



सत्यमेव जयते

File No: 214(I)E&SC/SEIAA/SEAC

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA),
SIKKIM)



Dated 21/03/2024



To,

Shri M T Sherpa
UDD GOVT OF SIKKIM
UDD GANGTOK, EAST SIKKIM , Gangtok, Gangtok, SIKKIM, Near SBI Bank, 737101
gshlmb95@gmail.com

Subject: Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Regional sanitary landfill facility at Mangan, North Sikkim submitted to Ministry vide proposal number SIA/SK/INFRA2/454716/2023 dated 19/12/2023.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO23B3402SK5319193N
(ii) File No.	214(I)E&SC/SEIAA/SEAC
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	7(i) Common Municipal Solid Waste Management Facility (CMSWMF)
(vii) Name of Project	Regional sanitary landfill facility at Mangan, North Sikkim
(viii) Name of Company/Organization	UDD GOVT OF SIKKIM
(ix) Location of Project (District, State)	NORTH DISTRICT, SIKKIM
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	yes
(xiii) Applicability of Specific Conditions	no

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the State Environment Impact Assessment Authority(SEIAA) Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by State Environment Impact Assessment Authority (SEIAA) Appraisal Committee of SEIAA in the meeting held on 12/03/2024. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).
6. The SEIAA, in its meeting held on 12/03/2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).
7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact Assessment Authority (SEIAA) Appraisal Committee hereby decided to grant Terms of Reference for instant proposal of M/s. Shri M T Sherpa under the provisions of EIA Notification, 2006 and as amended thereof.
8. The Ministry reserves the right to stipulate additional conditions, if found necessary.
9. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
10. This issues with the approval of the Competent Authority.

Copy To

1. The PCCF cum Secretary Forest, Forest Secretariat, Government of Sikkim, Deorali, Gangtok, East Sikkim-737102
2. The Secretary to Government of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO complex, Lodhi Road, New Delhi
3. The Secretary, Department of Science, Technology and Environment, Government of Sikkim, Gangtok.
4. The Secretary, Urban Development Department, Government of Sikkim, Gangtok, East Sikkim-737101
5. Regional Officer, Ministry of Environment Forest & Climate Change, Government of Sikkim.
6. The Deputy Commissioner, North Sikkim
7. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi
8. The Member Secretary, Sikkim Pollution Control Board, Government of Sikkim, Gangtok, East Sikkim-737102
9. The Secretary, Sikkim Water Regulation and Development Authority
10. The Chief Town Planner, Department of Town & Country Planning.
11. Monitoring cell, Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003
12. Parivesh portal/Record File.

Annexure 1

Standard Terms of Reference for (Common Municipal Solid Waste Management Facility (CMSWMF))

1. Project Details

S. No	Terms of Reference
1.1	Importance and benefits of the project.

S. No	Terms of Reference
1.2	The project should be designed based on the population projections as by Master Plan and in conformity to the Municipal Solid Waste Management Rules 2006 as amended from time to time.
1.3	Examine and submit details of alternative technologies viz. RDF shall also be evolved.
1.4	Examine and submit details of storm water/leachate collection from the composted area including leachate treatment options proposed.
1.5	Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
1.6	Submit the details of sanitary land fill site, impermeability and whether it would be lined, if so details thereof.
1.7	The EIA would include a separate chapter on the conformity of the proposals to the Municipal Solid Waste Management Rules, 2016 and the Construction and Demolition Waste Management Rules, 2016 including the sitting criteria therein.
1.8	Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
1.9	Details of storage and disposal of pre-processing and post-processing rejects/inerts.
1.10	List of proposed end receivers for the rejects/inerts should be provided. MoUs to be submitted in this regard.
1.11	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.12	NOC from local or nearest airport within 20 km and any flight funnel restrictions.
1.13	The project proponents should consult the Municipal solid waste Management manual of the Ministry of Housing and Urban Affairs, Government of India and draw up project plans accordingly.
1.14	Details of man-power requirement (regular and contract).
1.15	Process description along with major equipment's and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.

2. Land Environment

S. No	Terms of Reference
2.1	Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction

S. No	Terms of Reference
	(summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
2.2	Submit a copy of the land use certificate from the competent authority.
2.3	Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
2.4	A sensitivity analysis of the site shall be carried out as per the CPCB site selection criteria and form part of the EIA report.
2.5	Post project reclamation management program with financial allocation.

