

APPENDIX – I

(See paragraph – 6)

**FORM 1**

**(I) Basic Information:**

S. No.	Item	Details																				
1	Name of the project/Activity	Common Bio Medical Waste Treatment Facility at Sagardighi, Dist. – Murshidabad, West Bengal proposed by M/S SNG Envirosolutions Private Limited																				
2	S. No. in the schedule	7 (da) – Bio medical waste treatment facility (CBMWTF)																				
3.	Proposed capacity/area/length/ Tonnage to be handled/command area/lease area/number of Wells to be drilled.	<p>Following equipment/facility shall be installed for treatment of Bio- Medical waste.</p> <table border="1"> <thead> <tr> <th>S.No.</th> <th>Equipment</th> <th>Number</th> <th>Proposed Capacity</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Incinerator</td> <td>2</td> <td>250 kg/hr</td> </tr> <tr> <td>2.</td> <td>Autoclave</td> <td>1</td> <td>1000 liter/batch</td> </tr> <tr> <td>3.</td> <td>Shredder</td> <td>1</td> <td>250 kg/hr</td> </tr> <tr> <td>4</td> <td>Effluent treatment plant</td> <td>1</td> <td>20 KLD</td> </tr> </tbody> </table>	S.No.	Equipment	Number	Proposed Capacity	1.	Incinerator	2	250 kg/hr	2.	Autoclave	1	1000 liter/batch	3.	Shredder	1	250 kg/hr	4	Effluent treatment plant	1	20 KLD
S.No.	Equipment	Number	Proposed Capacity																			
1.	Incinerator	2	250 kg/hr																			
2.	Autoclave	1	1000 liter/batch																			
3.	Shredder	1	250 kg/hr																			
4	Effluent treatment plant	1	20 KLD																			
4.	New/Expansion/Modernization	New																				
5.	Existing Capacity /Area etc.	<b>Proposed Capacity:</b> 6577 beds from Murshidabad zone. <b>Plot area:</b> 6 bigha (2 Acres)																				
6.	Category of Project i.e.' A' or 'B'	B																				
7.	Does it attract the general condition? If yes, please specify.	NA																				
8.	Does it attract the specific condition? If 'yes, please specify.	NA																				
9.	Location	Proposed Project Site is located at Mouza- Arazi Balarambati, P.S.- Sagardighi, Dist. – Murshidabad, West Bengal. <b>Site Co-ordinates are: -</b> <b>24°21'32.55"N, 88°05'32.41"E</b> <b>24°21'31.23"N, 88°05'37.79"E</b> <b>24°21'29.53"N, 88°05'37.03"E</b> <b>24°21'31.58"N, 88°05'31.91"E</b>																				

	Plot/Survey/Khasra No.	Plot no- 175/470
	Village	Arazi Balarambati
	District	Murshidabad
	State	West Bengal,
10.	Nearest railway station/airport along with Distance in kms.	Manigram Railway Station is at 2.29 km in SE direction. Railway Line is 400 meters in E direction. Surichua Airport is at 45.4 Km in SW.
11.	Nearest Town, city, District Headquarters along with distance in kms.	Manigram Village is 2.5 Km in ESE.
12.	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal Address with telephone nos. to be given)	Plot No.175/470, Mouza - Arazi Balarambati, P.S. Sagardighi, Block- Sagardighi, District- Murshidabad, West Bengal. Pin code 742237
13.	Name of the applicant	Mr. Surendra Prasad Singh Director
14.	Registered Address	29A Ballygunge Circular Road Flat 1-A (Block B) Kolkata
15.	Address for correspondence:	
	Name	Mr. Surendra Prasad Singh
	Designation (Owner/Partner/CEO)	Director/Owner
	Address	29A Ballygunge Circular Road Flat 1-A (Block B) Kolkata
	Pin Code	700019
	E-mail	sngenviro@gmail.com
	Telephone No.	9830167737
	Fax No.	
16.	Details of Alternative Sites examined, if any. Location of these sites should be shown on a topo sheet.	No Alternate has been examined. Site has been selected keeping in view selection criteria, detail has been given in Pre-feasibility report.
17.	Interlinked Projects	No
18.	Whether separate application of interlinked Project has been submitted?	NA
19.	If yes, date of submission	NA
20.	If no, reason	NA
21.	Whether the proposal involves approval / clearance under: if yes, Details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972 (c) The C.R.Z. Notification, 1991?	No

22.	Whether there is any Government Order/ Policy relevant/ relating to the site?	NA
23.	Forest land involved (hectares)	No
24.	Whether there is any litigation pending against the project and /or land in which the project is proposed to be set up? (a) Name of the Court (b) Case No. (c) Orders/directions of the Court if any and its relevance with the proposed project.	NA

