HARYANA STATE POLLUTION CONTROL BOARD
C-11 Sector-6, Panchkula
Ph – 0172- 577870-73, Fax No. 2581201
E-mail- hspcbho@gmail.com
Website: hspcb.gov.in

Date: 22/11/2022

To

The Secretary,
Impact Assessment division –III Section
Minister of environment forest and climate change (MoEF) ,
India Paryavaran Bhavan,
Vayu Wing, 3rd floor, Aliganj
Jor Bagh Road, New Delhi110003

Sub: Proceedings of Public Hearing for Project requiring clearance under Environmental Impact Assessment Notification, 14 September, 2006 (as amended) for "Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana" held on 23/08/2022 at 11:00 AM.

Kindly refer to reference No. 21-51/2021-IA-III dated 19.07.2021 on the subject noted above.

Please find enclosed herewith the proceeding of the public hearing conducted on 23.08.2022 under the provisions of EIA Notification dated 14.09.2006 for proposed project requiring environment clearance for Installation of a Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana" held on 23/08/2022 at 11:00 AM forwarded by Regional Officer, Panipat Region, Haryana State Pollution Control Board vide letter dated 12.09.2022 alongwith attendance sheet, CD, photographs and other relevant documents for information and further necessary action.

DA/as above.

Sr.EE (PLG)
For Member
Secretary

Endst. No. **Date:**

A copy of above alongwith copy of proceeding with attendance sheet is forwarded to following for information and further necessary action please:-
.

1. The Member Secretary, SEIAA, Bays No. 55 - 58, Prayatan Bhawan, 1st floor, Sector 2, Panchkula.

2. The Additional Chief Secretary to Govt. Haryana, Environment Department, Chandigarh.
3. The Director, Environment Department, Haryana.
4. The Deputy Commissioner, Panipat.
5. The Chairman, Zila Parishad, Panipat.
6. Municipal Corporation, Panipat
7. Regional Officer, Panipat Region. He is requested to send the copy of proceedings to all the concerned Village Panchayat for displaying in the same their offices.
8. PS to Chairman.
9. PA to Member Secretary.
10. Nodal Officer-IT for uploading the proceeding on the website of the Board.
11. M/s Sanitary Landfill at Village Nimbri, Panipat.

DA/Copy of Proceeding

Sr.EE (PLG)
For Member
Secretary

Signed by Bhupender Singh Rinwa
Date: 22-11-2022 13:34:39
Reason: Approved

2336828/2022/REGION PANIPAT

HARYANA STATE POLLUTION CONTROL BOARD
SCO No.55, SECTOR-25, HUDA, PANIPAT
Ph. – (0180) 2672037, Telefax – 2664951, E-mail: hspcbropr@gmail.com

No. HSPCB/PR/2022/624 Dated: 12/09/2022

To

The Chairman,
Haryana State Pollution Control Board,
Panchkula.

Kind Attn: SEE (Planning Cell)(HQ)

Sub: Proceedings of Public Hearing for Project requiring clearance under Environmental Impact Assessment Notification, 14 September, 2006 (as amended) for "Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana" held on 23/08/2022 at 11:00 AM.

In this connection, please find enclosed herewith the copy of Proceedings of Public Hearing for Environmental Clearance for "Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana" held on 23/08/2022 at 11:00 AM.

It is submitted for your kind information and further necessary action please.

DA/
1. Copy of attendance sheet of public present during the hearing.
2. Copy of attendance sheet of officers present during the hearing.
3. Soft copy (CD) of proceedings of hearing.
4. Photographs of the hearing.
5. Approved copy of proceeding of hearing by Ld. DC, Panipat.

KAMALJIT SINGH
Digitally signed by KAMALJIT SINGH
Date: 2022.09.12 13:49:22 +05'30'
Regional Officer
Panipat Region

2336828/2022/REGION PANIPAT

Proceedings of the Public Hearing for Project requiring clearance under Environmental Impact Assessment Notification, 14th September, 2006 (as amended) for Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of "Sanitary Landfill" at Village at Village Nimbri, Panipat Haryana by Municipal Corporation Panipat on 23/08/2022 at 11:00 AM.

Please find enclosed herewith the Proceedings of the Public Hearing for Project requiring clearance under Environmental Impact Assessment Notification, 14th September, 2006 (as amended) for Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of "Sanitary Landfill" at Village at Village Nimbri, Panipat Haryana by Municipal Corporation Panipat, for kind approval please.

Regional Officer, HSPCB

Ld Deputy Commissioner, Panipat

R.O HSPCB

2336828/2022/REGION PANIPAT

Proceedings of the Public Hearing

Proceedings of the Public Hearing for Project requiring clearance under Environmental Impact Assessment Notification, 14 September, 2006 (as amended Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of "Sanitary Landfill" at Village at Village Nimbri, Panipat Haryana by Municipal Corporation Panipat on 23/08/2022 at 11:00 AM.

The above project is required to obtain the Environmental Clearance as this project is covered under amended EIA Notification dated 14th September, 2006 of the Ministry of Environment and Forest, Govt. of India, New Delhi. The project proponents have applied for the Environmental Clearance to MoEF&CC, Government of India and requested to conduct a public hearing. In this regard, an advertisement regarding public hearing notice for publication in leading Hindi Newspaper was published by Haryana State Pollution Control Board. The public hearing was conducted on dated 23/08/2022 under the chairmanship of Sh. Sushil Sarwan, IAS, Deputy Commissioner, Panipat, Haryana and alongwith other officers from respective departments. The attendance sheets of the officers and general public who attended the above said hearing are enclosed as Annexure-**A & B**. The CDs of videography of the entire public hearing are enclosed as **Annexure-C**.