3. Environmental Monitoring And Management

S. No	Terms of Reference
3.1	Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
3.2	Examine and submit details of the odour control measures.
3.3	Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socio-economic status, anticipated air and water pollution.
3.4	Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H ₂ S, CH ₄).
3.5	Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
3.6	Examine and submit the details of impact on environmental sensitive areas.
3.7	A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
3.8	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

4. Water Environment

S. No	Terms of Reference
4.1	Examine and submit details of impact on water bodies/rivers/ ponds and mitigative measures during rainy season.
4.2	Examine and submit the details of surface hydrology and water regime and impact on the same.

5. Water Management

S. No	Terms of Reference
5.1	Requirement of water with source of supply, status of approval, water balance diagram.
5.2	Details of effluent treatment and reuse and recycling process.
5.3	Action plan for measures to be taken for excessive leachate generation during monsoon period.
5.4	Pre-project monitoring of ground water quality is required.

6. Waste Management

S. No	Terms of Reference
6.1	Submit the criteria for assessing waste generation. Any segregation of hazardous and bio- medical wastes. Submit a copy of detailed plan of waste management.

7. Drainage

S. No	Terms of Reference
7.1	Details of Drainage of the project upto 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
7.2	Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).

8. Energy Requirement

S. No	Terms of Reference
8.1	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
8.2	Details of the adequate power back up facility, to meet the energy requirement in case of power failure from the grid.

9. Disaster Management Plan

S. No	Terms of Reference
9.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

S. No	Terms of Reference
9.2	Risk and hazard identification and details of proposed mitigation measures.

10. Socio-economic Environment

S. No	Terms of Reference
10.1	Examine and submit the details of rehabilitation/compensation package for the project effected people, if any.
10.2	Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
10.3	Report on health and hygiene to be maintained for the sanitation workers at the work place.

11. Court Cases

S. No	Terms of Reference
11.1	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

12. Miscellaneous

S. No	Terms of Reference
12.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Common Municipal Solid Wastes .

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
bio methane	bio methane	16	Kilo Litre per Day (KLD)	Road	the residue from the dry waste recycling process and rejects from compost shall be

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
					taken to landfill





GOVERNMENT OF SIKKIM
OFFICE OF THE MEMBER SECRETARY, SEIAA
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
DEPARTMENT OF FOREST AND ENVIRONMENT
DEORALI, GANGTOK

Ref. No. 64 /SEIAA

Dated 21/03/24

To,

M.T Sherpa
Secretary
Urban Development Department
Gangtok East Sikkim-737101

Sub- Regarding Terms of Reference (ToR) for Proposed Regional Sanitary Landfill at Mangan, North Sikkim at Khasra No- 78A/10 Village- Kazor, District- Mangan, North Sikkim.

Dear Sir/Madam,

Reference your proposal No-SIA/SK/INFRA2/454716/2023 on dated 19th December, 2023, regarding the above subject. The SEIAA in its meeting dated 12.03.2024 examined the proposal submitted by you and after through discussion and deliberation, it has been conveyed that SEIAA desires rapid EIA report of the proposal after due public consultation conducted by Sikkim Pollution Control Board. The terms of Reference (TOR) for the EIA report is being out lined below: -

7(i): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR COMMON MUNICIPAL SOLID WASTE MANAGEMENT FACILITY (CMSWMF) AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

I. Project Details

- i. Importance and benefits of the project.
- ii. The project should be designed based on the population projections as by Master Plan and in conformity to the Municipal Solid Waste Management Rules 2006 as amended from time to time.
- iii. Examine and submit details of alternative technologies viz. RDF shall also be evolved
- iv. Examine and submit details of storm water/leachate collection from the composted area including leachate treatment options proposed.
- v. Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
- vi. Submit the details of sanitary land fill site, impermeability and whether it would be lined, if so, details thereof.

