Shivalik Solid Waste Management Limited

SSWML

Regd. Office : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan, Himachal Pradesh – 174 101
Zirakpur Office : SCO 20-21, Ist Floor, Near Hotel Dolphin, Kalka-Shimla Highway, Baltana, Zirakpur, Punjab - 140 604
Ph. No : 01762-509496, Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in
GSTIN: 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

Ref. No SSWML/HP/2024-25/18174 Dated 4/12/2024

To
The Director,
Ministry of Env., Forest and Climate Change,
Integrated Regional Office, Shimla
C.G.O. Complex, Shivalik Block, Longwood,
Shimla – 171001, Himachal Pradesh

Subject: - Submission of Six-monthly EC Compliance Report of "Shivalik Solid Waste Management Limited", Tehsil- Nalagarh, Distt.- Solan, Himachal Pradesh for Dec-2024

Sir,

This is in response to the EC letter No. **EC22A032HP155908** issued on dated **25.03.2022,** We are hereby submitting the six monthly "compliance report" **(period ending 30.09.2024) for Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at Survey No. 1244/1, 1437/1, 1438/1, 1510/1** Village- Majra, P.O.- Dhabota, Tehsil- Nalagarh, Distt.- Solan, Himachal Pradesh for your kind perusal.

Thanks & Regards

Authorized Signatory
CEO
Shivalik Solid Waste Management

CC:

1. Principal Secretary, State Environment Assessment Authority Department of Environment, Science & Technology, Paryavaran Bhawan, Near US Club, Shimla, Himachal Pradesh-171001.
2. Member Secretary, Himachal State Pollution Control Board, Phase III, Shimla.
3. Himachal Pradesh State Pollution Control Board, Regional Office, Baddi, Solan H.P.

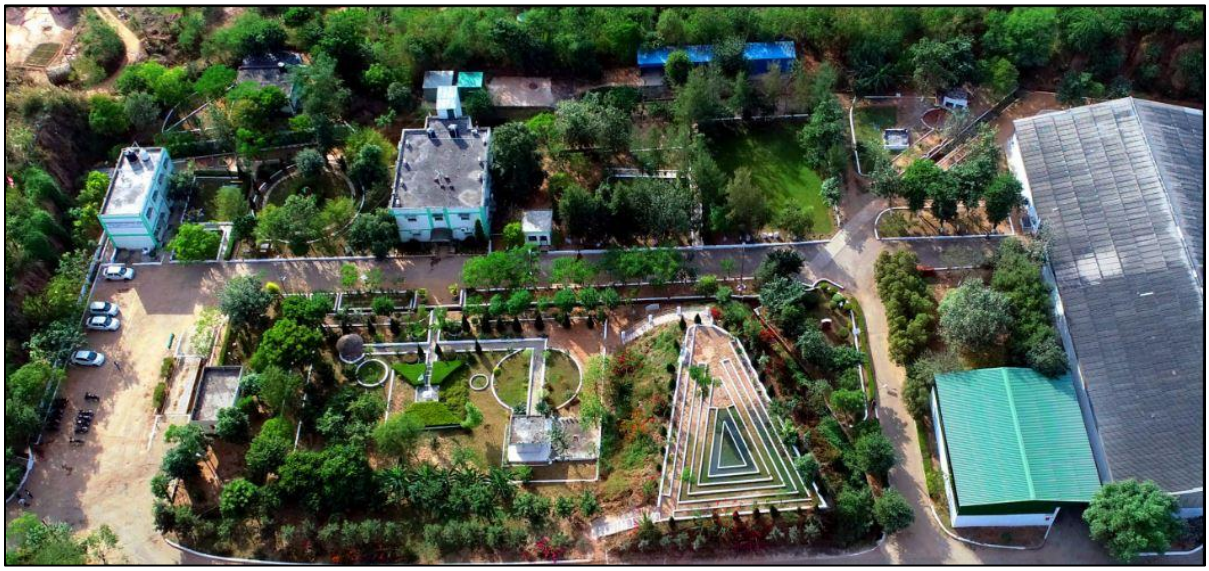
Enclosures: -

1. Compliance Report
2. Environmental Monitoring Report

SIX MONTHLY COMPLIANCE REPORT

OF

CHWTSDF



Project By:

SHIVALIK SOLID WASTE MANAGEMENT LTD.

Vill. - Majra, P.O.- Dabhota, Tehsil- Nalagarh, Distt. - Solan, Himachal Pradesh

DECEMBER- 2024

TABLE OF CONTENT

XIV	Pollution under Control Certificates
X	Form-V
XVI	On Site Emergency Plan
XVII	Process Flow Chart (HW)
XVIII	Treated Leachate Report
XIX	Vent Stack Test Reports
XX	Year wise EMP breakup
XXI	Water NOC

CHAPTER-1

INTRODUCTION:

1.1 BRIEF OF THE PROJECT: -

Shivalik Solid Waste Management Ltd. is a TSDF Landfill facility located at Survey No. 1244/1, 1437/1, 1438/1, 1510/1, Village–Majra, P.O. Dabhota, Tehsil Nalagarh, Distt. Solan, Himachal Pradesh. The environment clearance letter for the project was granted by Ministry of Environment, Forests & Climate Change, Government of India vide **EC22A032HP155908** dated **25.03.2022** which is attached along as **Annexure-I**.

