI,VARANASI 221005	221005	BH
27	DEEKSHA PATHOLOGY CENTER	CHL-00457	RASHMI MANJHI	0	KUDH KALAN CHIKIYA ROAD,PDDU NAGAR,CHANDAULI 232101	232101	PL
28	SHRADDHA NETRALAYA	CHL-00456	DR SUJIT DESHMUKH	5	WARD NO 10, GAUTAM NAGAR, CHANDAULI 232104	232404	BH
29	VAISHNAVI HOSPITAL AND SURGICAL CENTER	VNS-00455	DR JASHWANT SINGH YADAV	10	AMARA CHAURAHA NEAR PETROL PUMP,AWALESHPUR, VARANASI 221106	221106	BH
30	MAA RAJWATI HOSPITAL	VNS-00454	DR POOJA SINGH	10	PLOT NO 546/2 GOKULPURAM ,KANDAWA VARANASI 221005	221005	BH
31	SHRI NARAYANA HOSPITAL	CHL-00453	VINOD KUMAR RAI	18	BADRIPURAM COLONY,LANKA RAMLILA MAIDAN, CHANDAULI 232109	232109	BH
32	HARI OM SHANTI CLINIC	VNS-00452	SANDEEP KUMAR	0	JHABARA JALALPUR, VARANASI	221006	CL
33	SHYAMA HOSPITAL	VNS-00451	DR SASHANK SAKHER SINGH	5	BASANI BAZAR, BABATPUR,VARANASI 221204	221004	BH
34	AMRIT MILAN HOSPITAL	VNS-00450	S.N.RAI	10	CHANDMARI, VARANASI 221005	221005	BH
35	RAMAYAN HOSPITAL	MZP-00449	SAVITA DEVI	5	NEAR AJORA GARDEN PANDEYPUR,DEEPNAGAR COLONY, MIRZAPUR 231001	231001	BH
36	SUSHIL PATHOLOGY	MZP-00447	SUSHIL YADAV	0	DEEPNAGAR, PATEHARA KALA, MIRZAPUR,231309	231303	PL
37	NEW MAYA PATHOLOGY	CHL-00446	MAHANDER SINGH	0	WARD NO 4 NAGAR PAYNCHAT, CHAKIYA, CHANDAULI 232103	232103	PL
38	SHREE SAI CLINIC	CHL-00445	RAJ KUMAR SINGH PAL	0	NEAR S.A.H.PUBLIC SCHOOL RATANPUR SEMARA DOMARI ROAD MUDHALSRAI CHANDAULI 221008	221007	CL
39	JAN SEWA DIAGNOSTIC CENTER	VNS-00444	VINOD PANDEY	0	ARAZI NO. 66,CHAHANIYA, CHANDAULI 232109	232109	PL
40	KRISHNA POLLY CLINIC	CHL-00443	AJIT PATEL	0	VYASHPUR, SAHUPURI, CHANDAULI 221001	221001	CL
41	S.S CLINIC	VNS-00442	SHAILESH SINGH	0	S2/635,SIKRAUL,CENTRAL JAIL ROAD ,VARANASI 221002	221002	CL
42	NEERKAMAL HOSPITAL	VNS-00441	DR NITESH SINGH	50	PLOT NO 747 AIDHE CHANDMARI VARANASI 221003	221003	BH
43	CHANDAULI HOSPITAL	CHL-00440	DR.B.K. VERMA	120	WARD NO 5,L.T. NAGAR CHANDAULI 232103	232103	BH
44	VINDHYAWASINI NURSING HOME HOSPITAL	MZP-00439	SHOLLO	10	CHILH CHAURAHA NEAR PETROL PUMP MIRZAPUR, 231001	231001	BH
45	ATHARAV DIAGNOSTIC CENTER	CHL-00438	VINOD KUMAR TRIPATHI	0	SAKALPUR, SAKALDIHA, CHANDAULI, UP - 232109	232109	PL
46	LETEST DAIGNOSTIC	MZP-00437	MOHIT MISHRA	0	RAMAI PATTI, PARMAPUR ROAD, MIRZAPUR, UP - 231001	231001	PL
47	K.G.N CLINIC	CHL-00436	MD NAYEM	0	KATHAURI, LAUDA, CHANDAULI, UP - 232104	232104	CL
48	LILAWATI HOSPITAL	CHL-00435	MAHADEV VISHWAKARAMA	10	JASURI ROAD, CHANDAULI, UP - 232103	232103	BH
49	ASHISH CLINIC	Bho-00434	HEMLATA MISHRA		DOCTORS COLONY PASCHIM MOHAL GOPIGANJ BHADOHI	221303	CL
50	MANAS DENTEL CLINIC & IMPLANT CENTER	VNS-00433	RAGHWENDER PRATAP SINGH		SHOP NO 2,1st FLOOR, VDA BUILDING,OPP. TULSI MANAS MANDIR 221005	221005	DH
51	B.K. PANDEY PATHOLOGY CENTER	CHL-00432	BECHAN PANDEY	0	WARD NO. 1, INDRA NAGAR,CHAKIYA,CHANDAULI232103	232103	PL
52	VERMA NEURO & SPINAL CENTER	VNS-00431	DR PS VERMA	0	VIRENDRAPURAM COLONY, BLW,HYDIL RODA, VARANASI 221004	221004	CL
53	MAMTA HEALTH CARE CLINIC	VNS-00430	JYOTI VERMA	0	SADHUKUTIA KALLIPUR VARANASI 221311	221311	CL
54	SWAMI HARSHANKARANAND JI HOSPITAL AND RESEARCH CENTER	VNS-00429	Anil yadav	60	N8/237 NEWADA, BHU, DLW ROAD, NEWADA, SUNDERPUR, VARANASI 221005	221005	BH
55	SUSHILA HOSPITAL	VNS-00428	SURENDRA PRASHAD	10	GOSWAMI NAGAR, KANCHANPUR, CHITAIPUR, VARANASI	221006	BH
56	BABA KINARAM CLINIC	CHL-00427	ANJU	0	CHAHANIA CHANDAULI	232104	CL
57	NOW TREAT CLINIC	VNS-00426	ANKESH KUMAR	0	SA-6/186, T3K, MAA SARADA NAGAR, PAHARIYA, VARANASI	221008	CL
58	STAR IMAGING AND DIGNOSTIC CENTER	CHL-00425	PRANAV SINGHAL		BP-418, KAILASHPURI, OPP-AGRAWAL PETROLPUMP, PDDU NAGAR, CHANDAULI-232101	232101	PL
59	PRAKASH SEVA SADAN	JNP-00424	DR. GYAN PRAKASH SINGH	20	GOPALAPUR ,JAUNPUR 222137	222137	BH
60	CARE FRACTURE HOSPITAL	CHL-00423	AKHILESHWAR YADAV	18	KRISHAN RADHIKA NAGAR COLONY ,GODHANA BY PASS, MUGHALSRAI,CHANDAULI 232101	232101	BH
61	SINGH X RAY AND ULTRASOUND CENTER	VNS-00422	OM PRAKASH SINGH	0	C27/111 SINGH SHAKTI,JAGATGANJ,VARANASI 221002	221002	CL
62	SHAKTI DIAGNOSTIC	VNS-00421	DR. SHIRISH SINGH	0	G.T. ROAD RAJATALAB VARANASI 221311	221311	CL
63	HERITAGE SPECIALITY LAB & DIALYSIS CLINIC	VNS-00420	LALAN SINGH	25	LANKA, VARANASI, 221005	221005	BH
64	SV PATHOLOGY	VNS-00419	VIKASH VISHWAKARMA	0	VISHNUNPUR (NEAR ST.JOHN'S SCHOOL) LOHTA,VARANASI 221107	221107	PL
65	SAI NATH HOSPITAL & LAPAROSCOPIC CENTER	VNS-00418	DR R.K PATAL	49	B34/154-K-R BATUAPURA SUNDERPUR VARANASI 221005	221005	BH
66	METIS THE MEDICITY HOSPITAL	CHL-00417	PRAVEEN KUMAR RAI	100	GODHANA MOD, NH-2, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
67	SHRADHA NURSING HOME	VNS-00416	RK VERMA	10	BASANI BADA GAON ROAD, VARANASI	221006	BH
68	SURAKSHA HOSPITAL	VNS-00415	NAVEEN DWEVEDI	19	GANESH NAGAR COLONY, GANESHPUR, SHIVPUR VARANASI	221006	BH
69	MAA DHANRAJI HOSPITAL	CHL-00414	CHANDRASHEKAR SINGH	10	FAGUIA CHANDAULI 232103	232103	BH
70	SHAIV DENTAL CLINIC	VNS-00413	MAYANK MISHRA		S2/627-C, SIKRAIL VARANASI 221006	221006	CL
71	MAHAMANA HOSPITAL AND TRAUMA CENTER	VNS-00412	VISHAL VERMA	25	ASHOKPURAM COLONY, DAFI, VARANASI 221011	221011	BH
72	SUDHA SURGICAL HOSPITAL PVT. LTD.	VNS-00411	DR. K.K. SINGH	120	S-2/1-9T & S-2/1-17K TAGORE TOWN COLONY, ORDERLY BAZAR, BHOJUBEER VARANASI 221002	221002	BH
73	R.M. HOSPITAL	CHL-00410	TARIQUE AHSAN KHAN	0	543 KAILASHPURI MUGHALSRAI CHANDAULI 232101	232103	CL
74	S.S. FRACTURE CLINIC	CHL-00409	AJIT KUMAR	0	KAMALPUR BAZAR CHANDAULI 232107	232107	CL
75	SUMAN CLINIC	CHL-00408	RAM SUMAN SINGH	0	HETIMPUR SIKARGANJ CHAKIYA CHANDAULI 232103	232103	CL
76	DR. BHATNAGAR CLINIC	VNS-00407	DR. VIKASH BHATNAGAR	0	S14/74 A1,ANDHRA PUL VARANASI 221002	221002	CL
77	DR. LAL PATH LABS	CHL-00406	SANTOSH SHARMA	0	CHAHNIYA (NEAR BDO OFFICE) CHANDAULI 232109	232109	PL
78	ARC PLUS SUPER SPECIALITY HOSPITAL (A UNIT OF CLIDOARC LLP)	VNS-00405	MANJARI MISHRA	100	CHITAIPUR, VARANASI, UP - 221005	221005	BH
79	A ASHIRWAD HOSPITAL AND SURGICAL CENTER	VNS-00404	RAJESH YADAV	10	KRISHNA NAGAR COLONY,(OPP. SURABHI HOTAL) PAHARIYA VARANASI 221007	221007	BH
80	PUSHPA HOSPITAL	VNS-00403	DR AK CHAUBEY	10	PLOT NO. 35,LOHIYA NAGAR PHASE-1 ASHAPUR SARNATH VARANASI 221007	221007	BH
81	DR. SHIVA MURTI DUBEY CLINIC	CHL-00402	DR. SHIVMURTI DUBEY	0	472,RAVI NAGAR MUGHALSRAI, CHANDAULI 232101	232101	CL
82	NEW AB CLINICAL PATHOLOGY	CHL-00401	VINAOD KUMAR	0	NAUGARH CHANDAULI 232111	232111	PL
83	AL MAHMOOD HOSPITAL	VNS-00400	NAVED ASHRAF	10	N15/117, D-3, SUDAMPURA, BAJARDIHA, VARANASI, UP - 221010	221010	BH

