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MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/7(da)/1734 /2019

Date: 5 DEC 2019

By R P A D

Time Limit

Sub: Environment Clearance to M/s CARE BMW Incinerator for setting up of Common Bio-medical Waste Treatment Facility (CBWTF) at Survey No. 1186, Block No.-3013/B, 3014/A, 3014/B, Chhatral GIDC, Tal: Kalol, Dist: Gandhinagar. In Category 7(da) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/MIS/35539/2018.

Dear Sir,

This has reference to your application along with EIA report dated 25/07/2019 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 03/10/2019 to the SEAC.

The proposal is for Environmental Clearance to M/s CARE BMW Incinerator for setting up of Common Bio-medical Waste Treatment Facility (CBWTF) at Survey No. 1186, Block No.-3013/B, 3014/A, 3014/B, Chhatral GIDC, Tal: Kalol, Dist: Gandhinagar. It is a proposed unit for involving following activity, which falls in the category - 7(da) of the schedule of the EIA Notification-2006:

Sr. No.	Name of the Activity at CBWTF	Capacity	Waste to be Handled (MT/Day)	Quantity MT/Month	Remarks
1	Incinerator	250 kg/hr x 2 Nos.	10	300 MT	Working hour 20
2	Autoclave	250 kg/hr x 2 Nos.	5	150 MT	Working hour 10
3	Shredder	250 kg/hr x 2 Nos.	-	-	Working hour 10
	Total		15 MT	450 MT	

The project activity is covered in 7(da) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 08/11/2019 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 03/10/2019. The proposal was considered by SEIAA, Gujarat in its meeting held on 20/11/2019 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

**A. CONDITIONS:**

**A. 1 CONSTRUCTION PHASE:**

- Water demand during construction phase shall be reduced by use of curing agents, super plasticizers and other best construction practices.
- Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
- All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
- First Aid Box shall be made readily available in adequate quantity at all the times.
- The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.
- Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
- Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
- Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
- All top soil excavated during construction activity shall be used in horticultural / landscape development within the project site.
- Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum

extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.

- k. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
- l. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.

#### **A. 2 SPECIFIC CONDITION**

1. CBMWIF shall comply all the conditions/ Amendments of BMW Rules issued by the CPCB from time to time.
2. PP shall comply OM of MOEF&CC dated 01/05/2018 regarding corporate environmental responsibility (CER).
3. Unit shall discontinue existing CBWTF running at Plot No: 1216, At & Po: Santej, Tal: Kalol, Dist: Gandhinagar after getting EC and CTE of the Board for proposed CBWTF site.
4. In case of any regulatory action including closure of any existing CBWTF is inevitable, the respective SPCB/PCC may take action under the BMW Rules including for making alternate arrangement to ensure safe disposal of the bio-medical waste generated from the member health care facilities of such default CBWTF through CBWTF located nearby.
5. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Envision Enviro Technologies Pvt. Ltd, Surat was submitted by project proponent vide letter no. NIL dated 29/04/2019 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.
6. The CBWTF shall strictly comply with the CPCB guidelines time to time for setting up the Common Bio-Medical Waste Treatment Facility. [CBWTF].
7. Unit shall develop dense green belt of adequate width along periphery of the project boundary.
8. The CBWTF shall strictly comply the design criteria for incinerator, autoclave and shredder as per the CPCB guidelines.
9. The CBWTF shall setup technology system as per CPCB guideline.
10. The CBWTF shall strictly ensure mercury waste management at health care facility as per the Bio-Medical Waste Management Rules 2016.
11. The CBWTF shall establish Standard Operating Procedure for waste collection, handling, transportation, treatment and disposal as per Biomedical Waste Management Rules 2016.
12. The CBWTF shall comply provisions of MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 regarding Corporate Environment Responsibility (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per the said OM dated 01/05/2018 for various activities therein.
13. Consent to Operate shall be obtained from GPCB under Air (Prevention & Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Act, 1974 before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
14. The CBWTF shall provide Continuous Emission Monitoring System [CEMS] and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
15. Authorization, from Gujarat Pollution Control Board shall be obtained as applicable under Bio-Medical Waste Management Rules 2016.
16. The Bio-Medical wastes shall be managed in accordance with the Bio-Medical Waste Management Rules 2016.
17. Incinerated ash, used oil, sludge salt, treated biomedical waste and ETP Sludge should be disposed in accordance with BMW Rules, 2016.
18. The proponent shall comply with the Environmental standards notified by Ministry of Environment, Forest & Climate Change for incinerators along with the technology/guidelines.
19. Guidelines published by the Central Pollution Control Board (CPCB) from time to time for Common Bio Medical Waste Treatment Facility (CBWTF) shall be referred for implementation.
20. There shall not be any spillage from the transportation Vehicles.
21. The project proponent shall set up separate Environmental Management Cell for effective implementation of stipulated environmental safeguards under the supervision of Senior Executive.
22. All the recommendations of EMP shall be strictly complied.
23. The environmental safeguards containing the EIA report shall be implemented in letter & spirit.
24. Necessary provision shall be made for fire fighting facilities within the complex.
25. Treated flue gas emissions discharged through stack to atmosphere shall always be less than specific emission standards.
26. Project Proponent shall ensure regular operation and maintenance of the ETP and printed logbook shall be maintained.
27. All the pipelines carrying water/ waste water should be distinguished using colour coding on raw water pipes and reuse lines of treated water.
28. Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring.

29. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
30. Energy Conservation measures such as LEDs light for common lighting of areas, signage etc should be adopted.
31. The CBWTF shall develop 33 % of plot area as a green belt within premises as per the CPCB guidelines.
32. All measures shall be taken to prevent soil and ground water contamination.
33. All measures shall be taken to prevent soil and ground water contamination.
34. There shall be no drainage connection to discharge waste water from the premises.
35. Complete Zero Liquid Discharge [ZLD] status shall be maintained all the time.
36. Bleed liquor to be generated from the scrubbing systems shall be sent to ETP with process effluent for treatment.

## 2. WATER :

37. Total water requirement for the project shall not exceed 30 KL/day. The CBWTF shall reuse 17 KL/day of treated waste water for washing & scrubbing system within premises. Hence, fresh water requirement shall not exceed 13 KL/day and it shall be met through GIDC.
38. No ground water shall be tapped for the project requirements.
39. The industrial effluent generation from the project (washing activities & Scrubbing system) shall not exceed 17.0KL/day.
40. Water meter shall be installed and its record of daily water consumptions shall be maintained.
41. Entire quantity of Waste water shall be treated in proposed ETP. (Cap20 KL/Day)
42. The CBWTF shall provide adequate effluent treatment plant (ETP) comprises of Primary, Secondary, and Tertiary treatment plants and it shall be operated regularly and efficiently so as to ensure reuse for scrubbing system within premises.
43. Separate energy meter shall be provided at ETP. A proper operation logbook of the ETP containing records of quantities and qualities of treated effluent .
44. The domestic wastewater generation shall not exceed 2.8 KL/day for proposed project and it shall be disposed off into soak pit system.
45. Zero Liquid Discharge (ZLD) condition shall be maintained all the time with utilizing treated effluent for washing and scrubbing system within premises.
46. The project proponent shall provide electromagnetic flow meter at the inlet & outlet of the water supply, Inlet & outlet of the ETP and shall maintain a record of readings of each such meter on daily basis.
47. The quantity of fresh water usage and water recycling shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the GPCB, State Level Environment Impact Assessment Authority & Regional Office, MoEFCC along with six monthly Monitoring reports.



48. The CBWTF shall not exceed fuel consumption for stand-by DG set as mentioned below:

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Incinerator (250 kg/hr)	30 meter (Common)	Diesel	0.6 KL	PM, NO <sub>x</sub> , HCl, Total Dioxins and Furans, Hg	<ul style="list-style-type: none"> <li>• Quencher</li> <li>• Wet scrubber</li> <li>• Droplet separator</li> </ul>
	Incinerator (250 kg/hr)		Diesel	0.6 KL		
2	D.G. Set (300 KVA)	15 meter	Diesel	0.08 KL (0.01KL/hr)	PM, SO <sub>2</sub> , NO <sub>x</sub> ,	Adequate Stack Height
3	D.G. Set (300 KVA)	15 meter	Diesel	0.08 KL (0.01KL/hr)	PM, SO <sub>2</sub> , NO <sub>x</sub> ,	Adequate Stack Height