1.1.1 SALIENT FEATURE OF THE PROJECT: -

File No.	21-112/2021-IA-III
Project type	Category 7(d) *i.e.,* Common hazardous waste treatment, storage, and disposal facilities of EIA notification, 2006.
Project Location	Village–Majra, P.O. Dabhota, Tehsil Nalagarh, Distt. Solan, Himachal Pradesh.
Total Plot Area	35 acres (1,44,032 sq. m)
Green Area	50,032 sq. m *i.e.,* 35%
Processing Capacity of Landfill Waste	20,00,00 MT/year
Total Number of cells	13 SLF Cells
Manpower	80
Source of Electricity	HP, State Electricity Board
D.G Sets	1Nos capacity (100 kVA)
Source of Water	Tube well
Validity period of EC	7 years from date of issue
Total Project Cost	Rs. 22 Cr.

1.2 PURPOSE OF THE REPORT: -

As per the "Sub Para (ii)" of "Para 10" of EIA Notification 2006, it is stated that "It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year" and as per compliance of condition mentioned in Environment Clearance Letter, Six monthly compliance reports should be submitted to the Himachal Pradesh State Pollution Control Board and Regional Office; MoEF, GoI, Northern Region; and a copy to the Environment Regulatory Authority of Himachal Pradesh.

It is mandatory to submit a Six-Monthly Compliance Report to show the status & compliance of all the Conditions mentioned in Environment clearance Letter, along with monitoring of various Environmental Parameters (as per CPCB Norms). The regulatory authorities in this case are Himachal State Pollution Control Board; Integrated Regional Office-MoEF & CC (Shimla) and SEIAA, H.P. Based on the Specific and General Conditions mentioned in the EC Letter, a Compliance Report was prepared and is detailed in chapter 2.

1.3 Current Status of the Project: Operational Phase.

CHAPTER-2
DATA SHEET

S. No.	Particulars	Detail
1	Project type:	7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs)
2	Name of Project	Secured Landfill Facility (SLF) of 20 Lac MT at TSDF by Shivalik Solid Waste Management Limited
3	Clearance letters	**F.No.:**EC22A032HP155908 dated 25/03/2022. (EC attached along as **Annexure-I**)
4	Location: a) District b) State c) Location: Lat./Long.	a) Solan b) Himachal Pradesh c) 31°04'35.7"N; 76°38'05.2"E
5	Address for correspondence	Village- Majra, P.O.- Dabhota, Tehsil- Nalagarh, Distt.- Solan, H.P.
6	Salient feature a) of the project b) of the EMP	**a).** Shivalik Solid Waste Management Limited is operating a Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDFs) at district Solan of H.P. **Capacity of SLFs:** 20 MT **Plot area:** 144032 sqm. (35 acre) **Green Area:** 50032 sqm. (35% of plot area) **Fresh Water Requirement:** 12 KLD **Capacity of ETP/MEE:** 20 KLD **Solar Power Plant Capacity:** 130 KW **b). Total Cost Toward EMP:-** Capital Cost- Rs. 2200 Lakhs, Recurring Cost- Rs. 19.2 Lakhs annually.

7	Breakup of the project area a) Submergence forest area and non-forest area b) Others	Non forest land
8	Breakup of the project affected population with enumeration of those losing houses/dwelling units only agricultural land only both dwelling units & agricultural land & landless labors/artisans: (a) SC, ST/Adivasi (b) Others	No population will be affected from the project.
9	Financial Details: a) Project cost as originally planned and subsequent revised estimates and the year of price reference. b) Allocation made for EMP with item wise and year wise breakup c) BC ratio/IRR and the year of assessment d) Whether includes the cost of EMP as shown above e) Actual expenditure incurred on project so far f) Actual expenditure incurred on EMP so far	a) 22 Crore b) It is attached as **ANNEXURE-XX** c) – d) – e) – f) Rs. 10.21 lakhs (Dec. 2022 to Dec. 2024)
10	Forest land Requirement a) The status of approval for	NA

	diversion of forest land for non forestry use b) The status of clear felling c) The status of CA, if any d) Comments on the viability & sustainability of CA program in the light of actual field experience so far	
11.	The status of clear felling in the non-forest areas	NA
12.	Status of Construction (Actual &/or planned) a) Date of commencement b) Date of completion	Project is in operational phase since 2007.
13.	Reason for delay if project is yet to start	Not Applicable.