84	DR LAL PATH LABS F PSC	VNS-00399	JYOTI VAJPEE	0	SONARPURA, VARANASI, UP - 221001	221001	PL
85	DR LAL PATH LABS NICHIBAG PSC	VNS-00398	MR PRAKASH VAJPAYEE	0	SHOP NO 15, MUNICIPAL KATRA, NICHIBAG, CHOWK, VARANASI - 221001	221001	PL
86	HARSH HOSPITAL	VNS-00397	DR ANITA CHAUDHARY	0	B12/120 A8-2, BHELUPUR, VARANASI, UP - 221010	221010	CL
87	DR BEHERA 'S CLINIC	VNS-00396	DR SHAILAJASHANKAR BEHERA	0	N6/2 B-120,INDRA COLONY CHITAIPUR VARANASI, UP - 221005	221005	CL
88	KALAWATI NURSHING HOME	VNS-00395	SHIV SHANKAR VERMA	10	SAGUNAHA BABATPUR VARANASHI 221006	221006	NH
89	S. PATHOLOGY CENTER	VNS-00394	SANTOSH KUMAR	0	SA 15/139 AKC2 ASHAPUR HAVELIYA VARANASI 221007	221007	PL
90	S K KHUSHBOO HEALTH CARE CLINIC	VNS-00393	DR.JAISURYA PATEL	10	CHAUKHANDI RAMESHWAR ROAD VARANSI 221006	221006	BH
91	MUSHKAN CARE HOSPITAL	CHL-00392	BISMILLA ALI	10	BHAGWANPUR SAYADRAJA CHANDAULI 232110	232110	BH
92	RUDRA KASHI FRACTURE CLINIC	CHL-00391	DR. SANJAY SINGH	0	SONAULA BALUWA ROAD CHANDAULI 232114	232114	CL
93	OM CLINIC	VNS-00390	CHANDRAMANI TRIPATHI	0	H NO 21/18 A-2A, CHANDRA CHAURAHA, SARNATH, VARANASI, UP - 221010	221010	CL
94	ARYAN HOSPITAL	VNS-00389	CHANDRA SHEKHAR SINGH	10	PLOT NO 562, BHITTI, RAMNAGAR, VARANASI, UP - 221008	221008	BH
95	DIVYANSHI CLINIC	CHL-00388	KUSHUM VISHWAKARMA	0	VILL- JHANSI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
96	SHOURYA HEALTH CARE CENTER	VNS-00387	BHANU PRATAP SINGH	0	B37/67 D-5, SHANKARPURI COLONY, MAHMOORGANJ, VARANASI, UP - 221010	221010	CL
97	MANJU CLINIC	VNS-00386	DR ABHISHAK KUMAR		SHEMALPUR, KAAZISARAI,VARANASI 221105	221105	CL
98	ARCHANA X-RAY $ PATHOLOGY CENTER	CHL-00384	MANOJ KR RAI		KAMALPUR CHANDAULI 232106	212106	PL
99	MAHADEV MEMORIAL CLINIC	CHL-00383	DR.AJIT KUMAR		AMAR KATRA MUGHALSRAI CHANDAULI 232101	232101	CL
100	KRISHNA HOSPITAL	CHL-00382	REENA DEVI	10	ALOO MIL CHAURAHA MUGHALSRAI CHANDAULI 232101	232101	BH
101	SHAURYA HOSPITAL & CHILD CARE CENTER	CHL-00381	SUNITA DEVI	10	WARD NO 6 INDARA NAGAR G.T. ROAD CHANDAULI 232104	232104	BH
102	PURVANCHAL SUPER SPECIALITY HOSPITAL	VNS-00380	UMESH KUMAR	50	1529K DOCTOR'S COLONY AMARA KHAIRA CHOWK AKHARI BYPASS CHATAIPUR CHUNAR ROAD VARANASI 221002	221002	BH
103	AASHVI CLINIC	CHL-00379	PRABHAKAR SINGH		DHARAULI CHANDAULI 232104	232104	CL
104	P.N. POLY CLINIC	CHL-00378	DR. ANUPAMA UPADHIYA		JANSO KI MARAI ALINAGAR MUGHALSRAI CHANDAULI 232101	232101	CL
105	ANSH PATHOLOGY CENTER	VNS-00377	SHYAM SUNDER KESHARI		SUNDER VIHAR COLONY KERAKATPUR, CHANDPUR, VARANASI, 221005	221005	PL
106	DR. LAL PATH LAB	CHL-00376	RAJOO VISHWAKARMA		SARAIYA, SAIDPUR, CHAHANIYA, CHANDAULI, UP - 232103	232103	PL
107	SATYAM MATERNITY AND NURSING HOME PVT.LTD.	VNS-00375	DR SAROJ PANDAY	10	A-20 GANDHI NAGAR SIGARA ,VARANASI 221001	221001	BH
108	VINAYAK PATHOLOGY CENTER	CHL-00374	VIJAYANTI KUMARI		H.N.130 KIDAVAI NAGAR ,GANGA ROAD CHANDAULI 232104	232104	PL
109	SHRADDHA DENTEL CLINIC	VNS-00373	DR.SHRADDHA RAI		S26/19-1MIRA PUR BASHI SHIVPUR VARANASI 221003	221003	CL
110	ABHISHEK HOSPITAL	CHL-00372	DR. SANJAY KUMAR	190	WARD NO.5LOKMANYA TILAK NAGAR CHANDAULI 232104	232104	BH
111	AYUR MAX HOSPITAL	VNS-00371	ALKA VERMA	10	CHANDPUR, MANDUADIH, VARANASI,221005	221005	NH
112	NEUBERG SUPERTECH VARANASI HEALTHCARE PVT. LTD.	VNS-00370	VIKAS CHAURASIA		2ND FLOOR, B-30/6,6A,6B,6C&6D, ABOVE CENTRAL BANK OF INDIA, LANKA, VARANASI	221005	PL
113	ANANDI HEART AND MATERNITY CLINIC	VNS-00369	DR VIKAS AGRWAL		H. NO-B27/70,B-4A, LANE NO.11, RAVINDRAPURI, VARANASI-221002	221002	CL
114	SHRI RAM ARTI ENT & DENTAL CENTER	VNS-00368	DR NISCHAL GUPTA		B22/202A, KHOJAWA BAZAR, VARANASI, 221010	221010	CL
115	MAHAVIR CANCER CARE	VNS-00367	S K MISHRA		BHU, DLW ROAD, GANDHINAGAR, NARIA, VARANASI	221005	CL
116	MAA DURGA HOSPITAL	CHL-00366	VINOG KUMAR YADAV	20	SONHULA CHANIYA CHANDAULI 232109	232109	BH
117	ARPITA MEMORIAL HOSPITAL	VNS-00365	PRAMOD MISHRA	10	BADWAPUR MAHAVIR BAZAR AZAMGARAH ROAD VARANASI 221101	221101	BH
118	B.D MEMORIAL HOSPITAL	CHL-00364	SUNDER LAL	10	G.T. ROAD SAIYADRAJA CHANDAULI 232110	232110	BH
119	SINGH CLINIC	VNS-00363	Dr AK SINGH		HNO-K65/43/43-A-1, RAKSHA KATRA, KABIRCHAURA, VARANASI,UP 221001	221001	CL
120	ORTHOMAX HOSPITAL PVT LTD	VNS-00362	DR AMIT JAISWAL		BHAGWANDAS NAGAR COLONY SIGRA VARANASI 221010	221010	CL
121	DR GIRIJA SHANKAR MEMORIAL CLINIC	VNS-00361	DR. ATULYA RATAN		B 21/107 A-J-1-GD KAMACHHA VARANASI , 221010	221010	CL
122	HEALTHMAX HOSPITAL	VNS-00360	DR. SOMITRA AGRAWAL		J12/13, TIRAHA RAMKATORA, VARANASI, 221001	221001	CL
123	DR. PRASAD X-RAY & CLINIC	VNS-00359	DR. RAHUL PRASAD		B 8/108 , SONARPURA ROAD, SONARPURA BHELUPUR VARANASI, 221001	221001	CL
124	M/S DENSITY PATHOLOGY CLINIC	CHL-00358	VIKASH MISHRA		CHAKIYA CHANDAULI, 232109	232109	PL
125	SWAMI KRISHNA ASHRAM NURSINGH HOME	CHL-00357	TAPASYA NAND PATHAK	10	KAMTI KALA ELIA RAOD , CHAKIYA CHANDAULI ,232102	232102	NH
126	VIJAYANJALI HOSPITAL	VNS-00356	VIJAY KUMAR	10	S21/95 ENGLISHIA LINE, CANTT VARANASI, 222102	222102	BH
127	JEEVAK HOSPITAL AND RESEARCH CENTER	CHL-00355	SUNIL GAUTAM	100	KAMALPUR AKAUNI CHANDAULI ,232104	232104	BH
128	JEEVAK AYURVED MEDICAL COLLAGE & HOSPITAL RESEARCH CENTER	CHL-00354	SUNIL GAUTAM	60	KAMALAPUR AKAUNI , CHANDAULI,232104	232104	BH
129	DAYAL CLINIC	CHL-00353	MANISH DAYAL		G.T RAOD MUGHALSARAI CHANDAULI, 232101	232101	CL
130	SEKHAR HOSPITAL	CHL-00352	AJAY KUMAR SINGH	20	MAHEWA BY PASS RAOD, G.T RAOD CHANDAULI , 232104	232104	BH
131	RAJIV KHANNA CLINIC	VNS-00351	DR. RAJIV KHANNA		D58/52 MAHARAJ BAGH RATHYATRA COSSING VARANASI,221010	221010	CL
132	RAMA DEVI FARCTURE HOSPITAL	CHL-00350	REENA DEVI	40	CHAKIYA RAO GODHANA MOR , MUGHALSARAI CHANDAULI ,232101	232101	BH
133	R.D.F PATHOLOGY CENTER	CHL-00349	REENA		CHAKIYA ROAD GODHANA MOR MUGHALSARAI CHANDAULI,232101	232101	PL
134	KARUNA EYE CARE CENTER	CHL-00348	MRS. KARUNA		GODHANA MOR G.T ROAD NEAR CHAKIYA MOR CHANDAULI	232101	CL
135	ZEN KASHI CANCER HOSPITAL (ZENHEAL WELLNESS PVT. LTD)	VNS-00347	DIMPLE	20	AMARA AKHIRI CHAURAHA, CHUNAR BYPASS ROAD AWALESHPUR,VARANASI, 221106	221106	BH
136	YANSH PRAJAPATI DENTAL AND CHASHMA GHAR	CHL-00346	ABHAY KUMAR	0	NAI BASTI ALINAGAR MUGHALSARAI CHANDAULI UP-232101	232101	CL
137	SHRI RAM ARTI ENT CENTER	VNS-00345	NISCHAL GUPTA	0	S24/1-A-2K TAJPUR MAHAVEER MANDIR ORDERLY BAZAR, VARANASI, UP-221002	221002	CL
138	SATYA SAI NAYDU HOSPITAL	VNS-00344	MAMTA SINGH	35	NUWAON SABJI MANDI NH2 VARANASI, UP-221011	221011	BH
139	SAROJINI NAYDU HOSPITAL	VNS-00343	DR AJAY KUMAR SINGH	5	NAI BAZAR LOHATA VARANASI, UP-221107	221107	CL
140	JAI GURUDEV HOSPITAL AND SURGICAL CENTER	CHL-00342	MANMOHAN	10	GODHANA MORE,CHAKIA ROAD, MUGHALSARAI, CHANDAULI-232101	232101	BH
141	HIMANSHU HOSPITAL	CHL-00341	SHYAM PYARE PAL	10	BYPASS GODHANA MORE, MUGHALSARAI, CHANDAULI-232104	232104	BH
142	NETRADHAM CHANDAULI	CHL-00339	DR K NIRANJAN	25	SANJAY NAGAR G T ROAD, CHANDAULI, UP- 232104	232104	BH
143	MAA JAGDAMBA CLINIC	CHL-00338	RAM SINGH		DHANAPUR, CHANDAULI, UP - 232105	232105	CL
144	NEW SHIVANSH HOSPITAL	CHL-00337	RAMA SHANKAR GUPTA	20	DHINA ROAD, JAMURKHA JANAUYLI, KAMALPUR, CHANDAULI, UP - 232104	232104	BH
145	ATHENITY CARE MULTI SUPER SPECIALTY HOSPITAL	VNS-00336	DR ANURAG SINGH	25	AKHARI CHAURAHA NEAR BYPASS ROAD VARANASI UP-221106	221106	BH
146	MEDWIN HOSPITAL AND SURGICAL CENTER	CHL-00335	RANJANA YADAV	20	KARA VT DAMDIGT ROAD MUGHALSARAI CHANDAULI UP-232101	232101	BH
147	ANTYODAY CLINIC	VNS-00334	ALOK KUMAR SONKAR		MSS CAMPUS BARWANPUR GANGAPUR VARANASI UP-221001	221001	CL
148	KALINDI CLINIC	VNS-00333	DR NITESH SINGH		HOUSE 2/603 MACHHARRHATTA RAMNAGAR VARANASI UP-221008	221008	CL
149	ISHAAN SPECIALITY CLINIC	VNS-00332	RAJNI CHAURASIYA	0	NEAR DEVINE SAINIK SCHOOL , MANDUADIH VARANASI UP-221003	221003	CL
150	JANTA SEVA SADAN HOSPITAL	CHL-00331	AMARESHWAR DAS	10	MATHELA CHAHANIYA CHANDAULI UP-232109	232109	BH
151	MAA BHAWANI HOSPITAL	CHL-00329	SURESH KUMAR	15	GT ROAD DULAHIPUR MUGHALSARAI CHANDAULI UP-232101	232101	BH
152	ISHAAN SPECIALITY CLINIC	CHL-00328	DR RAJNI CHAURSIA	0	WARD NO 12 GT ROAD CHANDAULI UP-232101	232101	CL
153	KHUSHAHAL MEMORIAL HOSPITAL	VNS-00327	CHANDRASHEKHAR SINGH	20	ARAZI NO 695/12 KHUSHAHAL NAGAR SECTOR-A BARALALPUR CHANDMARI VARANASI UP-221107	221107	BH
154	PRABHA POLYCLINIC AND MATERNITY CENTRE	VNS-00326	MR S.K YADAV	5	68/92,MAYAPURI COLONY KERAKATPUR LOHTA, VARAMASI UP-221107	221107	BH
155	JAN SAHAYTA HOSPITAL	CHL-00325	BRENDRA KUMAR	20	DEVDIHIL SADALPURA CHANDAULI UP-232101	232101	BH
156	SINGH JANCH GHAR	CHL-00324	ALOG SINGH	0	KAILI ROAD CHANDAULI UP-232101	232101	BB
157	PRASAD MEDICAL AND SURGICAL CENTER	VNS-00323	DR RITESH KUMAR JAISWAL	25	PANDEYPUR AZAMGHRAH ROAD VARANASI UP-221002	221002	BH
158	AVI CLINIC	VNS-00322	DR GOPAL JI MISHRA		S12/31 PIYARIYA POKHARI TELIYABAG VARANASI UP-221002	221002	CL
159	L R B INDIA MULTISPECIALITY HOSPITAL	VNS-00321	ANJANA VERMA	20	VILL-BHITI BYPASS POST-RAMNAGAR VARANASI UP-221008	221008	BH
160	NANDAN HOSPITAL	VNS-00320	KAMLENDRA PRATAP SINGH	20	MI 167/1 GANESHAPURI COLONY SUSUWAHI VARANASI UP-221011	221011	BH
161	PEACE POINT HOSPITAL PVT LTD	VNS-00319	DR MAMTA SINGH	20	PLOT 72 JAWAHAR NAGAR EXT BHELUPUR VARANASI UP-221001	221001	BH
162	LAXMI CHARITABLE HOSPITAL	CHL-00318	HEM SUNDAR PANDEY	50	SONHUL CHAKIA CHANDAULI UP-232104	232104	BH
163	ANURAG HOSPITAL	VNS-00317	DR RAVINDRA KUAMR SINGH	20	AMAR AKHARI BYPASS CHUNAR ROAD ,VARANASI UP-221008	221008	BH
164	THE HEART CLINIC	VNS-00316	DR SUDHAKAR SINGH	0	N8/252A, NEWAD SUNDERPUR VARANASI UP-221005	221005	CL
165	STAR MULTISPECIALITY HOSPITAL	VNS-00315	DR AMIT KUMAR	20	N 6/2 B-120 INDRA COLONY CHITAIPUR VARANASI UP-221005	221005	BH
166	JAI CLINIC	VNS-00314	MR NITIN SRIVASTAVA	0	SHOP NO.35VDA COLONY CENTRAL JAIL ROAD,PURANICHUNGI SHIVPUR VARANASI UP-221003	221003	CL
167	SPARSH ORTHOPEDICS CARE	VNS-00313	MR SUBHODH PATHAK	0	TAGORE TOWN GATE NO.10 RDERLY BAZAR BHOJUBEER VARANASI UP-221002	221002	CL
168	DOLDAM MULTISPECIALITY HOSPITAL	VNS-00312	MAHENDRA SINGH KUSHWAHA	15	UPASANA NAGAR PHASE-1,AWALESHPUR ,CHUNAR ROAD VARANASI UP-221005	221005	BH
169	NANDINI MEDICARE	VNS-00311	MEENA KASHYAP	0	SIGRA VARANASI UP-221001	221001	CL
170	ASTHMA & CHEST CARE CENTER	VNS-00310	ANILA JOHARI	0	18 SHAKUMBHARI COMPLEX CHETMANI CROSSING DURGAKUND ROAD BHELUPUR VARANASI UP-221001	221001	CL