The following officers were present in the public hearing meeting.

1. Sh. Sushil Sarwan, IAS, Deputy Commissioner, Panipat
2. Sh. Kamaljit Singh, Regional Officer, HSPCB, Panipat
3. Sh. Kuldeep Singh, AEE, HSPCB, Panipat
4. Sh. Virender Singh, RFO, Samalkha, Panipat
5. Sh. Deepak Rana, AE, Municipal Corporation, Panipat
6. Sh. Surender Singh, BFO, Bapoli, Panipat
7. Sh. Raj Singh, BFO, Samalkha, Panipat
8. Ms. Renu Bala, IEO O/o DIC, Panipat

Sh. Kamaljit Singh, Regional Officer, Haryana State pollution Control Board, Panipat welcomed the Deputy Commissioner, Panipat with all other officers & general public present during the hearing and thereafter sought permission from the Chairman to start the Public Hearing. He briefed about the EIA notification dated 14.09.2006 and process of Public Hearing. He also requested the public to speak one by one and put up their question after the presentation of project and assured the public that their questions will be answered by the Project Proponents. Thereafter he asked the Project Proponent to give presentation of project.

Environmental Consultant, Dr. Dharna Tiwari explained about the proposed Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of "Sanitary Landfill" project as detailed below:

Municipal Corporation the "Authority" intends for Implementation of Remediation and construction, operation and maintenance of Sanitary Landfill at the Village Nimbri Panipat Dumpsite ("Sanitary Landfill Site"). As per the current estimates (2021) of the Municipal Corporation Panipat, about 400 tons of solid waste is generated daily in Panipat. The main solid waste generation sources are residential, commercial and institutional establishments, vegetable and meat markets, hospitals, hotels and restaurants, and construction and demolition waste (debris). Due to a large number of small-scale industrial units in the town, industrial solid waste also enters illegally into municipal stream.

1.1 SALIENT FEATURES

Table E-1:

S. No.	Particulars	Details
1.	Land Area	12.77 Acres (8.7-acre Processing + 4-acre private land)
2.	Power Requirement	Operation Phase: 49 KW - UHBVN
3.	Water Requirement	20 KLD
4.	Total Waste Generation	400 TPD
5.	Project Cost	28 Crore

1.2 PROJECT LOCATION AND BRIEF DESCRIPTION

The site is close to Sanoli Road site towards South direction. The nearest railway station is Panipat Junction 7.06 Km in West direction. Karnal Airport – 36.53 km in North direction is the nearest airport. The location map is shown in **Figure E.1**:

Figure E- 1: Location of the Project

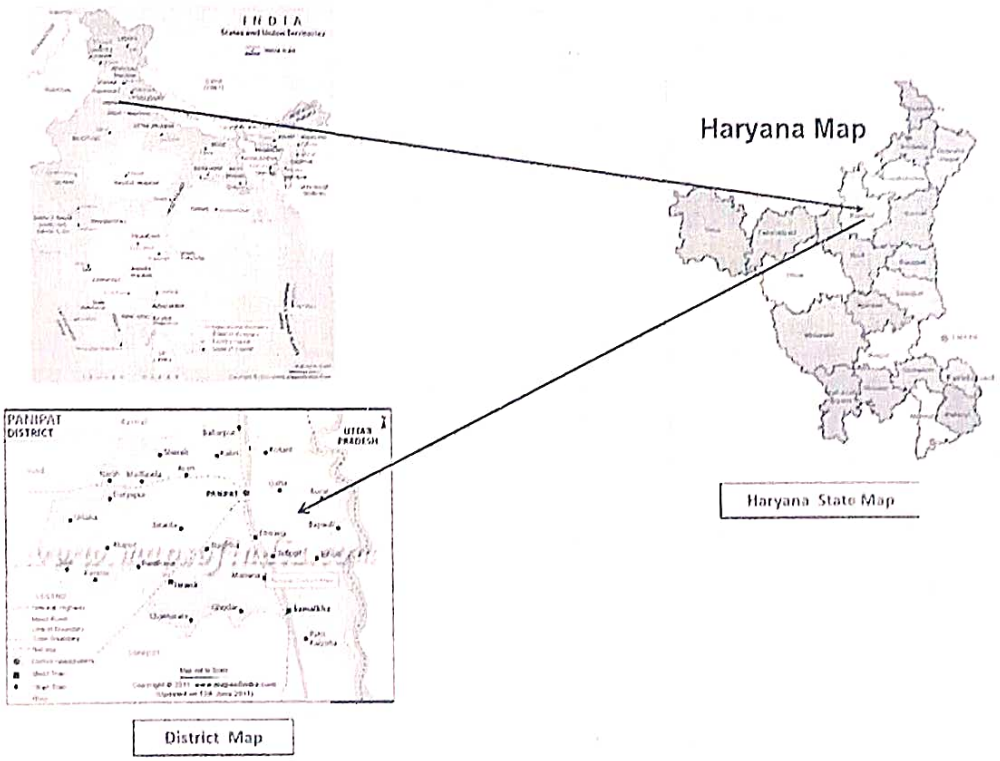

Table E-2: Brief Description of the Project

S. No.	Particulars	Remediation and Reclamation of Existing Dumpsite and construction, operation and maintenance of Sanitary Landfill at Village Nimbri Panipat Dumpsite
A.	**Nature of the Project**	**Size of the Project**
	Remediation and Reclamation of Existing Dumpsite	**12.77 Acre** (8.7 acre Processing +4 acre private land)
B	**Location Details**	