49. The CBWTF shall provide adequate stack height with flue gas generation sources as mentioned above:
50. There shall be no process gas emission from the proposed CBWTF.
51. CBWTF shall install adequate APCM for control of parameter like Total Dioxins and furans for proposed biomedical waste incinerator and shall construct boundary wall of adequate height for control of fugitive emission from proposed CBWTF site.
52. The CBWTF shall provide adequate APCM comprises of quencher, ventury scrubber and droplet separator with adequate stack height as APCM with incinerator.
53. A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.
54. Regular monitoring of ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, HCl, Total Dioxins and Furans, Hg and VOC shall be carried out at the site and downwind direction and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the CPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately.
55. Proponent shall strictly follow the odour control measures as suggested in environmental management plan.
56. Proponent shall strictly follow the Environmental Monitoring program for ambient air quality monitoring.
57. Treated flue gas emissions discharged through stack to atmosphere shall always be less than CPCB stipulated emission

standards.

58. Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.

**A. 4 SOLID / HAZARDOUS WASTE:**

59. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
60. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
61. The CBWTF shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
62. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
63. The design of the Trucks/tankers shall be such that there is no spillage during transportation
64. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
65. Hazardous / Solid waste management shall be as below:

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Management of HW
1	Used oil	Machineries	5.1	0.3 KL	Collection, storage and reuse as lubricants in plant within the premises only and/or send to authorized recyclers.
2	Incinerator Ash	Incinerator	37.2	360	Collection, Storage, Transportation and sent to TSDF for final disposal.
3	ETP Sludge	ETP	35.3	252	
4	Disinfected materials (Shredded plastic, glass etc.)	Shredding	Non-Hazardous	1,800	Send to authorized recycler.
5	Encapsulated Waste (sharps, containers of mercury waste)	Process	-	6	Disposed in sharp pit/Send to TSDF for final disposal.

66. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016
67. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from The CBWTF.
68. Treated biomedical waste shall be sold out to GPCB authorized recyclers only.
69. Used oil shall be use within the premises or burnt into incinerator.
70. Treated glass waste shall be sold out to GPCB authorized recycler only.
71. Sharp waste shall be diposed through TSDF after encapsulation and possible try for metal recovery.

**A. 5 SAFETY:**

72. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963.
73. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
74. Main entry and exit shall be separate and clearly marked in the facility.
75. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
76. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
77. All necessary precautionary measures shall be taken to avoid any kind of accident during loading, unloading and transportation of biomedical waste.
78. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
79. Only flame proof electrical fittings shall be provided in the plant premises.
80. All the waste storage room shall be marked with colour coding as per the CPCB guidelines time to time.
81. Proponent shall tie up with near by health care facility for any emergency cases.
82. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
83. First Aid Box in The CBWTF shall be made readily available in adequate quantity.
84. Training shall be imparted to all the workers on safety and health aspects of biomedical waste handling.

85. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
86. Transportation of biomedical waste shall be done as per the provisions of the Motor Vehicle Act & Rules.
87. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.

#### **A.6 NOISE:**

88. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

#### **A.7 GREEN BELT AND OTHER PLANTATION:**

89. The CBWTF shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, The CBWTF shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
90. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

#### **B. OTHER CONDITIONS:**

91. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018.
92. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
93. The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
94. Rain water recharging of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
95. CBWTF shall join and participate financially and technically for any common environmental facility infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. I GIDC.
96. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
97. All the commitments & undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
98. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
99. In the event of failure of any pollution control system adopted by The CBWTF. The CBWTF shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
100. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
101. During biomedical waste unloading there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
102. Pucca flooring impervious layer shall be provided in the work areas, biomedical waste storage areas and chemical handling areas to minimize soil contamination.
103. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
104. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous & other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
105. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
106. The project management shall ensure that The CBWTF complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
107. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be



- diverted for any other purpose.
108. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/SEAC/GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
109. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB.
110. 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 clearance and attract action under the provisions of Environment (Protection) Act, 1986.
111. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
112. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
113. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
114. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
115. This environmental clearance is valid for seven years from the date of issue.
116. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
117. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,  
Yours sincerely,



(S. M. SAIYAD)  
Member Secretary

*Issued to:*  
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