171	NEW SATYAM HOSPITAL MEDICAL AND SURGICAL CENTER	CHL-00309	RAM NIWAS	10	GODHANA MOR CHAKIYA ROAD CHANDAULI UP-232101	232101	BH
172	JAI PRAKASH PATHOLOGY XRAY AND COLLECTION CENTRE	CHL-00308	DILIP KUMAR JAISWAL	0	H NO 439 LOT NO 2 HANUMANPUR MUGHALSARAI CHANDAULI UP-232101	232101	PL
173	MAA MUNDESHWARI HOSPITAL	CHL-00307	DHARMENDRA KUMAR	10	WARD NO.4 GHATAMPUR CHAKIYA CHANDAULI UP-232101	232101	BH
174	OM SAI NATH HOSPITAL MEDICAL & FRACTURE	CHL-00306	ASHOK KUMAR	15	GODHANA MOR ALINAGAR CHANDAULI UP-232101	232101	BH
175	OM SAI BABA HOSPITAL AND SURGICAL CENTER	CHL-00305	ASHOK KUMAR	10	GODHNA MOR MUGHALSARAI CHANDAULI UP-232101	232101	BH
176	PARASHNATH TRIPATHI MEMORAL HOSPITAL	CHL-00304	SUBHASH TRIPATHI	10	SEMRA SHAHABGANJ CHANDAULI UP-232101	232101	BH
177	AVINYA SARGICARE CENTRE	CHL-00302	SATISH KUMAR	0	DULIAHIPUR CHANDAULI UP-232101	232101	CL
178	RAJ MULTISPECIALITY HOSPITAL	CHL-00301	DR RAVI GUPTA	20	417/1 RAJ TOWERS G T RAOD MUGHALSARAI CHANDAULI UP-232101	232101	BH
179	HITECH MANSAROVAR HOSPITAL	CHL-00300	PRAVIN KUMAR	20	ALINAGAR PDDU NAGAR CHANDAULI UP-232101	232101	BH
180	A.B HOSPITAL & SURGICAL CENTER	CHL-00299	DR NIGHAT BANO	10	DHANAPUR CHANDAULI UP- 232101	232101	BH
181	SAKYA PATHOLOGY	CHL-00298	SANTOSH KUMAR MAURYA	0	GAUTAM NAGAR GT ROAD ,CHANDAULI UP-232101	232101	PL
182	JANTA HOSPITAL AND MATERNITY CENTER	VNS-00297	DR MANOJ KUMAR PAL	20	AMAR AKHARI BY PASS CHUNAR ROAD VARANASI UP-221001	221001	BH
183	HARSH HOSPITAL	CHL-00296	SHRI ATMARAM PATHAK	20	MILKIPUR ALINAGAR CHANDAULI UP-232101	232101	BH
184	KHUSHAL MEMORIAL HOSPITAL	VNS-00295	CHANDRASEKHAR SINGH	28	DASEPUR HARHUA VARANASI UP-221105	221105	BH
185	GEETANJALI PATHOLOGY CENTER	CHL-00294	ALOK KUMAR		ALINAGAR MUGHALSARAI CHANDAULI UP-232101	232101	PL
186	SHRI SHALIGRAM HEALTH CARE	CHL-00293	DR ARUNKUMAR SINGH	10	NARINGHPUR G.T ROAD DISTRICT CHANDAULI UP-232101	232101	BH
187	NARAYANI SUPERSPECIALITY AND SURGICAL CENTER HOSPITAL	CHL-00292	HARISHIKESH KUMAR	10	REMA MOD MUGHALSARAI CHANDAULI UP-232101	232101	BH
188	NEW SARSWATI HOSPITAL	CHL-00291	RAM ASIHSH KUSHVAHA	10	WARD NO.8, SUBASH NAGAR KHOVA MANDI SAIDRAJA CHANDAULI UP-232101	232101	BH
189	NEW GEETANJALI PATHOLOGY CENTER	CHL-00289	ALOK KUMAR		SAIYADRAJA CHANDAULI UP-232101	232101	PL
190	NEW GEETANJALI PATHOLOGY CENTER	CHL-00288	ALOK KUMAR		BABURI CHANDAULI UP-232101	232101	PL
191	AYUSH PATHOLOGY CENTER	CHL-00287	VIVAK SINGH		CHCDHANAPUR CHANDAULI UP -232101	232101	PL
192	J.D HOSPITAL	CHL-00286	MOND JAVAD	16	ABDUL RAHIMPUR DULAHIPUR CHANDAULI UP-232101	232101	BH
193	SANJEEVANI HOSPITAL	CHL-00285	SONIL KUMAR	10	CHAHNIYA CHANDAULI UP-232101	232101	BH
194	A.K CLINIC & HOSPITAL	CHL-00284	G.P SINGH	10	SAHABGANJ CHANDAULI UP-232101	232101	BH
195	POOJA HOSPITAL	CHL-00283	OMPRAKASH KUSHWAHA	10	SONHULA ROAD CHANIYA CHANDAULI UP-232101	232101	BH
196	S.N PATHOLOGY CENTER	CHL-00282	SATYA NARAYAN YADAV		PATEL NAGAR MUGHALSARAI CHANDAULI UP-232101	232101	PL
197	K.B HOSPITAL	CHL-00279	KESHARI BEGUM	10	DULHIPUR MUGHALSARAI CHANDAULI UP-232101	232101	BH
198	K K HOSPITAL & SURGICAL CENTER	CHL-00278	VIJAY KUMAR MISHRA	9	REMA MOR BYPASS MUGHALSARAI CHANDAULI UP-232101	232101	BH
199	DIVYA PATHOLOGY DIAGNOSTIC	CHL-00277	MUKUND SINGH	0	SAKALDIHA MARKET CHANDAULI UP- 232109	232109	PL
200	VARANASI TRAUMA CARE HOSPITAL	VNS-00276	DR AK TIWARI	10	CHOLAPUR VARANASI UP-221101	221101	BH
201	SUSHRUTI NURSINGH HOME	CHL-00275	DR PRAMILA KUMARI	10	32/A MUGHALCHAK ALINAGAR MUGHALSARAI CHANDAULI UP-232101	232101	BH
202	ANAND NETRALAYA	CHL-00274	DR NISHANT SINHG	10	H.N-27 EASTRAN BAZAR RAM MANDIR MUGHALSARAI CHANDAULI UP-232101	232101	BH
203	SAVITRI NURSING HOME	CHL-00273	ASHARANI BINO	20	GODHANA MOD , MUGHALSARAI DIST CHANDAULI UP -23210	232101	BH
204	CHETNA PSYCHIATRY CENTER	VNS-00272	DR ARVIND KRISHNA GUPTA		D 54/16 D RAVINIKETAN AURANGABAAD VARANSAI UP-221010	221010	CL
205	KASHI NEURON MULTISPECIALITY HOSPITAL	VNS-00271	DR GAURAV SRIVASTAVA	20	TENGRA MODE RAMNAGAR VARANASI UP- 221008	221008	BH
206	GOVIND CLINIC	VNS-00270	DR MURLI RAMAN SRIVASTAVA		C.7/63, SENPURA , KABIR ROAD VARANASI UP -221001	221001	CL
207	SRI SHETALA HEALTH CARE AND SURGICAL CENTER	VNS-00269	UMESH KUMAR SINGH		JANSA BHADOHI ROAD VARANASI UP-221405	221405	CL
208	ORTHOCITY	VNS-00268	SHWETABH RAI	10	B 30/40 27-28 MADHAW MARKET LANKA VARANASI UP - 221005	221005	NH
209	DR K.K JAIN CLINIC	VNS-00267	DR K.K JAIN	0	CK 64/12 BHEIRAPURA KABIR ROAD VARANASI UP -221002	221002	CL
210	SHRISTI CLINIC	VNS-00266	SUMAN AGRAWAL	0	B-38/4-8, GANGAPURI COLONY MAHMOOGANJ VARANASI UP -221010	221010	CL
211	ROCKLAND NEURO AND MOTHER CHILD HEALTH CENTER	VNS-00265	SWETA RAI	10	D 64/47-9 MAA RAJESHWARI NAGAR MEHMOORGANJ BEHIND PADMINI HOTEL SIGRA VARANASI UP -221010	221010	BH
212	DR. B. B. RAI CLINIC	VNS-00263	DR JAYA RAI		D61/38E-10, SIDHGIRIBAGH, VARANASI, UP - 221001	221001	CL
213	ONE PLUS DIAGNOSTIC CENTER	CHL-00262	MANISH KUMAR		IN FRONT OF NIYAMTABAD, BLOCK NEAR POLICE STATION, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
214	S.S HOSPITAL AND SURGICAL CENTER	CHL-00261	RAJ	40	ALAMPUR, PACHPHERWA, NEAR OVERBRIDGE, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
215	HARSH HOSPITAL AND RESEARCH CENTER UNDER CARE SAHARA NYAS TRUST	CHL-00260	SANJAY KUMAR SINGH	10	SONHUL, CHAKIYA, CHANDAULI, UP - 232103	232103	BH
216	MAMTA PATHOLOGY CENTER	CHL-00259	SHAMBHU SHARAN SINGH		RAVI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
217	PATWARDHAN SKIN CLINIC	VNS-00258	DR MEDHA DONGRE M		B/32113 BM, NARIA, NEAR CHAUDHARI LAWN, BLW, VARANASI, UP - 221004	221004	CL
218	G R DIAGNOSTIC CENTER/SANTOSH MULTISPECIALITY HOSPITAL AND SUGICAL CENTER	CHL-00257	DR GOPAL DAS GUPTA		MADIYA NEW BASTI JALILPUR PARAW MUGHALSARAI CHANDAULI UP-232101	232101	PL
219	SANTOSH MULTISPECIALITY HOSPITAL AND SURGICAL CENTER	CHL-00256	DR GOPAL DAS GUPTA	45	MADIYA NEW BASTI JALILPUR PARAW MUGHALSARAI CHANDALI UP-232101	232101	BH
220	BANARAS HEART HOSPITAL	VNS-00255	DR PRASHANT SINGH	25	62,63 NAGARNIGAM ROAD CHANDRIKA NAGAR SIGRA VARANASI UP-221002	221002	BH
221	PRAGYA MOTHER AND CHILD CARE HOSPITAL	VNS-00254	DR MADHUKAR PANDEY	20	SAHITYA NAKA MORE RAM NAGAR VARANASI UP 221008	221008	BH
222	PRAGYA MOTHER AND CHILD CARE HOSPITAL	VNS-00253	DR MADHUKAR PANDEY	20	PLOT NO 9 RASHMI NAGAR LANKA VARANASI UP -221005	221005	BH
223	GLOBAL MEDICAL AND DIAGNOSTIC CENTRE	VNS-00252	DR JYOTSANAANAND		TRIMURTI TOWER GT ROAD MUGHALSARAI CHANDAULI UP- 232101	232101	CL
224	SINGH CLINIC	VNS-00251	BHANU PRATAP SINGH		D 64/1 -D-4 MADHOPUR SIGRA VARANASI UP- 221010	221010	CL
225	SHRESHTHA HOSPITAL	VNS-00250	SHIV KUMAR YADAV	10	DARSHAN NAGAR COLONY AWLESHPUR VARANASI UP-221005	221005	BH
226	RAYS MULTISPECIALITY HOSPITAL	CHL-00249	DR ANJULATA	20	NH-19 NAER ARYAN INTERNATIONAL SCHOOL GODHANA HIGHWAY MUGHALSARAI CHANDAULI UP - 232101	232101	BH
227	DAYAL HOSPITAL AND MATERNITY HOME	CHL-00248	MANISH DAYAL	10	HOUSE NO 32 LOT NO 01 MUGHALSARAI CHANDULI UP - 232101	232101	BH
228	YASODA MEMORIAL HOSPITAL	VNS-00247	DR KAMAL KUMAR	15	YASODA MEMORIAL HOSPITAL SAKALDIHA CHANDAULI UP-232109	232109	BH
229	GETWELL HOSPITAL	CHL-00246	MITHUN KUMAR SINGH	9	VILLHARISHANKARPUR CHANDHASI MUGHALSARAI CHANDAULI UP-232101	232101	BH
230	SUMAN HEALTH CARE AND DENTAL SPECIALITY CLINIC	CHL-00245	DR MANISH KUMAR PANDEY		ALINAGAR ROAD NEAR BANK OF BARODA TENDUI SAKALDIHA BAZAR CHANDAULI UP-232109	232109	CL
231	AVANTIKA HOSPITAL	CHL-00244	UDAY	18	ALINAGAR NAI BASTI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
232	SHRI SAI HEALTHCARE AND SURGICAL HOSPITAL	CHL-00243	DR MANOJ KUMAR RAI	10	ITWA SAKALDIHA, CHANDAULI, UP - 232108	232108	BH
233	SHUBHAM SADBHAWANA SUPER SPECIALITY HOSPITAL	VNS-00242	YOGESH RAI	25	B31/80-23 B, BHOGABEER, LANKA, VARANASI, UP - 221005	221005	BH
234	INNOVIA HOSPITAL PVT LTD	VNS-00241	VINOD ANAND	30	CALCUTTA SERVICE STATION, SHIVPUR TARNA, VARANASI, UP - 221003	221003	BH
235	ENT CLINIC	VNS-00240	DR MINAKSHI SINGH		SHRI NIVAS COMPLEX, N8/236-3-M-1, SUNDERPUR, VARANASI, UP - 221005	221005	CL
236	EYE CARE CLINIC	VNS-00239	PREETI AGRAWAL		SHOP NO 22, SAKUMBHARI COMPLEX, BHELUPUR, VARANASI, UP - 221001	221001	CL
237	SKIN CITY CLINIC	VNS-00238	VINOD KUMAR SINGH		S2/1A-22A, HARIDHAN KOTHI, TAGORE TOWN COLONY, BHOJUBIR, VARANASI, UP - 221002	221002	CL
238	ANAND CLINIC	VNS-00237	DR VIKAS ANAND		18-LGF, SHAKUMBARI COMPLEX, DURGAKUND ROAD, VARANASI, UP - 221005	221005	CL
239	RAMA DIAGNOSTIC CENTER	VNS-00236	ANWAR SIDDIQUI		SHRI RAM SHOPING COMPLEX, MALDAHIYA, VARANASI, UP - 221002	221002	PL
240	RAMA MEDICAL CARE CENTER PVT LTD	VNS-00235	SATENDRA PRATAP SINGH	27	BHAGWAN DAS NAGAR COLONY, SIGRA, VARANASI, UP - 221002	221002	BH
241	NAVALA CLINIC	VNS-00234	BANU PRATAP SINGH		OM NAGAR COLONY, LANE NO 1, BANIPUR POKHARA, PAHARIYA, VARANASI, UP - 221007	221007	CL
242	SINGH CLINIC	VNS-00233	BHANU PRATAP SINGH		D-64/1-D-4, MADHOPUR, SIGRA, VARANASI, UP - 221010	221010	CL
243	PRAMILA HOSPITAL	VNS-00232	DR DHANWANTRI SHUKLA	10	SA 15/59-D-A BALUA ROAD RENUNAGAR VARANASI UP 221007	221007	BH
244	PRAHYA NURSING HOME	VNS-00231	SMT KRISHNA KUMARI	10	KARSANA BACHCHHAW CHUNAR ROAD VARANASI UP-221011	221011	BH
245	KASIH HEALTH CARE CENTER	VNS-00230	SHIRIN ANSARI	20	DHAMARIYA PANI TANKI LOHTA VARANASI UP-221107	221107	BH
246	UDAY ARIPIT HOSPITAL	VNS-00229	REETA VERMA	10	JALALPUR JANSA VARANASI UP-221405	221405	BH
247	CHHAYA SUPERSPECIALTY HOSPITAL	VNS-00228	SAURABH SINH	49	DINDASPUR JANSA VARANASI,UP-221405	221405	BH
248	SHLOK HOSPITAL	VNS-00227	PERMATMA NANAD YADAV	25	AKHARI BYPSS,VARANASI,UP-221006	221006	BH
249	MANVED HOSPITAL	VNS-00226	DR RAKESH BAHADUR	20	DEV NAGAR, COLONY LATHIYA, VARANASI, UP - 221011	221011	BH
250	AARAMBH HOSPITAL	VNS-00225	SWETA SAREEN	8	D 61/36A, SIDHGIRIBAGH, SIGRA, VARANASI, UP - 221010	221010	BH
251	SANDHYA PATHOLOGY CENTER	CHL-00224	DR RAJESH KUMAR		BABURI, BUS STAND, NEAR HANUMAN MANDIR, CHANDAULI, UP - 232104	232104	PL
252	MA DURGA DENTAL CLINIC	CHL-00223	BASANT KUMAR PRAJAPATI		VILL KHANDWARI, POST CHAHANIYA, CHANDAULI, UP - 232109	232109	CL
253	SHIVNATH HOSPITAL TRAUMA AND SURGICAL CENTER	CHL-00222	DR SWAMI NATH SINGH	10	GT ROAD, VARAULI, PANCHFEDWA, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232120	232120	BH
254	YASODA MEMORIAL HOSPITAL	CHL-00221	DR KAMAL KUMAR	15	SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
255	R.K. CHILD CARE CENTER	CHL-00220	SUDHIR YADAV	10	WARD NO 7, MUGHALSARAI, ALINAGAR, CHANDAULI, UP - 232101	232101	BH
256	JAMURTI HOSPITAL AND GROUP OF INSTITUTION	CHL-00219	DR RAN VIJAI SINGH MAURYA	18	SAIDYADRAJA, CHANDAULI, UP - 232110	232110	BH
257	MANDHATA HOSPITAL	VNS-00218	DR MANDHATA SINGH	10	MEERAPUR BASAHI, VARANASI, UP - 221003	221003	BH