1.	Village	Nimbri
2.	Tehsil	Panipat
3.	District	Panipat
4.	State	Haryana
5.	Latitude & Longitude	

Coordinates Points	Latitude	Longitude
1.	29°22'58.72"N	77° 2'12.58"E
2.	29°22'58.77"N	77° 2'15.29"E
3.	29°22'44.30"N	77° 2'14.60"E
4.	29°22'44.29"N	77° 2'12.52"E
5.	29°22'45.58"N	77° 2'12.49"E
6.	29°22'45.64"N	77° 2'10.81"E
7.	29°22'57.29"N	77° 2'10.07"E
8.	29°22'57.31"N	77° 2'12.52"E

6.	Toposheet No.	H 43 Q15, H 43 R3
C	**Environmental Settings of the Area**	
1.	Ecological Sensitive Areas	No
2.	River / water body	

River/ water body	Distance	Direction
-	-	-

3.	Nearest Town / City	Panipat City – 5 Km in West direction
4.	Nearest Railway Station	Panipat Junction – 7.06 Km in West direction.
5.	Nearest Airport	Karnal Airport – 36.53 km in North direction.
6.	State Boundary	NH-1 (Delhi-Amritsar Road) 6.30 Km in West direction
7.	Seismic Zone	Zone – IV
D	**Cost Details**	
1.	Total Project Cost	28 crores
E	**Requirements of the Project**	
1.	Water Requirement	20 KLD
2.	Man Power Requirement (Skilled and unskilled persons)	Approx. 10-12

E.1.1.1 Purpose of the Report

The Environmental Impact Assessment has been prepared to assess the current environmental scenario of the area. The main objective of the proposed municipal solid waste processing is to collect 100% of MSW generated in the area limits and dispose of the same through scientific process. Management of Solid Wastes is of growing concern to the general public at large, local authorities and business communities in cities and towns across India. The problem is exacerbating in urban areas due to rapid strides in population growth, coupled with an economic boom that encourages the consumption of goods and, hence, wastes generation. The Government

of India has taken several initiatives to improve the existing Solid Waste Management practices in the Country. In short, the objective of the project is to introduce appropriate technologies for management of MSW so as to prevent the waste from causing pollution and health hazards. The EMP has been prepared with a view to ultimately ensure that the adverse impacts are minimized. As per the EIA Notification dated 14th September 2006, it is mandatory to have the Environmental Clearance for any new/existing / expansion or modernization of the project from Ministry of Environment, Forests & Climate Change, Government of India, New Delhi / SEIAA. The proposed project is categorized under Item "7(i) Common Municipal Solid Waste Management Facility (CMSWMF)" in the EIA Notification, dated September 14, 2006 and its amendments. Recently, Hon'ble NGT alarmed that due to incremental growth of Municipal Solid Waste (MSW), these MSW dumps are converting into virtual mountains. Hon'ble NGT further directed that every city/town should adhere to clause 'J' of Schedule–I of SWM Rules, 2016. Finally, Hon'ble NGT directed CPCB to propose Standard Operating Processing (SOP) for implementation of Bio-mining and Bio-remediation of legacy solid waste. As per the NGT orders, it is clearly mentioned on Page No. 2" legacy waste is causing huge damage to environment, so NGT said in their orders to facilitate each and every municipality to arrange a concrete and appropriate management of legacy remediations" NGT mentioned clearly to made best efforts to complete the work of bioremediation of legacy waste up to the date fixed by this Hon'ble NGT i.e., 07.04.2021.

E.1.1.2 SIZE OR MAGNITUDE OF OPERATION (INCL. ASSOCIATED ACTIVITIES REQUIRED BY OR FOR THE PROJECT)

E.1.1.3 Size & Nature of deposit

The proposed project is for maintenance of Sanitary landfill facility of 400 TPD of SWM in an area of 12.77 Acres for approx 1 years. This is to meet the temporary volume requirement. The Government of India has notified the Solid Waste Management Rules (SWM) Rules, 2016 for proper and effective management of municipal solid waste (MSW). Under the SWM Rules, 2016, provisions have been made to manage old dumps of MSW, which will be followed for the proposed project.

Current Scenario of municipal solid waste management as per the current estimates (2021) of the PMC, about 400 tons of solid waste is generated daily in Panipat. The main solid waste generation sources are residential, commercial and institutional establishments, vegetable and meat markets, hospitals, hotels and restaurants, and construction and demolition waste (debris). Due to a large number of small-scale industrial units in the town, industrial solid waste also enters illegally into municipal stream.

Table E- 3: WASTE GENERATION DETAILS

Description	Waste Generation approx.	Unit

Residential	216	TPD
Food market	45	TPD
Commercial	89	TPD
Religious Place	10	TPD
Street sweeping	40	TPD
Total Waste Generation	400	TPD

E.1.1.4 Project Description with Project Details

Excavate the existing mixed compacted garbage and sieve the waste through mechanical sieving machines/ any other equipment. Necessary steps and processes shall be taken to minimize environmental pollution while carrying out remediation/ reclamation of legacy waste at the Nimbri Dumpsite. The reasonable steps shall be taken to ensure that there is control of odour, dust and treatment generated leachate, flies, rodents and bird menace and fire hazards in and around the Nimbri Dumpsite during the period of reclamation. The processing of the Legacy Waste in accordance with CPCB guidelines for handling Legacy Waste along with SWM Rules 2016 (as amended time to time). The mechanical segregation and compost recovering facility shall be set up at the existing dumpsite. There shall be set up of a processing system flexible enough and convenient for segregation of dumped material; Segregate the excavated garbage in the land portion earmarked. Maximize the separation of recyclables viz. glass, metal etc. from the Nimbri Dumpsite. Maximize the separation of components for generation of Refuse Derived Fuel ("RDF") from the Nimbri Dumpsite. Provide on-site storage facility for various fractions of processed Waste. The reasonable endeavours shall be made to maximize the utilization of the Waste from the Nimbri Dumpsite and for this purpose shall ensure that at least 80% of the Waste will be utilized / reused so as to produce products/outputs such as soil enricher/compost, recyclables, RDF and products from construction and demolition waste. There is availability of proper MOU with pre-processing outputs such as RDF.