## (II) Activity

### 1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	The proposed project site consists of 6 bigha (2 Acres) of land. Proposed land is an agricultural land, Change in Land Use (CLU) will be applied after ToR grant. The land has been purchased for the establishment of CBMWTF. Land Document is attached as <b>Annexure-I</b> .
1.2	Clearance of existing land, vegetation and buildings?	No	The proposed site is vacant land.
1.3	Creation of new land uses?	Yes	Land will be converted for the establishment of CBMWTF.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	Site is suitable for construction activity.
1.5	Construction works?	Yes	RCC structures will be Constructed as per BWM rules 2016 for the proposed CBWTF.
1.6	Demolition works?	No	No demolition works are involved at the proposed site.
1.7	Temporary sites used for construction works or housing of construction workers?	No	Local people will be engaged for construction activities. Therefore, no labour hutments will be required.
1.8	Above ground buildings, structures or earthworks including linear structures,	Yes	Above ground infrastructures like main plant, administration building will be constructed

	cut and fill or excavations		apart from supporting infrastructures like offices and toilets. Excavation for laying the foundation of structures will be involved.
1.9	Underground works including mining or tunneling?	No	NA
1.10	Reclamation works?	No	NA
1.11	Dredging?	No	NA
1.12	Offshore structures?	No	NA
1.13	Production and manufacturing processes?	No	Proposed Common Bio Medical Waste Treatment Facility involves collection, storage, and treatment of Biomedical waste from health care facilities.
1.14	Facilities for storage of goods or materials?	Yes	0.22 Acre (11% of total area) area is allotted for storage of bio medical Waste.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	The freshwater requirement of 16 KLD which includes 5 KLD for domestic purposes, 5 KLD autoclave and 2 KLD for floor washing and 4 vehicle/Wheel wash. <b>Source:</b> Ground Bore Well The proposed CBWTF will have an ETP of 20m <sup>3</sup> per day (20 KLD) capacity. The wastewater generated from Floor washing, Vehicle washing will be treated through ETP and domestic water will be disposed through soak pit. Solid waste generated shall be sent to nearest Municipal Landfill.
1.16	Facilities for long term housing of operational workers?	No	Mostly, Local resident shall be employed.
1.17	New road, rail or sea traffic during construction or operation?	No	--
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	NH34, 5.65 Km, W Mozammel Ohab Haque Road, 2.75 Km, ESE
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	The project does not involve any change transport route.
1.20	New or diverted transmission lines or pipelines?	No	For power transmission, existing lines will be used

1.21	Impoundment, damming, culverting, realignment or other changes to the Hydrology of watercourses or aquifers?	No	The project does not involve impoundment, damming, culverting, realignment or other changes leading to change in hydrology.
1.22	Stream crossings?	No	No stream crossings involved
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	Water requirement for the project will be met through bore well.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	Proper storm water drainage system shall be planned.
1.25	Transport of personnel or materials for construction, operation, or decommissioning?	yes	When the facility is in operational phase several dedicated containerized vehicles for transportation of the waste by road and shall adopt the conditions specified in the Bio-Medical Waste Management Rules, 2016.
1.26	Long-term dismantling or decommissioning or restoration works?	No	The project does not involve long term dismantling, decommissioning or restoration works.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Nil
1.28	Influx of people to an area in either temporarily or permanently?	No	Not expected from this project as the laborers will be locally hired
1.29	Introduction of alien species?	No	Introduction of alien species is not expected from this project
1.30	Loss of native species or genetic diversity?	No	The project will involve development of greenbelt with native species and therefore loss of genetic diversity is not expected.
1.31	Any other actions?	No	-

**2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):**

S.No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	It is an undeveloped vacant land.
2.2	Water (expected source & competing users) unit: KLD	Yes	Freshwater requirement of 16 KLD which includes 5 KLD for domestic purposes, 5 KLD autoclave and 2 KLD for floor washing and 4 vehicle wash/Wheel. <b>Source:</b> proposed Bore Well The proposed CBWTF will have an ETP of 20 m <sup>3</sup> per day (20 KLD) capacity. The wastewater generated from Floor washing, Vehicle washing will be treated in ETP and domestic water will be disposed through soak pit.
2.3	Minerals (MT)	No	The project is not expected to use minerals of any sort.
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Stones, aggregates, soil, etc. will be used for the facility which will be sourced from local vendors.
2.5	Forests and timber (source – MT)	No	No forest or timber resources will be used for the project.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	0.1 MW (Source: WB State Electricity Board). 100 kVA DG set to be maintained as an emergency alternative source.
2.7	Any other natural resources (use appropriate standard units)	No	Use of any other natural resources is not anticipated