258	OM SHREE PATHOLOGY CENTRE	VNS-00217	PIYUSH SINGH		S2/117-2H, DITHORI MAHAL, BHOJUBIR, VARANASI, UP - 221002	221002	PL
259	SABIHAT PATHOLOGY CENTER	CHL-00216	GULAM ROOMI SULEMANI		SAKALDIHA, CHANDAULI, UP - 232109	232109	PL
260	MAA KAMLAWATI HOSPITAL	CHL-00215	NITIN KUMAR YADAV	9	KATESHAR, CHANDAULI, UP - 221008	221008	BH
261	SHRI DHANWANTRI CHIKITSALAYA AND SURGICAL CENTER	CHL-00214	DR SHIV KUMAR YADAV	10	ALINAGAR, PDDU NAGAR, CHANDAULI, UP - 232101	232101	BH
262	SAVITRI NURSING HOME	CHL-00213	ASHARANI BIND	20	GODHANA MOD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
263	CHANDRA DENTAL CLINIC	CHL-00212	SAURABH KUMAR		PDDU NAGAR, CHANDAULI, UP - 232101	232101	CL
264	SHREE BALAJI CLINIC	CHL-00211	DR VIKAS TIWARI		RAVINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
265	D MAX DENTAL CARE	CHL-00210	OWNER		DHARAMMSHALA ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
266	TEJU DENTAL CLINIC	CHL-00209	DR PRABHAT RANJAN		1342/A, CHAKIYA ROAD, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
267	NAAK KAAN GALA CLINIC	VNS-00208	DR ANIL KUMAR SRIVASTAVA		EAF 1/18 IMLAK 2 NADESAR, VARANASI, UP - 221002	221002	CL
268	NEW SUVIDHA ULTRASOUND & DIAGNOSTIC CENTER	CHL-00207	RAGHVENDRA PRATAP SINGH		GT ROAD, CHANDAULI, UP - 232104	232104	PL
269	SAI MEDICITY PRIVATE LIMITED	VNS-00206	VIVEKANAND RAI	50	B33/33-52, ROHIT NAGAR, VARANASI, UP - 221001	221001	BH
270	SHIVOY HOSPITAL AND TRAUMA CENTER	CHL-00205	DR SANJAY KUMAR TRIPATHI	10	GT ROAD, CHANDAULI, UP - 232104	232104	BH
271	METRO RISHIDEV HOSPITAL	VNS-00204	VARUN KUMAR PATHAK	20	AWLESHPUR, CHITAIPUR, AMRA BYPASS ROAD, VARANASI, UP - 221106	221106	BH
272	SAMVEDANA POLY CLINIC	CHL-00203	SANTOSH KUMAR		BALUA POLICE STATION, BALUA, CHANDAULI, UP - 232111	232111	CL
273	UMAPREM NETRALAY EYE HOSPITAL	VNS-00202	DR ARUN KUMAR GUPTA	10	N6/13-E-1-2, CHITAIPUR, VARANASI, UP - 221005	221005	BH
274	BABA AGHORESWAR CLINIC	CHL-00201	VED VAYAS PRAJPATI	0	TILAURI, CHAKIYA, CHANDAULI, UP - 232104	232104	CL
275	HIGHTECH DIAGNOSTIC CENTER	CHL-00200	MO FAIZAN		NAI BAZAR, DHENA ROAD, KAMALPUR, CHANDAULI, UP - 232110	232110	PL
276	THE NEUROCITY HOSPITAL (A UNIT OF MEDISON NEUROCITY PVT LTD)	VNS-00199	DR RAKESH SINGH	46	85A, ASHOK NAGAR, PANCHKOSHI ROAD, VARANASI, UP - 221001	221001	BH
277	SHRIPATI CLINIC	VNS-00198	DR PUPESH GUPTA	0	SA 6/170-PS, AKTHA, PAHARIYA, VARANASI, UP - 221001	221001	CL
278	MASIHA SURGICAL CENTER	VNS-00197	MADHU AGRAWAL		K-14/15, JATANBAR, VARANASI, UP- 221001	221001	CL
279	SARAF HOSPITAL	VNS-00196	AJAY AGRAWAL	15	B36/9 K2, KEWALYA DHAM COLONY, VARANASI , UP - 221005	221005	BH
280	SATYAM DIAGNOSTIC & DIGITAL X-RAY CENTER	CHL-00195	HARISHANKAR RAI		NAHAR BLOCK, DHANAPUR, CHANDAULI, UP - 232105	232105	PL
281	USHA DENTAL CLINIC AND IMPLANT CENTER	CHL-00194	DR NEHA JAISWAL		SHAHABGANJ, CHAKIYA, CHANDAULI, UP - 232118	232118	CL
282	MANAV KHIDMAT FOUNDATION	CHL-00193	NADEEF ASHARAF	10	MAHRUFPUR, CHAHNIYA, CHANDAULI, UP - 232109	232109	BH
283	SHOBHA HEALTH CARE CENTER	VNS-00192	DR BHUPENDRA DWIVEDI		PLOT NO 60, ASHOKA VIHAR, PHASE - 1, PAHARIYA, VARANASI, UP - 221007	221007	CL
284	RADIX HOSPITAL	VNS-00191	DR RICHA PANDEY	20	KAKKARMATTA BLW, VARANASI, UP - 221004	221004	BH
285	ANAND NURSINGH HOME	CHL-00190	DR NILIMA SINGH	10	HN 26, EASTRAN, BAZAR RAM MANDIR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
286	ANAND PATHOLOGY	CHL-00189	SACHCHIDANAND SINGH		HN 27, EASTERAN, BAZAR RAM MANDIR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
287	MAA SHARDA HOSPITAL	CHL-00188	VINEET KUMAR PANDEY	30	KHASRA NO 849, OPPOSITE KAMLAPATI TRIPATHI DIST HOSPITAL, NH 19, CHANDAULI, UP - 232104	232104	BH
288	AABHA DIAGNOSTIC	CHL-00187	AMIT KUMAR UPADHYAY		WARD NO - 4, KABIR NAGAR, CHAKIYA, CHANDAULI, UP - 232103	232103	PL
289	ABS MULTISPECIALITY HOSPITAL	CHL-00186	SANTOSH KUMAR GUPTA	20	NIYAMATABAD, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
290	PRAKASH PATHOLOGY AND X-RAY CENTER	CHL-00185	RAJKUMAR MAURYA		WARD NO 4, NAGAR PANCHAYAT, CHAKIYA, CHANDAULI, UP - 232103	232103	PL
291	SAI PATHOLOGY CENTER	CHL-00184	RAJESH KUMAR SRIVASTAVA		DHANAPUR, CHANDAULI, UP - 232105	232105	PL
292	OMEGA PLUS HOSPITAL	VNS-00183	DR NUTAN SINGH	30	N8/247-C NEWADA, SUNDERPUR, VARANASI, UP - 221005	221005	BH
293	BASANT MEDICITY	VNS-00182	GAYATRI KUMARI	20	NEAR KAMLA ASHIRVAD VATIKA, DAFI, VARANASI, UP - 221005	221005	BH
294	LETEST DIAGNOSTIC	VNS-00181	DR MOHIT MISHRA		INDRAPRASTH COLONY, AMRA BYPASS, KANDWA, VARANASI, UP - 221005	221005	PL
295	SHRUTI CLINIC	VNS-00180	DR GS SINGH	5	S8/455 D-1, KHAJURI, PANDEYPUR, VARANASI, UP - 221002	221002	BH
296	NEW CITY IN HOSPITAL	VNS-00179	BK RAI	10	AWLESHPUR, CHUNAR ROAD, AMRA, VARANASI, UP - 221004	221004	BH
297	USHA MEMORIAL HOSPITAL	VNS-00178	ABHISHEK RAI	10	BANIYAPUR, AZAMGARH ROAD, VARANASI, UP - 221002	221002	BH
298	AAKARSH PATHOLOGY CENTER	CHL-00177	MALKHAN SINGH		NAGAR PANCHAYAT KATRA, GT ROAD, CHANDAULI, UP - 232104	232104	PL
299	OM SAI PATHOLOGY CENTER	CHL-00176	ANIL SINGH MAURYA		BHATIJA ROAD, SAIYADRAJA, CHANDUALI, UP - 232104	232104	PL
300	SHRI PARAMHANS PATHOLOGY	CHL-00175	AMIT YADAV	0	GT ROAD, DIST HOSPITAL, CHANDUALI, UP - 232104	232104	PL
301	PATHKIND CC CHAKIYA	CHL-00174	ABU HASHIM		IN FRONT OFF GIC SCHOOL, NEAR SARKARI HOSPITAL, CHAKIYA, CHANDAULI, UP - 232102	232102	PL
302	SADHANA NURSING HOME	CHL-00173	SAURABH SINGH	5	MAHUR ROAD, BALUA, CHAHANIYA, CHANDAULI, UP - 232110	232110	BH
303	NEW OM SAI NATH HOSPITAL MEDIALAND SURGICAL CENTER	CHL-00172	ABHIJEET KUMAR	10	SONHUL, CHAKIYA, CHANDAULI, UP - 232102	232102	BH
304	APOLLO PATHOLOGY CENTER	CHL-00171	ABHISHEK KUMAR		KIDWAINAGAR, CHANDAULI, UP - 232104	232104	PL
305	SANT KABIR CLINIC	CHL-00170	VINOD KUMAR		CHAKIYA ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
306	K L PATHOLOGY	CHL-00169	SUNITA DEVI		SHALIMAR COMPLEX, MANITALI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
307	BINDU HOSPITAL	CHL-00168	VIJAY BAHADUR SINGH	10	TADIYA, BABURI, CHANDAULI, UP - 232102	232102	BH
308	AKASH MOTHER AND CHILD CENTER	CHL-00167	SHWETA KUMARI	6	HN. 561/A-4, MAHMOODPUR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
309	VEDANTA SUPERSPECIALITY HOSPITAL	CHL-00166	DR VED PRAKASH UPADHYAY	25	NEAR PT KAMLAPATI TRIPATHI DISTRIC HOSPITAL, GT ROAD, CHANDAULI, UP - 232104	232104	BH
310	SAMRAT HOSPITAL	CHL-00165	BEERBAL SINGH	10	TILAURI, CHAKIYA, CHANDAULI, UP - 232107	232107	BH
311	B.D. PATHOLOGY & DIGITAL X-RAY CENTER	CHL-00164	AJAY TIWARI	0	CHAKIYA ROAD, MUGHALSARAI, ALINAGAR, CHANDUALI, UP - 232101	232101	PL
312	ANURAG PATHOLOGY	CHL-00163	ANURAG SINGH		SAKALDIHA, CHANDAULI, UP - 232109	232109	PL
313	ADITRI CHILDREN AND DENTAL HOSPITAL	CHL-00162	DR NIDHI SINGH	100	NAI BASTI, GT ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
314	SANJEEVANI HOSPITAL	VNS-00161	ADARSH RAI	20	MAHADEV VATIKA, GADAWA ROAD, KAJISARAI, VARANASI, UP - 250234	250234	BH
315	DHANVANTARI HOSPITAL AND LAPROSCOPIC CENTER	VNS-00160	DR SATYAJEET MISHRA	10	SARAYSWAMI, SATOMAHUA, BABATPUR, AIRPORT ROAD, VARANASI, UP - 221008	221008	BH
316	RAMA CHILD CARE AND MULTISPECILITY HOSPITAL	VNS-00159	DR AVINASH RAI	30	GANGA VIHAR COLONY, SAMNEGHAT, LANKA, VARANASI, UP - 221005	221005	BH
317	SAIGAL DIAGNOSTIC	VNS-00158	GUTAM SAIGAL		FLAT NO 2 B-1, ANPURNA NAGAR COLONY, VIDYAPEETH ROAD, VARANASI, UP - 221002	221002	PL
318	SURBHI PATHOLOGY	VNS-00157	NAUSAD AHMED	0	ORDALI BAZAR, VARANASI, UP - 221002	221002	PL
319	SHOBHIT CLINIC AND CANCER CARE	VNS-00156	AK SINGH		S 25/221-4A-2, SARSAULI, BHOJUBEER, VARANASI, UP - 221002	221002	CL
320	VARANASI JANCH GHAR	VNS-00155	DR CP VERMA		BHOJUBEER, VARANASI, UP - 221002	221002	PL
321	SHAGUN PATHOLOGY	VNS-00154	NAVSHAD ALI		RAJESHWARI KATRA, BELWA BABA, VARANASI, UP - 221003	221003	PL
322	OPAL HOSPITAL PVT LTD	VNS-00153	POONAM RAI	75	N 10/60-2, KAKARMATTA, BLW ROAD, VARANASI, UP - 221004	221004	BH
323	THE SAMARTH HOSPITAL	VNS-00152	SUNIL YADAV	30	04 MAUJA, MUGADARPUR, GOLA, RING ROAD, SARNATH, VARANASI, UP - 221007	221007	BH
324	NEW SHREE SAI VARDAN HOSPITAL & RUDRA ANORECTAL CENTER	VNS-00151	DR SANJAY SINGH	30	S 4/50-A-1, MAHAVEER MANDIR ROAD, ORDERLY BAZAR, VARANASI, UP - 221002	221002	BH
325	JEEWAN DHARA HOSPITAL	VNS-00150	SANJAY SINGH	10	SANDAHA, CHIRAIGAO, BLOCK, VARANASI, UP - 221007	221007	BH
326	VEDANSHI HOSPITAL	VNS-00149	VIRENDRA KUMAR DUBEY	10	C 14, BHUVNESHWAR NAGAR COLONY, ORDERLY BAZAR, VARANASI, UP - 221002	221002	BH
327	THE HEALTH CITY	VNS-00148	VIJAY KUMAR SINGH	49	AIRPORT ROAD, SARAIKAJI, HARAHUA, VARANASI, UP - 221105	221105	BH
328	GURUDEV HOSPITAL	VNS-00147	SHIVKUMAR MAURYA	30	168 R 1, PAIGAMBERPUR, PANCHKROSHI CHAURAHA, VARANASI, UP - 221007	221007	BH
329	DIRGHAYU HOSPITAL & SURGICAL CENTER	VNS-00146	DR SHIV KUMAR JAISWAL	49	SA 15/3 MAVAIYA SARNATH, VARANASI, UP - 221007	221007	BH
330	RAJEEV DENTAL CLINIC	CHL-00145	RAJEEV PATHAK		MAIN ROAD, SAKALDIHA, CHANDAULI, UP - 232108	232108	CL
331	CITY HOSPITAL	CHL-00144	DR ABDUL KAYUM SINGH	10	VILL BHIKHARIPUR DIST CHANDAULI, UP - 232104	232104	BH
332	SHAKTI HOSPITAL AND FRACTURE CENTER	CHL-00143	MRITYUNJAY PRASAD	15	NEW MOHAL, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
333	SHIVAY HOSPITAL	CHL-00142	DR GAURAV KUMAR SINGH	10	TILAURI, CHAKIA, CHANDAULI, UP - 232103	232103	BH
334	CHARAK HOSPITAL	CHL-00141	RAVINDRA PRASAD	20	VILL GODHANA, POST PDDU NAGAR, CHANDAULI, UP - 232101	232101	BH
335	RIYA POLY CLINIC HOSPITAL & SURGICAL CENTER	CHL-00140	SATISH PRASAD	10	AMOGHPUR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
336	SWAMI VIVEKANAND JAN KALYAN HOSPITAL	CHL-00139	JITENDRA PRATAP YADAV	20	ALINAGAR, CHANDAULI, UP - 232101	232101	BH
337	HUMAN PATHOLOGY	CHL-00138	LAV KUSH YADAV		H NO. 109/1, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
338	SUSHMA PATHOLOGY	CHL-00137	MUKESH KUMAR		RAVINAGAR, PDDU, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
339	DR PRADEEP KUMAR GUPTA CLINIC	CHL-00136	DR PRADEEP GUPTA		695 B, KAILASHPURI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
340	SIMRAN HOSPITAL	CHL-00135	KARAMJEET SINGH	10	KALIASHPURI CHAURAHA, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
341	WOMENS CLINIC (MINI PARIVAR KALYAN KENDRA)	CHL-00134	SHIVJEET KAUR	0	GAUDIYA MATH, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
342	OM HOSPITAL	CHL-00133	VIKAS KUMAR	20	VIBHUTI NAGAR, CHAKIYA, CHANDAULI, UP - 232110	232110	BH
343	ASHUTOSH MULTISPECILITY HOSPITAL	CHL-00132	ASHOK SINGH	20	RAVI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
344	NEW AKANKSHA CHILD CARE CENTER	CHL-00131	RAM SHARMA	10	NEW DIST FEMALE HOSP, CHAKIYA, CHANDAULI, UP - 232110	232110	BH