There is target to generate compost from the biodegradable component of the Waste at the Nimbri Dumpsite. While reclaiming and excavating MSW from the present open dumpsite following aspects must be handled carefully like exposure to hazardous material, leachate, gases, odour etc., contaminated wastes that shall be uncovered during reclamation operations require special handling and disposal requirements, precautions must be taken while excavating as it releases gases like methane, Sulphur dioxide and other gases which causes explosion and fire.

There shall be minimizing the disposal of inert/processing rejects and maximize the usage of such inert waste including but not limited to making of curb side blocks, filling of low-lying areas, construction of roads etc. There shall be for creation and maintenance of infrastructure, facilities and amenities for sieving the excavated garbage and storing the segregated materials etc. at their own risk and cost. There shall be adequate number of processing machines for achieving its daily target so as to achieve the total reclamation of land based on the estimated quantum of waste at Nimbri Dumpsite. There shall be the provision of weighbridge to measure the quantity of various components of waste at dumpsite, processed in terms of sorting and segregated materials, RDF, compost material, and inserts going out of the Nimbri Dumpsite. Leveling of the earth surface shall be carried out by bulldozers or any other earth moving equipment. There shall be deployment of the necessary manpower, materials, equipment, tools and construction of plants and sheds and creation of facilities for handling, separating, segregating and storing for the operation of the plant. Legacy C&D waste during excavation, sorting/segregation and final disposal of such legacy C&D Waste shall be used for various useful purpose in the proposed Sanitary Landfill project. The alternate uses for C&D waste as per the C&D Waste Rules, 2016 shall also be found.

Hazardous waste such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive waste, if found, during excavation, sorting or segregation shall be handled as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. There shall be proper handover of any domestic hazardous waste/ biomedical waste if found during excavation, sorting/segregation to the nearest biomedical/ hazardous waste facility.

This waste shall be handled as per Biomedical Waste Management Rules, 2016. The process flow chart for the same is given in **Figure E -2**

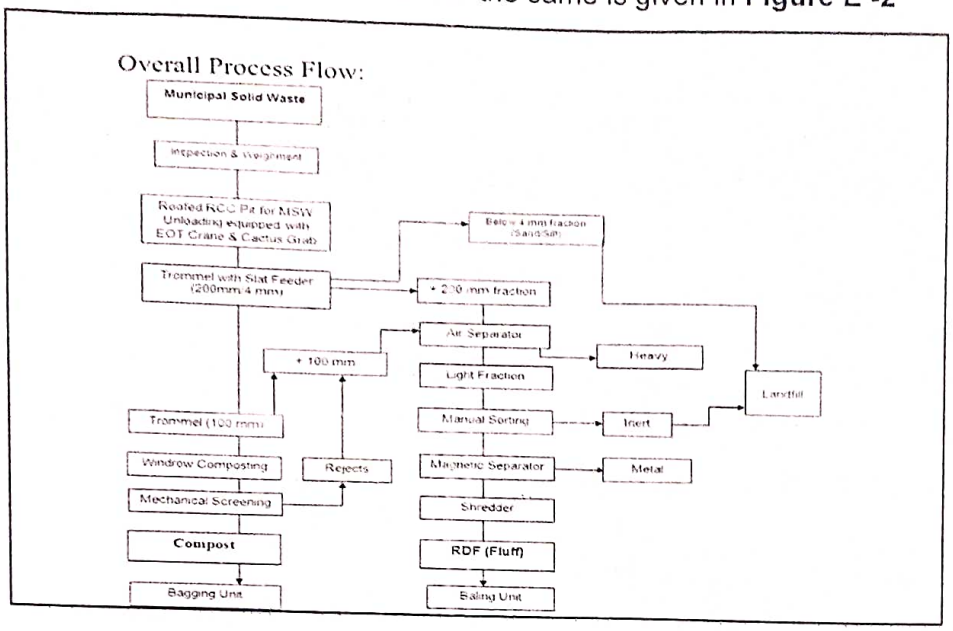

Figure E- 2: PROCESS FLOW CHART

E.1.1.5 BIO-REMEDIATION & BIO-MINING OF OLD MUNICIPAL DUMPSITES:

It refers to the excavation of old dumped waste and make windrow of legacy waste thereafter stabilization of the waste through bio-remediation i.e. exposure of all the waste to air along with use of composting bio-cultures, i.e. screening of the stabilized waste to recover all 11 valuable resources (like organic fines, bricks, stones, plastics, metals, clothes, rags etc.) followed by its sustainable management through recycling, co-processing, road making etc.