**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	Nil
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Stagnation of water or accumulation of waste will be strictly avoided to effectively restrict the reproduction and growth of disease vectors by adopting suitable drainage and waste management measures during the construction and operation phases.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	Scientific management of biomedical waste shall prevent spreading of diseases & improve overall environment of the area. During construction as well as operation phase, direct as well as indirect employment opportunities will be generated for local people. This will have a positive impact on socio-economic condition of the surrounding areas.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	There is no human settlement within 500 meters nor there is hospital or vulnerable groups of people.
3.5	Any other causes	No	No other Causes

**4. Production of solid wastes during construction or operation or Decommissioning (MT/month)**

<b>S. No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
4.1	Spoil, overburden, or mine wastes	No	No spoil, overburden or mine wastes will be generated from the project
4.2	Municipal waste (domestic and commercial wastes)	Yes	Municipal solid Waste generated will be disposed off as per prescribed rules.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	The proposed project is a Common Bio Medical Waste Treatment facility. Ash and sludge generated will be disposed through nearby TSDF.
4.4	Other industrial process wastes	No	-
4.5	Surplus product	No	No surplus product is expected to be generated from the project
4.6	Sewage sludge or other sludge from effluent treatment	Yes	Sludge will be generated from ETP sent to TSDF as per norms
4.7	Construction or demolition wastes	No	<p><b>a.</b> Construction waste: Reuse of construction wastes such as sand, brick, gravel, and cement for developing internal road and project structures.</p> <p><b>b.</b> No Demolitions activities are involved in this proposed project.</p>
4.8	Redundant machinery or equipment	No	Nil
4.9	Contaminated soils or other materials	No	Nil
4.10	Agricultural wastes	No	Nil
4.11	Other solid wastes	No	Nil

## 5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	<p><b>Emission Sources:</b></p> <ul style="list-style-type: none"> <li>• <b>Construction phase:</b> Emission from vehicles used for transportation construction material.</li> <li>• <b>Operation Phase:</b> Emission from DG sets that will be utilized for a short duration and during power failure scenario.</li> <li>• High Speed Diesel (HSD) Oil will be used as fuel for the DG sets.</li> <li>• The emissions will be SO<sub>2</sub> and NO<sub>x</sub> where adequate stack height will be provided as per the MoEF&amp;CC/CPCB/WBPCB Norms to ensure proper dispersion of pollutants and inbuilt acoustic enclosure will be provided in order to meet the standards prescribed by MoEF&amp;CC/CPCB &amp; WBPCB.</li> <li>• More than 33 % of Green belt will be developed &amp; maintained. This will mitigate the emissions.</li> <li>• Periodic monitoring and maintenance of transport vehicles to check on the quality of emission to be within permissible limits and consumption of fuel</li> </ul>
5.2	Emissions from production processes	Yes	Incineration of wastes will lead to emission of Particulate matter, NO <sub>x</sub> and other gases. APCD shall be installed to keep emissions within prescribed standards of MoEF&CC.
5.3	Emissions from materials handling including storage or transport	Yes	Emissions of Particulate matter from infectious biomedical waste during collection, transportation, storage, and handling.
5.4	Emissions from construction activities including plant and equipment	Yes	Fugitive emissions are likely during the construction & transportation activities due to use of construction equipment. These are however temporary in nature.
5.5	Dust or odors from handling of materials including construction materials, sewage, and waste	Yes	Sewage will be disposed to Septic Tank followed by Soak Pit. Appropriate enclosed areas for storage will be provided for biomedical waste.

5.6	Emissions from incineration of waste	Yes	The BMW waste will be incinerated scientifically in incinerator at the set temperature. Emissions will be controlled by providing necessary air pollution control system to meet prescribed standards.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	The project does not involve burning of wastes in open air
5.8	Emissions from any other sources	No	Emission from any other sources is not expected

## 6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	<p><b>Construction Phase:</b> The vehicles and machineries used for construction activities and transportation of materials shall generate the noise. Vehicles shall not use pressure horns. Work will be carried out during daytime. Construction machineries shall be maintained.</p> <p><b>Operation Phase:</b> DG set will be in operation during power failure. The DG set will be acoustically enclosed Noise pollution will be monitored regularly &amp; action taken to keep within prescribed limits.</p>
6.2	From industrial or similar processes	Yes	Noise levels are expected from incinerator plant, use of pumps and motors, necessary PPEs (earmuffs, closed chamber) will be provided for the personnel's working in this area
6.3	From construction or demolition	Yes	Foundation works, fabrication of structures, working of equipment and movement of vehicles are expected to raise the level of sound during construction phase.
6.4	From blasting or piling	No	The project does not involve blasting or piling activities
6.5	From construction or operational traffic	Yes	Vehicles carrying raw materials during construction and biomedical wastes during operation phase are likely to generate noise.