- vii. The EIA would include a separate chapter on the conformity of the proposals to the Municipal Solid Waste Management Rules, 2016 and the Construction and Demolition Waste Management Rules, 2016 including the sitting criteria therein.
- viii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- ix. Details of storage and disposal of pre-processing and post-processing rejects/inerts.
- x. List of proposed end receivers for the rejects/inerts should be provided. MoUs to be submitted in this regard.
- xi. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly speltout.
- xii. NOC from local or nearest airport within 20 km and any flight funnel restrictions
- xiii. The project proponents should consult the Municipal solid waste Management manual of the Ministry of Housing and Urban Affairs, Government of India and draw up project plans accordingly.
- xiv. Details of man-power requirement (regular and contract).
- xv. Process description along with major equipment's and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.

II. Land Environment

- xvi. Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction (summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
- xvii. Submit a copy of the land use certificate from the competent authority.
- xviii. Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
- xix. A sensitivity analysis of the site shall be carried out as per the CPCB site selection criteria and form part of the EIA report.
- xx. Post project reclamation management program with financial allocation.

III. Environmental Monitoring and Management

- xxi. Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
- xxii. Examine and submit details of the odour control measures.
- xxiii. Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socio-economic status, anticipated air and water pollution.
- xxiv. Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H₂S, CH₄).
- xxv. Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
- xxvi. Examine and submit the details of impact on environmental sensitive areas.
- xxvii. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
- xxviii. Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

IV. Water Environment

- xxix. Examine and submit details of impact on water bodies/rivers/ponds and mitigative measures during rainy season.
- xxx. Examine and submit the details of surface hydrology and water regime and impact on the same.

V. Water Management

- xxxi. Requirement of water with source of supply, status of approval, water balance diagram.
- xxxii. Details of effluent treatment and reuse and recycling process.
- xxxiii. Action plan for measures to be taken for excessive leachate generation during monsoon period.
- xxxiv. Pre-project monitoring of ground water quality is required.

VI. Waste Management

- xxxv. Submit the criteria for assessing waste generation. Any segregation of hazardous and bio-medical wastes. Submit a copy of detailed plan of waste management.

VII. Drainage

xxxvi. Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.

xxxvii. Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).

I. Energy Requirement

- i. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- ii. Details of the adequate power back up facility, to meet the energy requirement in case of power failure from the grid.

VIII. Disaster Management Plan

- i. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- ii. Risk and hazard identification and details of proposed mitigation measures.

IX. Socio-Economic Environment

- xxxviii. Examine and submit the details of rehabilitation/compensation package for the project effected people, if any.
- xxxix. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- xl. Report on health and hygiene to be maintained for the sanitation workers at the work place.

X. Court Cases

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

XI. Miscellaneous

- xlii. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative

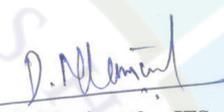
measure, project proponent can refer to the model ToR available on Ministry website "[http://moef.nic.in/Manual/Common Municipal Solid Wastes](http://moef.nic.in/Manual/CommonMunicipalSolidWastes)".

Note: 1) The study area shall comprise of radial distance of 10 KM from the project site and the study period is three months. The impact on each of the above parameter as a result of proposed project site shall be assessed through appropriate modeling and prediction method considering base line data.

Hence you are kindly requested to submit EIA report for further necessary action please.

Copy to:

1. The PCCF cum Secretary Forest Secretariat, Government of Sikkim, Deorali, Gangtok, East Sikkim-737102
2. The Secretary to Government of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO complex, Lodhi Road, New Delhi
3. The Secretary, Department of Science, Technology and Environment, Government of Sikkim, Gangtok.
4. The Secretary, Urban Development Department, Government of Sikkim, Gangtok, East Sikkim-737101
5. Regional Officer, Ministry of Environment Forest & Climate Change, Government of Sikkim.
6. The Deputy Commissioner, North Sikkim
7. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi
8. The Member Secretary, Sikkim Pollution Control Board, Government of Sikkim, Gangtok, East Sikkim-737102
9. The Secretary, Sikkim Water Regulation and Development Authority
10. The Chief Town Planner, Department of Town & Country Planning.


Dr. D. Manjunatha, IFS
CCF-Member Secretary,

D.S. Manjunatha, IFS
Chief Conservator of Forest (HQ/T)
Forest & Environment Department
Gangtok, Sikkim

11. Monitoring cell, Ministry of Environment, Forest & Climate
Change, Indira Paryavaran Bhawan, Jor Bagh Road, New
Delhi-110003

12. Parivesh portal/Record File