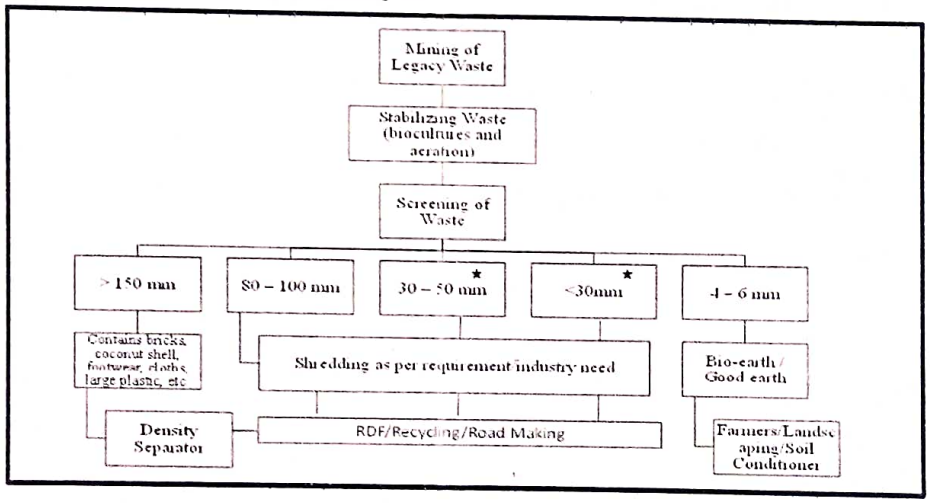

Figure E- 3: OVERVIEW OF BIO REMEDIATION AND BIO MINING OF LEGACY WASTE

E.1.1.6 TREATMENT PROCESS OF LEGACY WASTE

- Local Body (LB) shall make a time bound plan to execute the bio-mining

process.

- Volume of waste to be determined through contour survey (Total Station Survey) and site measurements.
- Initial Contour level survey of the site has been done and Final Contour level survey of the site shall be done at the completion of work.
- Initial baseline survey has been done.
- Sprinkle the newly exposed surfaces with a composting bio culture solution.
- Usually, the top layer has several materials in the active biological state. This layer shall be stabilised through composting bio-cultures, as well as herbal/biological sanitizers if found necessary for odour control.
- Waste pickers or labour shall be manually pick out bulky waste.
- Local turning of these windrow heaps once a week shall be done until no more volume reduction is observed in the heaps and no more heat is generated.
- Trommels and/or Horizontal Screens or other types of screens for the purpose of screening shall be used.
- The recyclables recovered from the bio-mining process shall be sent for recycling as per the quality of the material.
- Non-Recyclable plastic material shall be sent for road making or to RDF units or cement plants.
- The recovered earthy fines shall preferably be used for landscaping or gardening or road medians within the Local Body or the site.
- The recyclables like plastic, glass, metals, rags and cloth recovered from the waste during screening shall be sorted out and preferably cleaned before sending to recycling industries or as RDF.
- The heavy fractions may be sand and gravel usable for road shoulders or for plinth filling.
- There may be some (maximum 20% of total) left over waste including lumps of heterogeneous nature. The waste may be soaked with leachate or hard and difficult to disintegrate. This waste shall be sent to scientific landfill for disposal (near zero residues).

E.1.1.7 UTILITIES

Man power requirement

Adequate manpower (10-12) is required to ensure that the site is constructed and operated successfully. The staff employed shall be sufficiently trained, competent and adequately supervised, to ensure efficient functioning of the plant.

Water requirement

The source of water supply is hired tankers and during operation phase total water requirement will be 20 KLD.

Table E-4: WATER BREAK UP

Processing consumption	15
Water consumption for labour	0.5
Horticulture	4.5
Total	20 LD

E.1.1.8 HEALTH AND SAFETY

The landfill management should be responsible for all aspects of site safety, including public safety in areas adjoining the site. The safety officer of the operator should also be responsible for the health and safety of landfill staff. Following are the tasks involved.

- Maximum traffic speed should be 20 kilometers per hour (km/h).
- Every person working at the landfill should have a yearly medical examination.
- No one should be allowed to operate at the landfill without a mobile communication system (either radio or mobile telephone).
- Smoking should be prohibited except in designated smoking areas.
- Ingestion of food is restricted outside designated areas.
- The workers have to be equipped with the following personal protection equipment like gum boots, helmets, ear protective etc.
- The landfill workers should be trained in first aid, so that they themselves can properly provide first aid.
- Fire Prevention measures like banning smoking, ban on using mobile etc. Fire controlling equipment should be available on site.

E.1.1.9 First Aid

The landfill workers should be trained in first aid, so that they themselves can properly provide first aid. Considering the specific conditions at a sanitary landfill, it is strongly recommended that landfill staff working on a regular basis be trained on first aid.

E.1.1.10 ENVIRONMENTAL BASELINE STUDY

Various environmental factors as existing in the study area which are liable to be affected by the activities have been assessed both quantitatively and qualitatively. Baseline environmental data generation of study area was carried out during the period from Oct. to Dec., 2021.

- Water Environment (surface and ground water)
- Air Environment
- Noise Environment
- Biological Environment
- Socio- Economic Environment

1.4.8.1 WATER ENVIRONMENT

In order to conduct EIA Studies, baseline data pertaining to water environment of the proposed project was carried out evaluating the basic

characteristics, drainage pattern, and hydrology. Water Environment of the area has been studied by locating ground water sources.

Conclusion:

The analysis results of **ground water** indicates that the pH value is 6.96 to 7.88 which is well within the specified standard of 6.5 to 8.5. The TDS was observed as 610 to 880 mg/l. The chlorides were found as 8 to 64 mg/l. The sulphate was found as 8.8 to 37.9 mg/l. It is observed that sulphate is within limits. Total hardness ranges between 180 to 500 mg/l. Metals: Iron is found in between 0.07 -0.26 mg/l.

The analysis results of **surface water** indicate that the pH value is 6.78 to 6.98 which is well within the specified standard of 6.5 to 8.5. The TDS was observed as 540 to 560 mg/l. The chlorides were found as 18 to 19 mg/l. The sulphate was found as 23.7 to 28.8 mg/l. It is observed that sulphate is within limits; Metals: Iron is found in between 0.12 -0.14 mg/l.