6.6	From lighting or cooling systems	No	Noise generation from such activities is not anticipated
6.7	From any other sources	No	Noise generation from such activities is not anticipated

**7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	There is a risk of contamination of land and water from accidental spillage of diesel, infectious biomedical waste. However, utmost care will be taken to during transportation, storage and handling of waste and fuels so that they do not cause any impact on the environment
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	The effluent generated during the process will be treated in ETP and the treated water will be reused within the system. Domestic waste will be treated in septic tank.
7.3	By deposition of pollutants emitted to air into the land or into water	No	Major emission from the facility is expected from incinerator and DG sets. Proper pollution control measures and stack height meeting MoEF&CC's guidelines will be provided for proper mitigation/dispersion of pollutants. Hence, chances of contamination of land and water by deposition of pollutants are expected to be insignificant
7.4	From any other sources	No	Risk of contamination of land or water from any other sources is not anticipated
7.5	Is there a risk of long-term buildup of pollutants in the environment from these sources?	Yes	Long term built-up of pollutants in the environment from this project is not expected.

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment**

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or	Yes	Spillage and handling of infectious biomedical waste during collection,

	production of hazardous substances		transportation and handling may lead to health hazard. Storage of plastic waste may pose fire hazard. Adequate steps for firefighting will be taken to control fires in case of emergency. During construction & operation all the workers will be provided with suitable PPE as required under the health & safety norms. Training and awareness about the safety norms will be provided to all the staff.
8.2	From any other causes	Yes	Risk of accidents is envisaged due to mishandling of machinery equipment, and falling from height, slips etc. during construction phase. A disaster management plan will be implemented to avoid such accidents. To deal with minor accidents, first aid facility will be provided at site.
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, Cloudburst etc)?	Yes	The project is in Seismic Zone IV which is a low damage risk zone. The proposed site is in plane area having no risk of land slide. No major water body to cause floods.

**9. 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**

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> <li>• Supporting infrastructure (roads, power supply, waste or wastewater treatment, etc.)</li> <li>• housing development</li> <li>• extractive industries</li> <li>• supply industries</li> <li>• other</li> </ul>	Yes	As a positive impact, supporting infrastructure facilities will come up in the surrounding areas once the project will be established. No housing development is expected as the project will engage local people for its operations. The project will not lead to development of any extractive industries.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	No such planning has been considered
9.3	Set a precedent for later developments	No	The project will set an example for better waste management.

9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	Nil
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### (III) Environmental Sensitivity

S. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	-
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes	Hooghly River – 6 Km in NE.
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	-
4	Inland, coastal, marine or underground waters	Yes	Hooghly River – 6 Km in NE. Sheeal Lake Bird Watching Area, 8 Km, ESE
5	State, National boundaries	No	-
6	Routes or facilities used by the public for Access to recreation or other tourist, pilgrim areas	No	Nil
7	Defense installations	No	Nil
8	Densely populated or built-up area	Yes	Manigram Village is 2.5 Km in ESE.
9	Areas occupied by sensitive man-made land uses ( <i>hospitals, schools, places of worship, community facilities</i> )	Yes	Manigram Hospital- 2.40 Km,ESE. Manigram High School - 2.50, ESE. Bidhan Chandra College-7.8, Km. Basanti Narayan Mandir- 2.79 Km, ESE. Jumma Masjid- 3.11 Km, ESE.
10	Areas containing important, high quality or scarce resources. ( <i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i> )	No	Sheeal Lake Bird Watching Area, 8 Km , ESE
11	Areas already subjected to pollution or environmental damage. ( <i>those where existing legal environmental standards are</i>	No	--

	<i>exceeded)</i>		
12	Areas susceptible to natural hazard which could cause the project to present environmental problems ( <i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i> )	No	The region lies in the seismic zone IV. No hazard is expected.

**PROPOSED TERMS OF REFERENCE: Provided in the additional documents.**

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be my risk and cost".



(Authorized Signatory)

SNG Envirosolutions Private Limited

**NOTE:**

1. The Projects involving clearance under Coastal Regulation Zone Notification, 1991 shall submit with the application a C.R.Z map duly demarcated by one of the authorized agencies, showing the project activities, w.r.t. C.R.Z. (at the stage of TOR) and the recommendations of the state Coastal Zone management Authority (at the stage of EC). Simultaneous action shall also be taken to obtain the requisite clearance under the provisions of the C.R.Z. Notification, 1991 for the activities to be located in the CRZ.
2. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon (at the stage of EC)."
3. All correspondence with the Ministry of Environment & Forests including submission of application for TOR/ Environmental Clearance, subsequent clarifications, as may be required from time to time, participation in the EAC Meeting on behalf of the project proponent shall be made by the authorized signatory only. The authorized signatory should also submit a document in support of his claim of being an authorized signatory for the specific project".