345	R.N. MEMORIAL HOSPITAL	CHL-00130	VIJAY SHANKAR LAL	15	RESHMA DEVI PLAZA, TARAJEEVANPUR, CHANDAULI, UP - 232120	232120	BH
346	LIFE LINE HOSPITAL	CHL-00129	HAIDAR ALI	20	ILIYA, HATA, CHANDAULI, UP - 232118	232118	BH
347	SATYAM HOSPITAL	CHL-00128	DR VANDAN VIDHYARTHI	10	CANAL ROAD, NAGEPUR, SAKALDIHA BAZAR, CHANDAULI, UP - 232109	232109	BH
348	SHIVAM HOSPITAL	CHL-00127	DR PARMANAND TIWARI	20	SAKALDIHA BAZAR, CHANDAULI, UP - 232109	232109	BH
349	GATEWAY HOSPITAL	CHL-00126	MITHUN KUMAR SINGH	9	HARISHANKARPUR, CHANDHASI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
350	STANDARD PATHOLOGY	CHL-00125	RAJEEV KUMAR SINGH	0	KASHIPURI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
351	BALAJI DIAGNOSTIC CENTER	CHL-00124	VIJAY KUMAR	0	CHAHNIYA, CHANDAULI, UP - 232109	232109	PL
352	SAI HOSPITAL	CHL-00123	DHARMRAJ YADAV	15	CHAHANIYA, CHANDAULI, UP - 232109	232109	BH
353	SHREE ASHIRWAD CLINIC	CHL-00122	GHANSHYAM PRASAD GUPTA	0	SAIYADRAJA, CHANDAULI, UP - 232106	232106	CL
354	SHRI PARAMHANS PATHOLOGY	CHL-00121	MUKESH	0	GT ROAD, DIST HOSPITAL, CHANDAULI, UP - 232104	232104	PL
355	SAMAADHAAN CHIKITSALAY	CHL-00120	DR LAXMI SHANKAR	6	GT ROAD, MUGHALCHAK, ALINAGAR, CHANDAULI, UP - 232101	232101	BH
356	HIND HI-TECH DIAGNOSTIC CENTER	CHL-00119	ALOK KUMAR	0	NEAR JD HOSPITAL, PAHLI BAZAR, DULAHIPUR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
357	BHARAT DIAGNOSTIC CENTER	CHL-00118	VINOD KUMAR TRIPATHI	0	WARD NO 11, GAUTAM NAGAR, CHANDAULI, UP - 232104	232104	PL
358	DOCTOR GHAR (DOCONLINE CONSULTING PVT LTD)	CHL-00117	SHIV PRAKASH	0	INAYATPUR, CHANDAULI, UP - 232104	232104	CL
359	ANAND HOSPITAL AND SURGICAL CENTER	CHL-00116	DR LAXMI SANKAR YADAV	10	WARD NO 2, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
360	NAVJEEVAN HOSPITAL	CHL-00115	SANDEEP KUMAR	18	MAJHAGIAN, NAUGARH, CHANDAULI, UP - 232111	232111	BH
361	GAUTAM DIAGNOSTIC CENTER	CHL-00114	PRADEEP KUMAR SINGH		KHANDWARI, CHAHANIYA, CHANDAULI, UP - 232109	232109	PL
362	LIFE LINE PATHOLOGY	CHL-00113	HAYAT MD KHAN		VIKAS KATRA, CHANDAULI, UP - 232104	232104	PL
363	MANSHA HOSPITAL	CHL-00112	SANTHOSH KUMAR YADAV	18	DEVKALI RAOD, KAMALPUR, CHANDAULI, UP - 232106	232106	BH
364	SHIV SHAKTI HOSPITAL	CHL-00111	RAMESH PRASAD	10	ILIYA ROAD, CHANDAULI, UP - 232104	232104	BH
365	DEV HOSPITAL	CHL-00110	AJIT YADAV	20	BHATIJA ROAD, SAIYADRAJA, CHANDAULI, UP - 232106	232106	BH
366	NEW ADITYA MATERNITY AND NURSING HOME	CHL-00109	PANKAJ PANDEY	30	WARD NO 11, SANJAY NAGAR, NAGAR PANCHAYAT, CHANDAULI, UP - 232104	232104	BH
367	RC HOSPITAL	CHL-00108	DR RK SHARMA	10	DULAHIPUR, GT ROAD, MUGHALSARAI, CHADAULI, UP - 232101	232101	BH
368	ABHISHEK PATHOLOGY CENTER	CHL-00107	KAILASH		GODHNA MODH, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
369	RADHIKA DENTAL CLINIC	CHL-00106	DR ABHISEK SINGH		FUTIYA, CHANDAULI, UP - 232104	232104	CL
370	ADITYA PATHOLOGY CENTER	CHL-00105	KAMINI UPADHYAYA		SIRKUTIYA, BABURI, CHANDAULI, UP - 232102	232102	PL
371	SHASWAT PATHOLOGY	CHL-00104	VIRENDRA SINGH		CHAKIYA, CHANDAULI, UP - 232103	232103	PL
372	VIMALA HOSPITAL	CHL-00103	ANIL KUMAR SHARMA	15	VILL SARESAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
373	KASHI PATHOLOGY CENTER	CHL-00102	VINAY KUMAR JAISWAL		JAISWAL KATRA, GT ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
374	AGRAWAL SURGICAL HOSPITAL	CHL-00101	VINAY KUMAR JAISWAL	20	SUBASH NAGAR, MUGHALSARAI, CHANDAULI , UP - 232101	232101	BH
375	DR BC GUPTA MEMORIAL HOSPITAL	CHL-00100	VIJAY KUMAR GUPT	15	SAKALDIHA BAZAR, CHANDAULI, UP - 232109	232109	BH
376	SHAILDEVI MEMORIAL HOSPITAL	CHL-00099	DR BHUMIKA SINGH	10	SAKALDIHA ROAD, SARESAR, CHANDAULI, UP - 232101	232101	BH
377	TULYANSHU CARE HOSPITAL	CHL-00098	SANGEET	10	SAIDPUR ROAD, CHAHANIYA, CHANDAULI, UP - 232109	232109	BH
378	ASHIRVAD HOSPITAL	CHL-00097	SUJEET KUMAR YADAV	20	BAGHI, NAUGARH, CHANDAULI, UP - 232111	232111	BH
379	SAI SHAILJA NURSING HOME	CHL-00096	AKHILESH SINGH	15	FUTIYAN, CHANDAULI, UP - 232104	232104	BH
380	LATEEF CLINIC	CHL-00095	ABDUL KALIM	0	SEMRA, RAMNAGAR, CHANDAULI, UP - 232104	232104	CL
381	LATEEF HOSPITAL	CHL-00094	ABDUL KALIM	25	GT ROAD, JALILPUR, PADAV, CHANDAULI, UP - 221008	221008	BH
382	MUGHALSARAI HOSPITAL	CHL-00093	PRIYANKA JAISWAL	20	ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
383	SANDHYA HOSPITAL	CHL-00092	SUNIL KUMAR SHARMA	20	NAHAR BLOCK, DHANAPUR, CHANDAULI, UP - 232110	232110	BH
384	ABHISHEK CLINIC	CHL-00091	ABHISHEK SINGH		UTRAUT, CHAKIYA, CHANDAULI, UP - 232104	232104	CL
385	SG PATHOLOGY	CHL-00090	AMIT KUMAR SINGH		MUNSAF KATRA, GT ROAD, CHANDAULI, UP - 232104	232104	PL
386	SG DIAGNOSTIC CENTER	CHL-00089	SUSHMA MAURYA		KAMALPUR, CHANDAULI, UP - 232106	232106	PL
387	SAIYADRAJA HOSPITAL	CHL-00088	URMILA	15	WARD NO 2, SHASTRI NAGAR, SAIYADRAJA, CHANDAULI, UP - 232104	232104	BH
388	DR VIRENDRA PRATAP HOSPITAL U/C DRAVILOK HOSPITAL	CHL-00087	DR SUDHA SINGH	20	CHAKIYA, CHANDAULI, UP - 232103	232103	BH
389	M.R. CLINIC	CHL-00086	MOH AKBAR		SAKALDIHA BAZAR, CHANDAULI - 232109	232109	CL
390	JYOTSANA HOSPITAL	CHL-00085	JITENDRA MISHRA	5	KHANDWARI, CHAHANIYA, CHANDAULI, UP - 232109	232109	BH
391	AYUSHMAN HOSPITAL	CHL-00084	AYUSH KUMAR SINGH	10	WARD NO 11, GAUTAM NAGAR, GT ROAD, CHANDAULI, UP - 232104	232104	BH
392	HARIOM HOSPITAL AND DIAGNOSTIC CENTER	CHL-00083	VIVEK KUMAR SINGH	30	WARD NO 4, KAMLA NAGAR, GT ROAD, CHANDAULI, UP - 232104	232104	BH
393	SWADHA HOSPITAL	CHL-00082	DR PRAVIN CHANDRA	10	ALOO MILL CHAURAHA, WARD NO 3, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
394	NEW LIFE LINE HOSPITAL	CHL-00081	SURESH KUMAR YADAV	15	ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
395	HARIOM DIAGNOSTIC CENTER	CHL-00080	ALOK KUMAR DUBEY	0	WARD NO 4, DDU NAGAR, SAIYADRAJA, CHADAULI, UP - 232110	232110	PL
396	ASHIRWAD NURSING HOME	CHL-00079	DR JYOTSANA ANAND	15	ALINAGAR, MUGHALCHAK, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
397	HD HOSPITAL	CHL-00078	SHIVJANAM YADAV	10	SAREHUA KALA, TAJPUR, SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
398	AYUSH HEALTHCARE	CHL-00077	ANIL KUMAR SINGH	30	CHAKIYA ROAD, ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
399	KASHI HOSPITAL	CHL-00076	RK SINGH	10	13/A, SIDHHARTHPURAM COLONY, MUGHALSARAI, CHANDUALI, UP - 232101	232101	BH
400	RIYA CHILD CARE HOSPITAL	CHL-00075	RAMESH KUMAR SINGH	10	ALOO MILL, NAI BASTI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
401	MAA PATHOLOGY CENTER	CHL-00074	SK PATEL		ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
402	BALA JI CHILD CARE CENTER	CHL-00073	DR AJAY KUMAR	10	SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
403	KAMAL SHREE HOSPITAL	CHL-00072	RK SINGH	5	HN 497, RAVI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
404	NEW AMAN HOSPITAL	CHL-00071	ABIB AMAN	15	PACHAPHEDWA, CHANDAULI. UP - 232101	232101	BH
405	RR MEMORIAL HOSPITAL AND MEDICAL RESEARCH CENTER	CHL-00070	MANJU SINGH	25	KUDHKALA, CHAKIYA ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
406	BBM HOSPITAL	CHL-00069	MUSTQIM AHMAD	45	ALOO MILL, NAI BASTI, LANKA ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
407	SUPRIYA CLINIC	CHL-00068	NIRUPAMA TRIPATHI	10	SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
408	JYOTI NETRA CHIKITSHALAYA	CHL-00067	SANJAY KUMAR SHARMA	10	CHANAHANIYA, CHANDAULI, UP - 232109	232109	BH
409	DITYA HOSPITAL	CHL-00066	ARVIND KUMAR	15	GT ROAD, CHANDAULI, UP - 232104	232104	BH
410	VIDYA HOSPITAL	CHL-00065	GYANESH KUMAR PANDEY	15	MUGHALCHAK, ALINAGAR, CHANDAULI, UP -232101	232101	BH
411	ANSHIKA HOSPITAL	CHL-00064	ARVIND KUMAR SINGH	10	NAI BASTI, ALI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
412	SHUBHANGI DIAGNOSTIC PATHOLOGY	CHL-00063	CHANCHAL UPADHYAYA		SAKALDIHA BAZAR, CHANDAULI, UP - 232109	232109	PL
413	SAMAR CHILD CARE HOSPITAL	CHL-00062	IMRAN ALI	20	WARD NO 13, ALINAGAR, CHANDAULI, UP - 232101	232101	BH
414	SAM HOSPITAL	CHL-00061	SAIYAD GHAFAR	15	WARD NO 14, GANDHI NAGAR PANCHAYAT, CHANDAULI, UP - 232104	232104	BH
415	VATSALYA HOSPITAL	CHL-00060	ANIL KUMAR YADAV	10	GURERA NAHAR, CHANHANIYA, CHANDAULI, UP - 232110	232110	BH
416	PRAKRITI PATHOLOGY CENTER	CHL-00059	SHIVAM RAI	0	DISTRICT HOSPITAL, GT ROAD, CHANDAULI, UP - 232104	232104	PL
417	JANTA HOSPITAL AND SURGICAL CENTER	CHL-00058	RAM PRAWEASH RAI	10	SIROHUPUR, SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
418	KOMAL MATERNITIY AND NURSING HOME	CHL-00057	ANIL KUMAR PANDEY	10	LAL CHOWK, BABURI, CHANDAULI, UP - 232104	232104	BH
419	DR C SOM CLINIC	CHL-00056	CHINMOY SOM		SHOP NO 3A 4A, JAISWAL KATRA, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
420	DIVYA HOSPITAL	CHL-00055	SATISH KUMAR SHUKLA	10	TAJPUR, SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
421	REAL PATHOLOGY CENTER	CHL-00054	SALMAN KHAN		CHAKIYA, TRIMUHANI, CHANDAULI, UP - 232101	232101	PL
422	TRIDEV PATHOLOGY CENTER	CHL-00053	ANIL SINGH		CHAKIYA, TRIMUHANI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
423	SHAURYA HEALTHCARE CENTER	CHL-00052	SUNIL KUMAR SINGH		CHAKIYA, TRIMUHANI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
424	LALITA PATHOLOGY	CHL-00051	ABHISHEK KUMAR YADAV		ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
425	SARASWATI MEDICAL CENTER	CHL-00050	RENU AGRAWAL	0	NAI BASTI, GT ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	CL
426	SCIENTIFIC PATHOLOGICAL LABORATORY	CHL-00049	RAMESH CHANDRA		NEW MOHAL, NAI SATTI, PDDU NAGAR, CHANDAULI, UP - 232101	232101	PL
427	SHREE HOSPITAL	CHL-00048	DR KIRAN BARANWAL	10	724 A, KAILASHPURI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
428	AGRAWAL NURSING HOME	CHL-00047	DR DEEPIKA AGRAWAL	8	613 NAI BASTI, BECHUPUR, GT ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
429	RAM KRISHNA EYE HOSPITAL	CHL-00046	DR AMIT KUMAR GUPTA	10	GT ROAD, DUHALIPUR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
430	MANDINA HOSPITAL	CHL-00045	FAHMIDA BEGUM	10	DAMODARDAS POKHRA, GIDHAULI, CHANDAULI, UP - 232101	232101	BH
431	SANSKRITI MEDICARE CENTER	CHL-00044	DR MANISH CHAUDHARY	15	RAVI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH

432	SHUBHKAMNA MATERNITY AND NURSING HOME	CHL-00043	DR PRGYA SALIGRAM	10	BECHUPUR, NAI BASTI, GT ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
433	MURTI FRACTURE CLINIC	CHL-00042	MANJU SINGH	10	HN 620, KAILASHPURI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
434	DEVANSH HOSPITAL AND RESEARCH CENTER	CHL-00041	DR DEVENDRA PRATAP SINGH	10	304 A, BECHOOPUR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
435	MAYAVIND HOSPITAL	CHL-00040	DR SEEMA SRIVASTAV	10	334 A, KAILASHPURI, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
436	JJ NURSING HOME	CHL-00039	DR RAJEEV KUMAR	10	ALINAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
437	DP MEMORIAL AND CHARITABLE HOSPITAL	CHL-00038	ADITYA SINGH CHANDEL	20	GT ROAD, CHANDAULI, UP - 232104	232104	BH
438	NEW OM PATHOLOGY CENTER	CHL-00037	JITENDRA GUPTA	0	GODHANA MOD (Above Om Sai Baba Hospital) CHAKIYA ROAD, MUGHALSARAI, CHANDAULI, UP - 232101	232101	PL
439	NAMAN CHILD CARE CENTER	CHL-00036	PRABHU NATH DUBEY	10	SAKALPUR, GHARCHIT, SAKALDIHA, CHANDAULI, UP - 232109	232109	BH
440	BABA CLINIC AND NURSING HOME	CHL-00035	PARVEJ AHMAD	20	WARD NO 12, KAILI ROAD, CHANDAULI - 232104	232104	BH
441	KG NANDA HOSPITAL	CHL-00034	DR ANAND PRAKASH TIWARI	25	WARD NO 11, SANJAY NAGAR, GT ROAD, CHANDAULI, UP - 232104	232104	BH
442	DEVA HOSPITAL AND SURGICAL CENTER	CHL-00033	USHA TRIPATHI	15	ALI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
443	SHIVANSH PATHOLOGY CENTER	CHL-00032	PAWAN KUMAR		SAIYADRAJA, CHANDAULI, UP - 231110	231110	PL
444	JANMANAS CLINIC	CHL-00031	DR RAHUL SINGH		REMA MOD, CHAKIYA, CHANDAULI, UP - 232101	232101	CL
445	KAMNA CLINIC	CHL-00030	DR SUDHANSHU SINGH		WARD NO 2, GT ROAD, SAIYADRAJA, CHANDAULI, UP - 232110	232110	CL
446	SPARSH HOSPITAL	CHL-00029	SEEMA CHAUHAN	20	WARD NO 4, ALI NAGAR, MUGHALSARAI, CHANDAULI, UP - 232101	232101	BH
447	SHIVAM HOSPITAL	CHL-00028	RAJKUMAR SINGH	20	TARAJIVANPUR, SAKALDIHA, CHANDAULI, UP - 232120	232120	BH
448	MATRI SADAN CLINIC AND SURGICAL CENTER	CHL-00027	SANJAY KUMAR RAI	10	SAIDPUR ROAD, SAKALDIHA BAZAR, CHANDAULI, UP - 232109	232109	BH
449	SK PATHOLOGY CENTER	CHL-00026	GAUTAM KUMAR YADAV	0	GT ROAD, CHANDAULI, UP - 232104	232104	PL
450	PUSHA DEVI HOSPITAL AND JACCHA BACCHA KENDRA	CHL-00025	PRINCE KESHRI	15	GODHANA BYPASS, GT ROAD, CHANDAULI, UP - 232101	232101	BH
451	KOMAL HOSPITAL	CHL-00024	VINRENDRA KUMAR SINGH	20	KMALPUR, DEVKALI MOD, CHNDAULI, UP - 232106	232106	BH
452	OM SAI PATHOLOGY CENTER	CHL-00023	BRIJESH TRIPATHI		KAILI ROAD, KESHAVPUR, CHANDAULI, UP - 232104	232104	PL
453	SHRI MEGHA BABA HOSPITAL	CHL-00022	SUNIL KUMAR	10	PANDEYPUR, CHKIYA ROAD, CHANDAULI, UP - 232109	232109	BH
454	SAMADHAN HOSPITAL	CHL-00021	LAKSHMAN PRASAD	10	SAIDPUR RAOD, CHAHANIYA, CHANDAULI, UP - 232109	232109	BH
455	MAA VINDHYVASINI DIAGNOSTIC CENTER	CHL-00020	VIMLENDU PRAKSH DUBEY		DHARAULI BUS STAND, CHANDAULI - 232104	232104	PL
456	NEW ASTHA HOSPITAL	CHL-00019	INDRA PRAKASH DUBEY	15	FUTIYA, GT ROAD, CHANDAULI, UP - 232104	232104	BH
457	SUBHAMRAJ CHIKISHA KENDRA (HOSPITAL)	CHL-00018	DR RAGINI SRIVASTAV	25	GT ROAD, POWER POINT PETROL PUMP, CHANDUALI, UP - 232104	232104	BB
458	SHRI SWAMI PARAMHANS HOSPITAL	CHL-00017	AKANSHA SINGH	18	GT ROAD, BICHIYA KALA, CHANDAULI, UP - 232104	232104	BH
459	SURYA HOSPITAL AND TRAUMA CENTER	CHL-00016	GAUTAM TRIPATHI	30	SANJAY NAGAR, CHANDAULI, UP - 232104	232104	BH
460	PRATIKSHA HOSPITAL AND SURGICAL CENTER	CHL-00015	ASHWANI KUMAR	25	TILMILPUR, SKALDIHA, CHANDAULI, UP - 232109	232109	BH
461	ASHUTOSH POLY CLINIC	CHL-00014	SUNIL DUTT	10	NAHAR ROAD, DHANAPUR, CHANDAULI, UP - 232105	232105	BH
462	SATYAM HOSPITAL	CHL-00013	HAJARI SINGH YADAV	15	KAKARAHI LOHIA NAGAR, SAIYADRAJA, CHANDAULI, UP - 232110	232110	BH
463	SHRI DHANWANTARI HOSPITAL AND NURSING HOME	CHL-00012	DR CHANDRIKA PRASAD	15	WARD NO 12, GUTAM NAGAR, CHANDAULI, UP - 232104	232104	BH
464	YASHLOK HOSPITAL	CHL-00011	JITENDRA SINGH	10	GT ROAD, CHANDAULI, UP - 232104	232104	BH
465	ANAMIKA CHILD CARE AND HOSPITAL	CHL-00010	DR RISHI KUMAR YADAV	10	FUTIYA, CHANDAULI, UP - 232104	232104	BH
466	SADGURU CHIKTSHA SEWA SAMITI	CHL-00009	ARVIND KUMAR SINGH	10	BHATIJA ROAD, SAYADARAJA, CHANDAULI, UP - 232110	232110	BH
467	INDRAJEET SINGH MEMORIAL HOSPITAL	CHL-00008	AKHILESH SINGH	10	MUNSAF KATRA, GT ROAD, CHANDAULI, UP - 232104	232104	BH
468	RAJ HOSPITAL	CHL-00007	RAJESH YADAV	5	SAIDPUR ROAD, CHAHANIYA, CHANDAULI, UP - 232109	232109	BH
469	VIKALP HOSPITAL	CHL-00006	OM PRAKASH YADAV	8	NEAR POWER HOUSE, GT ROAD, CHANDAULI, UP - 232104	232104	BH
470	MAA SHARDA HOSPITAL	CHL-00005	YASHVANT KUMAR CHAUHAN	10	CHANDRAKHA NIYAMTABAD, CHANDAULI, UP -232101	232101	BH
471	KGN HOSPITAL	CHL-00004	MUHAMMAD IKRAMUDDIN HASMI	10	BYPASS CHAURAHA, REMA ALINAGAR, CHANDAULI, UP - 232101	232101	BH
472	SAMARTH MEDICAL AND DENTAL CLINIC	CHL-00003	KANTI DEVI		AZAD NAGAR SAIYADRAJA CHANDAULI, UP - 232101	232101	CL
473	BACHHO KA CLINIC AND HOSPITAL	CHL-00002	DR RAMA SANKAR SINGH	6	WARD NO 11 SANJAY NAGAR CHANDAULI, UP-232104	232104	BH

ANNEXURE NO. R/10

Genrated With BMW ERP (vrba.cbwtf.in)
|User : Admin | Timestamp : - 12/11/2024 21:43

Incineration Log Book Report

Date	Time of operation of the incineration		Quantity of hourly BMW charges in kg (Total	Temperature maintained in degree C			Remark	Remark	PH level of scrubbed Liquid used (Pl.indicate range i.e,min. to max)	Average values of flue gas analysis results (continous online) observad during the incineration/plasma pyrolysis process operation				Consumption of electricity/diesel whichever is applicable			Net Quantity of Bio-medical waste received in Kg	Net Quantity of Bio-medical waste left over in a day (in kg)
	Strat	End		Primary chamber	Secondary Chamber	Remark				CO in mg/Nm3	Remark	CO2 in %	% combustion Efficiencey	Power for Electric Incinerator		Diesel in liters(pl.indicate daily or weekly diesel consumption)		
														Initial reading	Final reading			
01-May-2024	10:50 AM	02:40 PM	740.00	855	1060				7.1	0.05		5.4	99			55.00	740.00	0.00
02-May-2024	10:35 AM	02:20 PM	741.00	856	1059				7.2	0.04		5.5	99			56.00	741.00	0.00
03-May-2024	10:38 AM	02:35 PM	750.00	856	1049				7.1	0.05		5.6	99			59.00	750.00	0.00
04-May-2024	10:23 AM	02:45 PM	773.10	855	1060				7.2	0.05		5.5	99			59.00	773.10	0.00
05-May-2024	10:30 AM	02:35 PM	753.40	850	1055				6.99	0.05		5.5	99			58.00	753.40	0.00
07-May-2024	10:22 AM	02:53 PM	778.30	860	1060				7.1	0.05		5.5	99			60.00	778.30	0.00
08-May-2024	10:34 AM	02:40 PM	759.40	855	1060				7.3	0.05		5.6	99			59.00	759.40	0.00
09-May-2024	10:23 AM	02:50 PM	771.15	850	1055				7.3	0.05		5.5	99			61.00	771.15	0.00
10-May-2024	10:33 AM	02:40 PM	767.35	853	1050				7.2	0.05		5.5	99			59.00	767.35	0.00
11-May-2024	10:25 AM	03:20 PM	874.30	860	1060				7.1	0.05		5.5	99			70.00	874.30	0.00
12-May-2024	10:25 AM	03:24 PM	875.60	850	1050				7.1	0.05		5.4	99			62.00	875.60	0.00
14-May-2024	11:05 AM	03:25 PM	915.70	860	1060				7.2	0.05		5.5	99			65.00	915.70	0.00
15-May-2024	10:55 AM	03:35 PM	1,004.80	860	1060				6.99	0.05		5.4	99			68.00	1,004.80	0.00
16-May-2024	10:45 AM	03:10 PM	889.30	855	1060				7.0	0.05		5.5	99			65.00	889.30	0.00
17-May-2024	10:30 AM	02:55 PM	972.00	850	1060				7.1	0.05		5.5	99			64.00	972.00	0.00
18-May-2024	10:26 AM	02:40 PM	908.00	860	1060				7.1	0.05		5.5	99			61.00	908.00	0.00
19-May-2024	10:30 AM	03:30 PM	983.00	855	1060				7.2	0.05		5.5	99			65.00	983.00	0.00
23-Jul-2024	10:30 AM	02:35 PM	1,046.10	855	1055				7.1	0.05		5.5	99			58.00	1,046.10	0.00
24-Jul-2024	10:35 AM	02:50 PM	1,097.70	860	1060				6.99	0.05		5.5	99			62.00	1,097.70	0.00

Date	Time of operation of the incineration		Quantity of hourly BMW charges in kg (Total	Temperature maintained in degree C			Remark	Remark	PH level of scrubbed Liquid used (Pl.indicate range i.e,min. to max)	Average values of flue gas analysis results (continous online) observad during the incineration/plasma pyrolysis process operation				Consumption of electricity/diesel whichever is applicable			Net Quantity of Bio-medical waste received in Kg	Net Quantity of Bio-medical waste left over in a day (in kg)
	Strat	End		Primary chamber	Secondary Chamber	Remark				CO in mg/Nm3	Remark	CO2 in %	% combustion Efficiencey	Power for Electric Incinerator		Diesel in liters(pl.indicate daily or weekly diesel consumption)		
														Initial reading	Final reading			
25-Jul-2024	10:32 AM	02:35 PM	1,064.40	850	1055				7.0	0.05		5.5	99			61.00	1,064.40	0.00
26-Jul-2024	10:40 AM	02:50 PM	1,113.30	850	1050				7.1	0.05		5.5	99			65.00	113.30	1,000.0(
27-Jul-2024	11:25 AM	04:45 PM	1,054.10	850	1055				7.1	0.05		5.5	99			65.00	1,054.10	0.00
28-Jul-2024	10:20 AM	03:20 PM	1,104.70	850	1060				7.2	0.05		5.5	99			65.00	1,104.70	0.00
30-Jul-2024	10:35 AM	05:05 PM	1,087.00	855	1060				7.2	0.05		5.5	99			75.00	1,087.00	0.00
31-Jul-2024	11:50 AM	05:00 PM	1,139.90	855	1055				7.0	0.05		5.5	99			65.00	1,139.90	0.00
01-Aug-2024	10:50 AM	05:15 PM	1,074.20	855	1060				7.0	0.05		5.5	99			70.00	1,074.20	0.00
02-Aug-2024	11:08 AM	05:18 PM	1,142.60	850	1050				7.3	0.05		5.5	99			65.00	1,142.60	0.00
03-Aug-2024	11:58 AM	02:56 PM	1,093.00	850	1050				7.0	0.05		5.5	99			55.00	1,093.00	0.00
04-Aug-2024	11:58 AM	05:30 PM	1,153.70	855	1055				7.2	0.05		5.5	99			65.00	1,153.70	0.00
06-Aug-2024	02:08 PM	06:40 PM	1,105.30	860	1060				7.0	0.05		5.5	99			52.00	1,105.30	0.00
07-Aug-2024	11:25 AM	05:25 PM	1,144.70	860	1060				7.3	0.05		5.5	99			70.00	1,144.70	0.00
08-Aug-2024	01:30 PM	05:45 PM	1,112.10	855	1060				7.0	0.05		5.3	99			68.00	1,112.10	0.00
09-Aug-2024	01:25 PM	04:35 PM	1,167.00	850	1050				7.1	0.05		5.5	99			65.00	1,167.00	0.00
10-Aug-2024	11:08 AM	03:01 PM	1,089.50	855	1060				7.2	0.05		5.5	99			60.00	1,089.50	0.00
11-Aug-2024	11:14 AM	03:51 PM	1,136.60	850	1060				7.3	0.05		5.5	99			62.00	1,136.60	0.00
13-Aug-2024	11:50 AM	03:27 PM	1,125.50	860	1060				7.1	0.05		5.5	99			63.00	1,125.50	0.00
14-Aug-2024	11:38 AM	05:02 PM	1,152.70	860	1060				7.0	0.05		5.5	99			65.00	1,152.70	0.00
03-Sep-2024	09:35 AM	01:15 PM	1,117.60	850	1050				7.1	0.05		5.5	99			55.00	1,117.60	0.00
04-Sep-2024	11:58 AM	04:10 PM	1,207.30	855	1055				7.0	0.05		5.5	99			57.00	1,207.30	0.00
05-Sep-2024	11:50 AM	04:18 PM	1,127.80	850	1050				6.99	0.05		5.5	99			58.00	1,127.80	0.00
06-Sep-2024	11:50 AM	03:10 PM	1,203.50	850	1050				7.1	0.05		5.4	99			55.00	1,203.50	0.00
07-Sep-2024	01:00 PM	04:55 PM	1,120.70	855	1060				7.1	0.05		5.5	99			60.00	1,120.70	0.00