1.4.8.2 AIR ENVIRONMENT

- Ambient Air Quality Monitoring reveals that the minimum and maximum concentrations of PM10 for all the 10 Air Quality monitoring stations were found to be 87.2 $\mu g/m^3$ and 343.4 $\mu g/m^3$ respectively, while for PM2.5 varies between 46.5 $\mu g/m^3$ and 89.6 $\mu g/m^3$.
- As far as the gaseous pollutants SO2, NO2, & CO are concerned, the prescribed limits under NAAQ Standards for residential and rural areas has not exceeded at any station.
- The minimum and maximum concentrations of NO2 were found to be 11.3 $\mu g/m^3$ and 54.2 $\mu g/m^3$ respectively.
- The minimum and maximum concentrations of SO2 were found to be 5.2 $\mu g/m^3$ and 24.3 $\mu g/m^3$ respectively.
- The minimum and maximum concentrations of CO were found to be 0.526 mg/m^3 and 1.978 mg/m^3 respectively.

Conclusion

From the baseline monitoring result, it is observed that the monitored parameters (PM10, PM2.5, SO2, NO2,) are within the permissible limits as per NAAQS, 2009 during the study period.

1.4.8.3 NOISE ENVIRONMENT

The day noise levels have been monitored during 6.00 am to 10.00 pm and night noise levels during 10.00 pm to 6.00 am, at all the 10 locations covered in 10 km radius of the study area.

The noise levels are found to be 51.5-67.7dB (A) and 46.9-62.6 7dB (A) for day and night time respectively.

The high levels of noise in day for project site can be attributed due to construction and operation and vehicular activities.

The noise levels at all location are well below the NAAQS standards.

BIOLOGICAL ENVIRONMENT

The biological study of the area has been conducted in order to understand the ecological status of the existing flora and fauna to generate baseline information and evaluate the probable impacts on the biological environment. There is no Bio-sphere Reserve, National Parks, Wildlife Sanctuary, Tiger Reserve and Elephant Reserve within 10 km radius of the project site.

SOCIO- ECONOMIC ENVIRONMENT

- Based on the interpretation made above, primary survey (interaction with stakeholders, FGD, community consultation and discussion with an influential person of the study area) and secondary sources, the significant observations and gap in the study area poor sanitation and improper drainage system. Sanitation employment and medical facilities are substantial problems seen in the study area.
- The Livelihood of most people in the study area depends on labor work, Agriculture, cattle rearing and jobs. Tap water, tube well, hand pump and wells are the sources of drinking water in the study area. In India, rural areas also have the highest overall burden of coronavirus (Covid-19) epidemic, and the study area also has been reported in general cases of cough and fever.
- The people have a mixed opinion about the new proposed project. People want employment for local people in the industry. CER activities carried out in village development through the industry. According to villagers, the industry will take proper action to air, water, and noise and land pollution.
- The socio-economic study revealed that the youth in the project area is devoid of employment opportunities. They can be a potential source of workers with minimum handholding and vocational education skills, hence Youth empowerment programs through awareness creation about various government schemes, providing appropriate opportunities with relevance to their qualification and skills, conducting skills inculcating programs etc.

E.1.1.11 RISK ANALYSIS

The principal objective of the risk assessment study is to identify and quantify the major hazards and the risk associated with various operations of the proposed project, which may lead to emergency consequences (disasters) affecting the public safety and health. All necessary measures to minimize the risk due to the proposed project will be taken during design stage and also during operation period viz. fire & safety control measures, Emergency preparedness plan, disaster management plan, etc.

E.1.1.12 ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan (EMP) is required to ensure sustainable development in the area of the proposed project site. Hence, it needs proper Environmental Management Plan (EMP) to meet these objectives. The purpose of the Environmental Management Plan is to minimize the potential environmental impacts from the project and to mitigate the adverse impacts. Details of Environment Management Plan are given below-

Table E-5: MITIGATION MEASURE PROPOSED DURING OPERATION PERIOD

S. No.	Component	Potential impact identified	Suggested Management Plan
1.	Ambient Air Quality	Vehicular emissions Dust and particulates Emissions Gas emission.	❖ Internal roads will be concreted / asphalted to reduce dust emissions; ❖ Thick green belt will be provided along the internal roads and plant boundary which will limit the spread of dust and odour; ❖ Proper gas management plan. ❖ Post closure monitoring of ambient air quality at site should be undertaken as per the requirements of SWM Rules, 2016.
2.	Soil Quality	Contamination of soil due to Leachate. Spillage from used oil from DG set	❖ Design parameters for facility already include impermeable concrete windrow pad, drainage network, leachate collection and treatment system. ❖ Ensure that the surface runoff from paved areas is collected in storm water drains and does not flow to landscaped areas; ❖ It is recommended that the closed landfill should have provisions for HDPE Liner beneath it to check leachate percolation into soil and ground water.

3.	Ambient Noise Quality	Potential increase in noise levels in adjoining areas due operating equipment's. Impact on avifaunal species due to increased noise	❖ Acoustic enclosures, rubber paddings and linings will be provided for all noise producing equipment's such as shredders, DG sets etc. ❖ Proper plantation will be done in barrier of project site. ❖ Proper maintenance of machineries such as diesel and exhausts silencers, lubrication of conveyer trolleys, etc. ❖ Working hours of the workers employed in high noise areas will be rotated; ❖ Earplugs/muffs, or other hearing protective wear will be provided to those working very close to the noise generating machinery; ❖ Periodic monitoring of noise levels on site and at nearby receptors will be carried out to ensure compliance with Noise Pollution (Regulation & Control) Rules 2000.
4.	Water Resources and Quality	Fresh water demand of the Project. Inadequate management of Storm water. Leachate generation from windrows compost pads, mixed waste storage pits and closed landfill.	❖ Recycling and reuse of leachate will be carried out to minimize freshwater requirement. ❖ Provisions to be made for rainwater harvesting from rooftop, paved areas and landscaping areas. ❖ Leachate from the waste tipping areas will be collected separately and conveyed via leachate collection drain up to leachate collection sump ❖ Quality of groundwater should be monitored and analyzed against IS 10500 standards for drinking water prior to use.
5.	Traffic & Transport	Increase in traffic volume	❖ A proper traffic management plan will be implemented to mitigate adverse impacts, if any on existing traffic and transport scenario.

6.	Ecology	Disturbance to local birds and small mammals in the adjoining areas.	❖ A green belt will be developed along the periphery of the proposed project which will limit noise reaching outside the project boundary and provide habitat to small birds and mammals; ❖ Native species and healthy seedlings will be planted filled with topsoil; ❖ Attempts will be made to ensure that all open spaces, where tree plantation may not be possible, will be covered with shrubs and grass to prevent erosion of topsoil.
7.	Socioeconomic aspect	Disturbance to community due to increased noise levels, odour, air emissions and traffic. More employment Opportunities Formalization of rag pickers Participatory role of Residents Improve aesthetics of area	❖ Legacy of waste shall be managed properly which will greatly reduce foul smell and reduce impact from odours. ❖ Vehicles/ trucks moving through community roads will be covered and the operations will be restricted to day time. ❖ Maximum efforts will be made to provide job opportunities to local residents during construction and operation phase. ❖ Awareness campaigns to be organized emphasizing the need of sorting at source, waste collection and participatory role of residents in waste management in an area.

E.1.1.13 CER ACTIVITIES (CORPORATE ENVIRONMENTAL RESPONSIBILITY)

Table E-6: CER ACTION PLAN

Cost of Proposed Project: 28 Crores.; Cost of the (at least 2.00 % of the project cost): 56 Lacs

S No.	Activity	Capital cost in lacs/Year
1.	Drinking water supply sanitation	20

2.	Health Education	10
3.	Plantation in community areas	4
4.	Education welfare: scholarship for students in nearby govt. school	2
5.	Medical/ Health Camp: organize health check-up camps	10
6.	Area development: provide assistance to nearby village panchayat for area development.	10
Total		56

*Note 1: CER Cost as per O.M. F No. 22-65 / 2017- IA III (CER Regarding)

E.1.1.14 ENVIRONMENT MONITORING PLAN

The major construction activities involved in setting up the unit are construction of sheds for treatment units, major components in the industry are landfill. The construction activities require mobilization of construction material and equipment. The construction activities are expected to last for few months.

During construction phase of landfill at every stage quality of construction will be monitored viz. base preparation, liners quality, drainage layers, leachate collectionsystem, storm water management system, gas vent systems, etc.

Table E-7: ENVIRONMENTAL MEASURES DURING OPERATION PHASE

S. No.	Potential Impact	Detailed Action to be Followed as per EMP	Parameters for Monitoring	Frequency of Monitoring
1)	Air Emissions	Gas quality from landfill areas	VOC, H2S	As per CTE norms given by SPCB or EC norms given by MoEF & CC and CPCB protocol.
		Stack emissions from DG sets	As per CTE conditions PM, SO2, NOx	
		AAQ within the Project premises.	As per CTE conditions / NAAQ Standards	
		All vehicles to be PUC Certificate.	Vehicle logs to be maintained	
		Meteorological data	Wind speed, direction, temp., relative Humidity and rainfall.	
2)	Noise	Noise generated from operations to be monitored	Spot noise level recording	Periodic during operation phase Once in month by third party

3)	Wastewater Discharge (leachate)	Compliance to wastewater discharge standards	pH, TSS, TDS, BOD, COD and Oil & grease (heavy metals if required)	Daily at regular intervals Once in a month by third party
4)	Solid waste/Hazardous Waste	Check compliance to SWM rules	Quality & quantity monitoring	Periodically /CPCB norms.
5)	Ground Water Quality	Monitoring ground water quality, through piezometers	As per CPCB guidelines	Periodically & as Per CPCB norms.
6)	Flora and Fauna	Vegetation, greenbelt / green cover development	No. of plants, species	Once a year
7)	Soil quality	Checking & Maintenance of good soil quality around	Physico chemical parameters and Metals.	Once a year
8)	Health	Employees and migrant labour health check ups	All relevant parameters (BP, HIV, Chest X-ray, Eye vision, etc.) and HIV for workers	Regular check-ups as per Factories act.

After the completion of Presentation by Environmental Consultant Regional Officer, HSPCB asked the general public to raise their Queries/ suggestion which are given as below:

S. No.	Name	Village	Question	Reply
1	Sh. Jagbir Malik	Ex. Sarpanch Nimbri	The dumping site was made in the year 2010 and till now no work has been done. Regularly ground water is getting contaminated. There is also the presence of smoke. If the waste will be treated properly then it'll be very good for the villagers.	Consultant replied that the top and bottom liners shall be in accordance with the minimum requirement stated in the SWM rules 2016. The liner system will avoid leachate from entering into the groundwater. A dense green belt with fast growing floral species as recommended by CPCB with climatological adaptability shall be developed along the periphery of the landfill site. ❖ The important dust suppression measures proposed will be regular water sprinkling on main haul roads in the project area.
2	Sh. Kamaljit Singh,	Regional Officer, HSPCB, Panipat	What measures shall be taken to control seepage and leakage on rainy days	Consultant replied that Provisions for diversion of storm water Discharge drains shall be made to minimise leachate

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				generation. For landfill receiving residues of waste processing facilities shall have proper liners.
3	Sh. Kamaljit Singh,	Regional Officer, HSPCB, Panipat	What is the proposal for dust mitigation during working hours.	Trees will be planted under prescribed area which will be cover ~35% of total proposed project area under plantation. Regular sprinkling of water shall be done in the project area to suppress the dust.
4	Sh. Virender	Nimbri	Will the village be safe from the flies and insects which is available due to the presence of waste.	The reasonable steps shall be taken to ensure that there is control of odour, dust and treatment generated leachate, flies, rodents and bird menace in and around the Nimbri Dumpsite. Herbal/biological sanitizers will be sprayed over the waste.