Date	Time of operation of the incineration		Quantity of hourly BMW charges in kg (Total	Temperature maintained in degree C			Remark	Remark	PH level of scrubbed Liquid used (Pl.indicate range i.e,min. to max)	Average values of flue gas analysis results (continous online) observad during the incineration/plasma pyrolysis process operation				Consumption of electricity/diesel whichever is applicable			Net Quantity of Bio-medical waste received in Kg	Net Quantity of Bio-medical waste left over in a day (in kg)
	Strat	End		Primary chamber	Secondary Chamber	Remark				CO in mg/Nm3	Remark	CO2 in %	% combustion Efficiencey	Power for Electric Incinerator		Diesel in liters(pl.indicate daily or weekly diesel consumption)		
														Initial reading	Final reading			
08-Sep-2024	10:55 AM	03:45 PM	1,207.60	855	1060				7.2	0.05		5.4	99			65.00	1,207.60	0.00
10-Sep-2024	11:35 AM	03:46 PM	1,136.40	850	1050				7.3	0.05		5.5	99			58.00	1,136.40	0.00
11-Sep-2024	10:25 AM	03:14 PM	1,243.00	850	1060				7.3	0.05		5.5	99			57.00	1,243.00	0.00
12-Sep-2024	10:40 AM	03:21 PM	1,102.00	850	1055				7.0	0.06		5.5	99			55.00	1,102.00	0.00
13-Sep-2024	11:20 AM	03:50 PM	1,206.00	860	1060				7.1	0.05		5.6	99			65.00	1,206.00	0.00
14-Sep-2024	11:55 AM	03:50 PM	1,105.00	855	1060				7.0	0.05		5.5	99			60.00	1,105.00	0.00
15-Sep-2024	11:58 AM	03:55 PM	1,169.90	860	1060				6.99	0.05		5.5	99			65.00	1,169.90	0.00
17-Sep-2024	11:10 AM	02:40 PM	1,101.20	850	1050				7.3	0.05		5.5	99			55.00	1,101.20	0.00
18-Sep-2024	10:50 AM	05:08 PM	1,203.10	850	1050				7.1	0.05		5.5	99			62.00	1,203.10	0.00
19-Sep-2024	10:55 AM	03:40 PM	1,126.90	850	1055				7.1	0.05		5.5	99			55.00	1,126.90	0.00
20-Sep-2024	11:45 AM	03:31 PM	1,239.00	860	1060				7.2	0.05		5.5	99			60.00	1,239.00	0.00
21-Sep-2024	10:50 AM	03:15 PM	1,112.50	855	1060				7.0	0.05		5.5	99			60.00	1,112.50	0.00
22-Sep-2024	11:50 AM	04:31 PM	1,210.00	850	1050				7.3	0.05		5.5	99			58.00	1,210.00	0.00
24-Sep-2024	11:40 AM	04:00 PM	1,134.30	860	1060				7.0	0.05		5.5	99			60.00	1,134.30	0.00
25-Sep-2024	11:57 AM	04:00 PM	1,230.80	850	1050				7.2	0.05		5.5	99			54.00	1,230.80	0.00
26-Sep-2024	11:20 AM	03:23 PM	1,111.80	850	1050				7.2	0.05		5.5	99			53.00	1,111.80	0.00
27-Sep-2024	11:05 AM	03:50 PM	1,176.60	850	1050				7.0	0.05		5.5	99			60.00	1,176.60	0.00
28-Sep-2024	10:40 AM	03:14 PM	1,125.20	850	1050				7.1	0.05		5.5	99			57.00	1,125.20	0.00
29-Sep-2024	10:31 AM	03:25 PM	1,205.48	855	1060				6.9	0.05		5.5	99			72.00	1,205.48	0.00
16-Aug-2024	11:38 AM	05:02 PM	1,144.29	855	1060				6.98	0.05		5.4	99			65.00	1,144.29	0.01
17-Aug-2024	10:40 AM	04:05 PM	1,055.21	850	1050				7.1	0.05		5.5	99			63.00	1,055.21	0.00
18-Aug-2024	10:35 AM	03:55 PM	1,111.10	850	1050				7.1	0.05		5.5	99			68.00	1,111.10	0.00
20-Aug-2024	10:05 AM	04:50 PM	1,077.20	850	1050				7.2	0.05		5.5	99			63.00	1,077.20	0.00

Date	Time of operation of the incineration		Quantity of hourly BMW charges in kg (Total	Temperature maintained in degree C			Remark	Remark	PH level of scrubbed Liquid used (Pl.indicate range i.e,min. to max)	Average values of flue gas analysis results (continous online) observad during the incineration/plasma pyrolysis process operation				Consumption of electricity/diesel whichever is applicable			Net Quantity of Bio-medical waste received in Kg	Net Quantity of Bio-medical waste left over in a day (in kg)
	Strat	End		Primary chamber	Secondary Chamber	Remark				CO in mg/Nm3	Remark	CO2 in %	% combustion Efficiencey	Power for Electric Incinerator		Diesel in liters(pl.indicate daily or weekly diesel consumption)		
														Initial reading	Final reading			
21-Aug-2024	11:42 AM	04:30 PM	1,115.90	855	1055				7.1	0.05		5.5	99			60.00	1,115.90	0.00
22-Aug-2024	10:50 AM	04:10 PM	1,085.40	850	1050				6.9	0.05		5.5	99			61.00	1,085.40	0.00
23-Aug-2024	11:58 AM	04:41 PM	1,200.00	860	1060				7.1	0.05		5.5	99			66.00	1,200.00	0.00
24-Aug-2024	10:48 AM	03:54 PM	1,101.60	850	1050				6.9	0.05		5.5	99			63.00	1,101.60	0.00
25-Aug-2024	10:50 AM	03:50 PM	1,154.70	855	1055				7.1	0.05		5.5	99			63.00	1,154.70	0.00
27-Aug-2024	11:14 AM	03:40 PM	1,097.00	850	1050				6.9	0.05		5.5	99			59.00	1,097.00	0.00
28-Aug-2024	11:25 AM	05:25 PM	1,181.80	855	1055				7.1	0.05		5.5	99			63.00	1,181.80	0.00
29-Aug-2024	10:34 AM	03:10 PM	1,099.90	850	1050				6.9	0.05		5.5	99			61.00	1,099.90	0.00
30-Aug-2024	11:40 AM	04:40 PM	1,174.40	855	1055				7.1	0.05		5.5	99			63.00	1,174.40	0.00
31-Aug-2024	10:08 AM	02:50 PM	1,072.90	850	1050				6.9	0.05		5.5	99			59.00	1,072.90	0.00
01-Sep-2024	10:45 AM	03:25 PM	1,188.10	855	1055				7.1	0.05		5.5	99			59.00	1,188.10	0.00
01-Oct-2024	10:45 AM	03:39 PM	1,132.90	855	1055				6.9	0.05		5.5	99			62.00	1,132.90	0.00
02-Oct-2024	10:56 AM	03:52 PM	1,226.70	850	1050				7.1	0.05		5.5	99			61.00	1,226.70	0.00
03-Oct-2024	10:54 AM	02:27 PM	1,172.70	855	1055				6.8	0.05		5.5	99			45.00	1,172.70	0.00
04-Oct-2024	11:45 AM	04:10 PM	1,252.30	850	1050				7.1	0.05		5.5	99			60.00	1,252.30	0.00
05-Oct-2024	10:38 AM	03:55 PM	1,210.80	850	1050				7.1	0.05		5.5	99			65.00	1,210.80	0.00
06-Oct-2024	11:02 AM	04:18 PM	1,292.80	850	1050				7.1	0.05		5.5	99			75.00	1,292.80	0.00
08-Oct-2024	11:05 AM	04:18 PM	1,209.90	850	1060				6.9	0.05		5.5	99			72.00	1,209.90	0.00
09-Oct-2024	11:18 AM	04:37 PM	1,298.30	855	1060				7.1	0.05		5.5	99			71.00	1,298.30	0.00
10-Oct-2024	10:58 AM	04:44 PM	1,181.40	850	1060				7.1	0.05		5.5	99			78.00	1,181.40	0.00
11-Oct-2024	11:55 AM	04:57 PM	1,261.20	850	1060				7.1	0.05		5.5	99			75.00	1,261.20	0.00
12-Oct-2024	11:25 AM	04:27 PM	1,164.90	850	1060				7.2	0.05		5.5	99			75.00	1,164.90	0.00
13-Oct-2024	07:30 AM	01:35 PM	1,264.90	850	1060				6.8	0.05		5.4	99			76.00	1,264.90	0.00

Date	Time of operation of the incineration		Quantity of hourly BMW charges in kg (Total	Temperature maintained in degree C			Remark	Remark	PH level of scrubbed Liquid used (Pl.indicate range i.e,min. to max)	Average values of flue gas analysis results (continous online) observad during the incineration/plasma pyrolysis process operation				Consumption of electricity/diesel whichever is applicable			Net Quantity of Bio-medical waste received in Kg	Net Quantity of Bio-medical waste left over in a day (in kg)
	Strat	End		Primary chamber	Secondary Chamber	Remark				CO in mg/Nm3	Remark	CO2 in %	% combustion Efficiencey	Power for Electric Incinerator		Diesel in liters(pl.indicate daily or weekly diesel consumption)		
														Initial reading	Final reading			
15-Oct-2024	10:40 AM	03:45 PM	1,193.40	850	1060				6.9	0.04		5.3	99			65.00	1,193.40	0.00
16-Oct-2024	10:35 AM	04:25 PM	1,288.20	850	1060				6.8	0.04		5.4	99			71.00	1,288.20	0.00
17-Oct-2024	10:50 AM	04:10 PM	1,186.40	850	1060				7.1	0.06		5.5	99			78.00	1,186.40	0.00
18-Oct-2024	10:54 AM	04:17 PM	1,260.10	850	1060				6.8	0.05		5.4	99			77.00	1,260.10	0.00
19-Oct-2024	10:34 AM	03:50 PM	1,080.30	850	1060				6.8	0.04		5.3	99			69.00	1,080.30	0.00
20-Oct-2024	10:28 AM	03:47 PM	1,218.50	860	1060				7.1	0.05		5.5	99			71.00	1,218.50	0.00
22-Oct-2024	10:27 AM	03:35 PM	1,128.90	860	1060				6.9	0.04		4.8	99			75.00	1,128.90	0.00
23-Oct-2024	10:05 AM	03:10 PM	1,210.80	860	1060				7.1	0.06		5.6	99			76.00	1,210.80	0.00
24-Oct-2024	10:31 AM	02:18 PM	1,118.10	860	1060				6.8	0.06		5.6	99			71.00	1,118.10	0.00
25-Oct-2024	10:38 AM	03:32 PM	1,203.30	860	1060				7.1	0.05		5.3	99			75.00	1,203.30	0.00
26-Oct-2024	10:25 AM	03:13 PM	1,118.20	860	1060				7.1	0.05		5.2	99			68.00	1,118.20	0.00
27-Oct-2024	10:37 AM	02:44 PM	1,212.30	860	1060				7.1	0.05		5.6	99			67.00	1,212.30	0.00
29-Oct-2024	10:27 AM	03:02 PM	1,118.28	855	1060				6.8	0.06		5.7	99			68.00	1,118.28	0.00
30-Oct-2024	11:08 AM	03:20 PM	1,201.76	860	1060				7.1	0.06		5.4	99			68.00	1,201.76	0.00
31-Oct-2024	10:45 AM	02:25 PM	1,103.46	860	1060				6.9	0.05		5.1	99			61.00	1,103.46	0.00
01-Nov-2024	10:55 AM	03:31 PM	1,192.31	860	1060				7.1	0.06		5.6	99			65.00	1,192.31	0.00
03-Nov-2024	10:29 AM	03:02 PM	1,108.43	860	1060				6.8	0.05		5.1	99			66.00	1,108.43	0.00
05-Nov-2024	10:49 AM	04:01 PM	1,187.37	860	1060				7.1	0.05		5.2	99			72.00	1,187.37	0.00
06-Nov-2024	10:51 AM	03:32 PM	1,102.55	855	1055				6.9	0.06		5.1	99			68.00	1,102.55	0.00
07-Nov-2024	10:20 AM	02:57 PM	1,174.99	850	1050				7.1	0.05		5.2	99			67.00	1,174.99	0.00
08-Nov-2024	10:28 AM	03:16 PM	1,087.52	855	1060				6.8	0.06		5.3	99			68.00	1,087.52	0.00

ANNEXURE NO. R/11

SBI

भारतीय स्टेट बैंक
STATE BANK OF INDIA

CERTIFICATE OF SALE

(For Immovable Property)
[Rule – 9 (6) of the Security Interest (Enforcement) Rules, 2002]

Whereas,

The undersigned Shri Sushil Kumar Saroj S/o Shri Ram Jas aged 37 years being the Authorized Officer of the State Bank of India under Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 and in exercise of the powers conferred under section 13 read with rule 9 of the Security Interest (Enforcement) Rules, 2002 sold on behalf of the State Bank of India in favour of **M/s VRBA Bio Waste Solution Private Limited, N-1-66-R-25, Shiv Prasad Colony, Varanasi, Uttar Pradesh - 221005**, the immovable property shown in the schedule below secured in favor of State Bank of India by M/s Metal Alloy (Proprietor Shri Surendra Prasad Jaiswal), E-46, Industrial Area, Ramnagar, Phase – 1, Chandauli, Uttar Pradesh – 221110 towards the financial facility Cash Credit offered by State Bank of India. The undersigned acknowledges the receipt of Rs.2,16,46,000.00 (Rupees two croro sixteen lacs forty six thousand only), being the sale price in full as the highest bid amount in the auction and handed over the delivery and possession of the scheduled property. The sale of the scheduled property was made free from all encumbrances known to the secured creditor listed below on deposit of the money demanded by the undersigned.