Thereafter, Regional Office, HSPCB, Panipat again appealed to the general public present during the time of hearing to ask any more questions/suggestions w.r.t. the said project. No more question/suggestion asked by the public present during hearing and thereafter public hearing was ended with permission of the chair.

Kuldeep Singh,
AEE, HSPCB

Kamaljit Singh,
Regional Officer, HSPCB

Ld Deputy Commissioner, Panipat

Attendance Sheet for the Officers present during the Public Hearing for Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana on 23/08/2022 at 11:00 AM at project site Village Nimbri, Panipat.

Sr. No.	Name of Officer	Designation	Mob. No.	Signature
1	Ram Bala	TEO	86073-20895	Ram Bala
2	Kamaljit Singh	RO, HSPCB, PNP	9467626808	K
3.	Kuldeep Singh	AEE, HSPCB, PNP	9069000079	
4.	VIRENDER SINGH	R.F.O. Samalkha	98121-41454	
5.	Surender Kumar	BFO Babail	8708178076	
6	Raj Singh	BFO Samalkha	8053435737	Raj Singh
7	Debak Rana	AE, MCP	9728880808	
8.	SUSHIL SARWAN	D.C		

Attendance Sheet for Public present during the Public Hearing for Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana on 23/08/2022 at 11:00 AM at project site Village Nimbri, Panipat.

Sr. No.	Name	Father's Name	Address	Mob. No.	Signature
1	रामचन्द्र	चौकीदार	निम्बरी	9812144714	रामचन्द्र
2	सतीश	सतपाल	निम्बरी	8222083819	सतीश
3	जगबीर मलिक सरपंच	रणजीत	निम्बरी	93018-00004	[illegible]
4	रामशरे	अ-मा	निम्बरी	87088(?)833	
5	Ranbir singh	Prabhu Ram	Nimbri	8839701938	[illegible]
6	राजपाल	जीतराम	निम्बरी	9254447912	
7	Jagdish Ri	Dulichand	Nimbri	98002006(?)	
8	बलवान	लखमीचन्द	निम्बरी		
9	पितांबर	रणजीत	निम्बरी	~~4813583~~ 8053483488	
10	सुरेश	राम प्यारी	निम्बरी	9996059551	
11	[illegible]	दुलिया	निम्बरी	—	
12	Ram Phal	ओमप्रकाश	निम्बरी		
13	Madanlal	दुलीचन्द	निम्बरी	94667-97364	Madan
14	AAsif Ahmad	Gudarsaf	Sanjh Rao	9034964405	
15	Krishan Lal	Sh. Darya Singh	Nimbri	9728507969	K
16	अनिल	बलवीर	निम्बरी	7015145968	
17	धर्मेन्द्र	चन्द्र सिंह	निम्बरी	9050586001	
18	योगेश	सर्वेश्वर कुमार	पानीपत	8295800683	Desuran
19	Sachin	Vikram	~~Hind~~ Panipat	9896383168	Sachin

Attendance Sheet for Public present during the Public Hearing for Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana on 23/08/2022 at 11:00 AM at project site Village Nimbri, Panipat.

Sr. No.	Name	Father's Name	Address	Mob. No.	Signature
20	Raman	Ramniwas	Jind	9306719792	Rma
21	Mandeep	Kuldeep	Nimbri	8950788970	Mandeep
22	देविन्द्र	कर्मसिंह	निम्बरी	9466219914	
23	मुकेश	नरबरदार	निम्बरी	98132-10323	
24	रोहतास	हेमराम	निम्बरी	7056134131	
25	प्रवीन	कुमार	मुन्डी	9650424209	
26	मोहनसिंह	पुरनसिंह	भरतपुर	7297831502	
27	रमेश	आदपुरा मिश्रा	राजपुरा	9873917311	Ramesh
28	अनिल	करण सिंह	निम्बरी	8950297022	
29	Sunil	Ramdia	NIMBRI	921517003	Sunil
30	अशोक	देवानन्द	पानीपत	8813033368	[illegible]
31	Sumit	Sh. Ramesh	पानीपत	8901230345	[illegible]
32	जीतराम	कुडाराम	निम्बरी	9729927888	
33	जगबीर	गार्ड सिंह	निम्बरी	936493103	Jag
34	जसबीर	धर्मा	साई कालोनी	—	
35	विकास	समरचन्द	पानीपत		
36	समोल	सुपरदास	पानीपत	—	
37	हर्ष	फूलचन्द	पानीपत		
38	सोमनाथ	जगिन्द	पानीपत	—	

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Attendance Sheet for Public present during the Public Hearing for Reclamation of existing Dumpsite and construction operation and maintenance of Sanitary Landfill at Village Nimbri, Panipat Dumpsite Haryana on 23/08/2022 at 11:00 AM at project site Village Nimbri, Panipat.

Sr. No.	Name	Father's Name	Address	Mob. No.	Signature
39	पवन	संतलाल	पानीपत	8930726064	
40	बलराज	बलबीर	पानीपत	8053774882	
41	पुखी	शुखपाल	पानीपत	9896932884	
42	सोमवीर	महीपत			
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