Description of the immovable property

Land and building bearing survey no. E-46 situated at plot No. E-46 situated within the industrial area at Ramnagar in Village - Patnawa, Pargana - Ramnagar, District – Chandauli admeasuring area 1771 square meter, registered at Book no. 1,Volume no. 111,Pages 38, Book no. 1, Volume 110, Pages 176/213, Document no. 5 registered on 24.03.1987 in the office of Sub-Registrar,Ramnagar,Varanasi in the name of M/s Metal Alloy, proprietor Shri Surendra Prasad Jaiswal

Bounded:

North	Plot No. E-39
South	Road
East	Plot No. E-47
West	Plot No. E-45

Date: 04.08.2022
Place: Prayagraj (Allahabad)

(Authorized Officer)
State Bank of India

भारतीय स्टेट बैंक STATE BANK OF INDIA SBI SARB 10039 Allahabad

bank.sbi
0532-2216410
sbi10039@sbi.co.in

तनावग्रस्त आस्तियों वसूली शाखा, इलाहाबाद
4,कचेहरी रोड, 1st फ्लोर
SBI बिल्डिंग, प्रयागराज - 211002

Stressed Assets Recovery Branch, Allahabad
4, Kutchery Road, 1st Floor
SBI Building, Prayagraj - 211002

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, वाराणसी
UTTAR PRADESH POLLUTION CONTROL BOARD, VARANASI

संदर्भ सं0 / Ref.No. 1213 | जन सूचना | 23-24 दिनांक / Date 1-7-23

सेवा में,

श्री रतनदेव सिंह,
(डायरेक्टर, मेसर्स वी0आर0बी0ए0 बायो वेस्ट साल्यूशन प्रा0लि0)
लेन नं0– 3, एन.1 / 66–आर–25,
शिव प्रसाद गुप्त कालोनी, लंका,
जनपद–वाराणसी।

विषयः सूचना का अधिकार अधिनियम, 2005 की धारा–6 की उपधारा–3 के अन्तर्गत चाही गयी सूचना के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक अपने आर0टी0आई0 आवेदन पत्र दिनांक 01.07.2023 का संदर्भ ग्रहण करने का कष्ट करें। उक्त के सम्बन्ध में अवगत कराना है कि कार्यालय में उपलब्ध अभिलेखानुसार पर्यावरण अभियन्ता, डब्ल्यू0एम0डी0 के पत्र दिनांक 02.02.2023 (छायाप्रति संलग्न), जो जन सूचना अधिकारी (वृत्त–6), उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को सम्बोधित है, में दी गयी सूचनानुसार जनपद–वाराणसी एवं जनपद–चंदौली में स्थित हेल्थ केयर फैसिलिटीज में बेड्स की संख्या एवं नान–बेडेड क्लीनिक की संख्या का विवरण निम्नवत् है :–

क्र0सं0	जनपद का नाम	अस्पतालों में बेडों की कुल संख्या	नान–बेडेड क्लीनिक की कुल संख्या
1	वाराणसी	18,521	566
2	चन्दौली	4,477	125
	कुल संख्या –	**22,998**	**691**

अग्रेतर अवगत कराना है कि वर्तमान में जनपद–वाराणसी में एक सी0बी0डब्ल्यू0टी0एफ0 संस्था मेसर्स सी0पी0सी0 (पावर) इण्डिया लिमिटेड, मोहनसराय, वाराणसी स्थापित एवं संचालित है। जनपद–चन्दौली में कोई भी सी0बी0डब्ल्यू0टी0एफ0 संस्था स्थापित एवं संचालित नहीं है। सी0पी0सी0बी0 गाईड लाइन के अनुसार 10,000 बेड्स से अधिक होने अथवा 75 किलोमीटर त्रिज्यक दूरी से अधिक होने पर नये सी0बी0डब्ल्यू0टी0फ0 प्लांट स्थापित किये जाने का प्राविधान किया गया है। प्रस्तावित सी0बी0डब्ल्यू0टी0एफ0 संस्था मेसर्स वी0आर0बी0ए0 बायो वेस्ट साल्यूशन प्रा0लि0, औद्योगिक क्षेत्र, रामनगर, चन्दौली से 75 किलोमीटर दूरी के अन्दर वर्तमान में केवल एक सी0बी0डब्ल्यू0टी0फ0 संस्था मेसर्स सी0पी0सी0 (पावर) इण्डिया लिमिटेड, मोहनसराय, वाराणसी स्थापित एवं संचालित है।

उपरोक्तानुसार आपका आवेदन पत्र दिनांक 01.07.2022 को निस्तारित किया जाता है।

अग्रेतर आपको अवगत कराना है कि यदि आप उपर्युक्त सूचना से संतुष्ट नही है तो आप उक्त अधिनियम की धारा–19(1) के अधीन इस पत्र के प्राप्त होने के दिनांक से 30 दिन के अंदर प्रथम अपीलीय प्राधिकारी के समक्ष अपील दायर कर सकते है, जिनका विवरण निम्नवत है–

प्रथम अपीलीय प्राधिकारी का नाम, पदनाम एवं पता–
डॉ0 एस0सी0 शुक्ला, प्रथम अपीलीय अधिकारी,
क्षेत्रीय कार्यालय, उ0प्र0 प्रदूषण नियंत्रण बोर्ड
जवाहर नगर, भेलूपुर, वाराणसी–221010
मो0नं0–7839891967

भवदीय

संलग्नकः–उपरोक्तानुसार।

(बी0के0 श्रीवास्तव)
जन सूचना अधिकारी

पृ0सं0 एवं दिनांकः–उपरोक्त।
प्रतिलिपिः–निम्नलिखित को सूचनार्थ सादर प्रेषित।

1. सदस्य सचिव महोदय, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।
2. मुख्य पर्यावरण अधिकारी(वृत्त–6) / नोडल बायो मेडिकल, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।
3. जन सूचना अधिकारी(वृत्त–6), उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।
4. प्रथम अपीलीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, वाराणसी।

जन सूचना अधिकारी

क्षेत्रीय कार्यालय : आवास विकास ऑफिस कॉम्प्लेक्स, जवाहर नगर, भेलूपुर, वाराणसी–221010, दूरभाष : 0542–2275951, फैक्स : 0542–2275951
मुख्यालयः टी0सी0–12वी, विभूति खण्ड, गोमती नगर, लखनऊ–226010, दूरभाष : 0522–2720828, 2720681, 2720831. फैक्स : 0522–2720764
ई–मेल : info@uppcb.com वेबसाइट : www.uppcb.com
Dr SC Sir rti

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No. H8B302/सी–6/आरटीआई0/584/2023 दि. 3-2-23
पंजीकृत

सेवा में,

श्री दिवाकर सिंह,
1/64 ए, गोमती नगर विस्तार,
लखनऊ।

विषयः– सूचना का अधिकार अधिनियम,2005 के अन्तर्गत सूचना के सम्बन्ध मे।

महोदय,

कृपया उपरोक्त विषयक अपने आवेदन पत्र संख्या–1 एवं 2 दिनांक 31.01.2023, का संदर्भ ग्रहण करने का कष्ट करें। आप द्वारा मॉगी गयी सूचना निम्नवत है:–

बिन्दुसंख्या–1 2 एवं 3 के संबंध में संबधित अनुभाग से सूचनायें प्राप्त कर पत्र के साथ संलग्न कर प्रेषित की जा रही है।

उक्त के अतरिक्त यह भी अवगत कराना है कि उ0प्र0 में सूचना का अधिकार अधिनियम के अन्तर्गत आवेदनों/प्रथम अपीलों को ऑनलाइन प्राप्त कर निस्तारित किए जने हेतु एक वेब पोर्टल https://rtionline.up.gov.in विकसित किया गया है। भविष्य में जनसूचना के आवेदन/प्रथम अपील करने हेतु आप उक्त वेब पोर्टल का उपयोग कर सकते है।

उपरोक्तानुसार आपका आवेदन पत्र निस्तारित किया जाता है।

यदि आप उपयुक्त विनिश्चत से क्षुब्ध हैं तो आप सूचना का अधिकार अधिनियम, 2005 की धारा–19 (I) के अधीन इस पत्र के प्राप्त होने के दिनांक से 30 दिन के अन्दर प्रथम अपीलीय प्राधिकारी के समक्ष अपील दायर कर सकते है, जिनका पता निम्नवत है:–

श्री रामगोपाल,मुख्य पर्यावरण अधिकारी,उ0प्र0 प्रदूषण नियंत्रण बोर्ड,टी0सी0–12 वी, विभूति खण्ड, गोमतीनगर, लखनऊ–226010

संलग्नकः यथोपरि।

भवदीय,
3/2/23
जन सूचना अधिकारी,
वृत्त–6

o/c.

T.C/12V, Vibhuti Khand Gomti Nagar, Lucknow – 226010
Phone: 2720831, 2720828, 2720691 & 2720681 – Fax: 0522 – 2720764
Email: info@uppcb.com – Web

सेवा में,

जन सूचना अधिकारी वृत्त–6,
उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड,
लखनऊ–226010।

विषयः जनसूचना अधिकार अधिनियम–2005 के सम्बन्ध में श्री दिवाकर सिंह द्वारा चाही गयी सूचना के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक में श्री दिवाकर सिंह 1/64 ए गोमती नगर विस्तार, लखनऊ के पत्र संख्या– 1 व 2 दिनांक 31.01.2023 का संदर्भ ग्रहण करने का कष्ट करें।

उक्त दोनो पत्रों के माध्यम से चाही गयी सूचनायें संकलित कर निम्न प्ररूप में आवश्यक कार्यवाही हेतु प्रस्तुत है।

क्र0सं0	क्षेत्रीय कार्यालय का नाम	जनपद का नाम	सरकारी एवं गैर सरकारी अस्पतालों में की संख्या		नॉन बेडेड क्लीनिक की कुल संख्या
			सरकारी अस्पतालों में बेडों की कुल संख्या	गैर सरकारी अस्पतालों में बेडों की कुल संख्या	
1	वाराणसी	वाराणसी	3421	15100	566
2		भदोही	466	1901	63
3		जौनपुर	1299	6262	162
4		चंदौली	606	3871	125
5		गाजीपुर	1067	4360	80
6	सोनभद्र	मिर्जापुर	839	2604	120
7		सोनभद्र (रॉबर्ट्सगंज)	512	2331	97
8	प्रयागराज	प्रयागराज	1662	13809	505
9	आजमगढ़	मऊ	544	1539	40
10		बलिया	1178	756	68
11		आजमगढ़	1927	3245	228
12	रायबरेली	सुल्तानपुर	1060	4025	101
13		अमेठी	562	2303	106
14		प्रतापगढ़	1318	2992	364

प्रदेश में वर्ष 2021 में कुल संचालित पैथोलॉजी व ब्लड बैंक की कुल संख्या क्रमशः 5783 व 351 है। संचालित पैथोलॉजी व ब्लड बैंक की संख्या जनपदवार धारित नही है।

संलग्नकः–यथोपरि।

भवदीय

(इमरान अहमद खान)
पर्यावरण अभियन्ता
डब्ल्यू0एम0डी0

प्रतिलिपिः निम्नलिखित को सूचनार्थ प्रेषित

1. मुख्य पर्यावरण अधिकारी(उपकर / डब्ल्यू0एम0डी0)
2. मुख्य पर्यावरण अधिकारी (वृत्त–6)

पर्यावरण अभियन्ता
डब्ल्यू0एम0डी0

₹1
NCT OF DELHI COURT FEE
DLCT20171071124351
20-AUG-2024

₹2 758
NCT OF DELHI COURT FEE
DLCT2037159H2423L
20-AUG-2024

ADVOCATES' WELFARE FUND STAMP ₹25
1736550
TWENTY FIVE RUPEES

279

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 750 OF 2024

IN THE MATTER OF:
Ajay Kumar Singh ...Applicant

Versus

State Level Environmental Impact
Assessment Authority, Uttar Pradesh & Ors. ...Respondents

Know all to whom these present shall come that I, Ratan Deo Singh S/o Sh. Maha Deo Singh, Director of M/s VRBA Bio Waste Solution Pvt. Ltd. having office at Lane No 3, N 1/66-R-25, Shiv Prasad Gupt Colony Lanka, Varanasi, Uttar Pradesh.

The above named _____RESPONDENT NO. 2 _____do hereby appoint.

Deva Shukla Advocate (Enrollment No. D/5303/2019)
Neha Shukla Advocate (Enrollment No. UP/7974 /2017)
Kumudini Shukla Advocate (Enrollment No. UP/7974 /2017)
Amit Kumar Advocate (Enrollment No. D/355/2021)
Chamber No. 448, Lawyers' Chambers
District Court Compound, Ghaziabad, Uttar Pradesh
Email: deva.s.shukla@outlook.com
Mob No. 9999228882; 9999118882

(Hereinafter called the advocate/s) to be my Advocates in the above noted case authorized him:-

To act, appear and plead in the above-noted case in this Tribunal or in any other Court in which the same may be tried or heard subject to payment of fees separately for each Court by me/ us.

To sign, file verify and present pleadings, appeals cross objections or petitions for execution review, revision, withdrawal, compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.

To file and take back documents to admit and/or deny the documents of Applicant.

And I/We undertake that I / we or my /our duly authorized agent would appear in the Court on all hearings and will inform the Advocates for appearance when the case is called.

And I /we the undersigned do hereby agree that in the event of the whole or part of the fee agreed by me/us to be paid to the Advocate remaining unpaid he shall be entitled to withdraw from the prosecution of the said case until the same is paid up. The fee settled is only for the above case and above Court. I/We hereby agree that once the fee is paid. I /we will not be entitled for the refund of the same in any case whatsoever. If the case lasts for more than three years, the advocate shall be entitled for additional fee equivalent to half of the agreed fee for every addition three years or part thereof.

IN WITNESS WHEREOF I/We do hereunto set my /our hand to these presents the contents of which have been understood by me/us on this 12 th day of November 2024. FOR – VRBA Bio Waste Solution Pvt Ltd

Accepted subject to the terms of fees.

Authorized Signatory
RATAN DEO SINGH
CLIENT

Deva Shukla
Advocate

Neha Shukla
Advocate

Kumudini Shukla
Advocate

Amit Kumar
Advocate

VRBA
BIO WASTE SOLUTION
PVT. LTD.
GSTIN No. : 09AAHCV3492R1ZB, PAN No. : AAHCV3492R

BOARD RESOLUTION

Extract of the Minutes of Meeting of the Board of Directors of VRBA Bio Waste Solution Private Limited held on 11th day of Month November 2024 at the Registered Office of the Company at Lane No 3, N 1/66-R-25, Shiv Prasad Gupt Colony, Lanka, Varanasi, UP.

"RESOLVED THAT" Board be and hereby authorize, Mr. Ratan Deo Singh S/o Maha Deo Singh and Director of the company, to file any application, writ petition or any other application or any other relevant documents or paper before the competent Court, Tribunal, Authorities or Forums including any Appellate Tribunal on behalf of the company.

"RESOLVED FURTHER THAT" that Mr. Ratan Deo Singh is duly authorized to represent the company before competent Court, Tribunal, Authorities or Forums including any Appellate Tribunal and take all necessary steps including signing of all papers, applications, plaints petition Vakalatnama, affidavit and all other documents as may be required and incidental thereto.

Sd/-
Chairman of the Meeting
Certified True Copy

For & On behalf of VRBA Bio Waste Solution Private Limited

For VRBA Bio Waste Solution Pvt Ltd	For VRBA Bio Waste Solution Pvt Ltd	For VRBA Bio Waste Solution Pvt Ltd
VINAY KUMAR RAI	VIRENDRA PRATAP SINGH	ASHOK VERMA
Director	Director	Director
For VRBA Bio Waste Solution Pvt Ltd	For VRBA Bio Waste Solution Pvt Ltd	For VRBA Bio Waste Solution Pvt Ltd
BIMLESH KUMAR SINGH	PRAVIN KUMAR RAI	RATAN DEO SINGH
Director	Director	Director

ADDRESS : E-46, INDUSTRIAL AREA,RAMNAGAR,PHASE-1,CHANDAULI,U.P. 221110
Office Address : Lane No.3,N1/66-R-25,Shiv Prasad Gupt Colony Lanka, Varanasi. U.P. 221005
9161286666, 8573025000
vrbabiowastesolution@gmail.com