CHAPTER-3
COMPLIANCE REPORT

All the Statutory Compliance Conditions as per the Environmental Clearance (Attached as **Annexure-I**) of TSDF site situated at Village – Majra, P.O.- Chabot, Tehsil- Nalagarh, District - Solan, Himachal Pradesh have been covered in this chapter.

3.1 POINT WISE COMPLIANCE OF THE CONDITIONS IMPOSED IN ENVIRONMENT CLEARANCE:

Sr. No.	Condition Of Environment Clearances	Compliance
A.	**Specific Condition**	
i	The Proponent should ensure that the project fulfill all the provisions of Hazardous and other wastes(Management and Trans Boundary Movement) Rules, 2016 and the "Protocol for Performance Evolution and Monitoring" for the same as Published by CPCB including collection, transportation, design *etc.*	Agreed. We are complying with all the provisions of hazardous waste (Management and Trans Boundary Movement) Rules- 2016 as well as CPCB Protocol for Performance Evolution and Monitoring.
ii	Guidelines for secured landfill issued by CPCB shall be followed.	Complied.
iii	Necessary Provision shall be made for firefighting facilities within the complex.	Complied. Firefighting facilities are available within the project site.
iv	Project Proponent should prepare and implement an on-site Emergency management plan.	Complied. On-site Emergency management plan has been prepared.
v	Employees shall be provided work specific PPE such as helmets, safety shoes, masks *etc.*	Agreed. Employees and Workers are provided with work specific PPE such as Helmets, safety shoes, masks *etc.* PPE Matrix is attached as **Annexure II** and Photographs showing safety trainings and PPE provided to workers are attached as **Annexure-III.**
vi	Project Proponent should develop a green	Agreed.

	belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement. Total green area of 50,032 sqm (@35% of plot area) and 10,006 trees shall be maintained as proposed. The tree species shall be selected as secured to site condition in consultation with concerned forest department.	Green belt has been developed around the periphery of the TSDF site. Photographs of the green belt is attached as **Annexure-III.**
vii	Fresh water requirement shall not exceed 12KLD during operational phase. Abstraction of ground water shall be subject to the permission of central groundwater authority (CGWA).	Agreed, Freshwater requirement will not exceed 12 KLD.
viii	Gas generated in the landfill should be Properly collected, monitored and flared.	This is a Secure landfill facility; Proper venting system for gas release has been provided. Monitoring of gas vents is being done regularly for parameters like Ammonia and Hydrogen Sulphide. Latest Test report is attached as **Annexure-IV**
ix	Sufficient Number of Piezo meter wells shall be installed in and around the project site to monitor the ground water quality in consultation with the state pollution control Board/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Reginal office of MoEF & CC	5 No. of monitoring wells have been provided at site. Test report attached as **Annexure-IV.**
x	The depth of the landfill site shall be decided based on the ground water table at the site	Agreed. Height of landfill above ground level is around 15 to 20 m based on the ground water table.
xi	PP Shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.	Agreed. All the chemicals are handled with adequate safety procedures to avoid spillage.
xii	Wastewater generated from processes including leachates arising from premises shall be treated in MEE of 20KLD Capacity. Treated water shall be reused within the	Agreed. Toxicity characteristic Leaching procedure test conducted on regular basis and record has been

	Project. Toxicity characteristic Leaching procedure (TCLP) test to be performed on leachates.	maintained for the same.
xiii	Rainwater runoff from the landfill area and other hazardous waste management area shall be collected and treated in an effluent treatment plant.	Agreed. During rainy season landfill operations are suspended and the open cells are temporarily covered using HDPE sheets. Rainwater runoff from the landfill area is collected through storm water drain pipe and is treated in MEE.
xiv	The PP shall install continuous effluent monitoring system with respect to standards prescribed in Environment Protection Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment Protection Act, 1986 or NABL accredited laboratories.	Not applicable as we are operating a Zero liquid discharge unit. Wastewater is not being discharged outside the premises.
xv	Any Waste from construction and demolition activities related therefore shall be managed so as to strictly conform to the Construction and demolition waste management rule, 2016	Noted.
xvi	No non-hazardous wastes, as defined under the hazardous and other waste (Management and Trans- Boundary Movement) Rules, 2016. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the MSW generated from Project.	Agreed. SSWML is only handling hazardous waste from the industries.
xvii	Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary Security provision should be made as a condition in the authorization under the Hazardous and other wastes(Management	Agreed. The site is maintained properly. No unauthorized person or goods are allowed to enter the Premises without permission.

	and Transboundary Movement) Rules, 2016 to Prevent unwanted access.	
xviii	Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized, and no public space should be utilized.	Agreed. There is no traffic congestion in the entry and exit points of the project site and no public space is being utilized.
xix	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of services of the roads within a 2 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 2kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the state urban development department and the PWD/Component authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	Traffic management plan was submitted at the time of Final EIA report.
xx	The Environment clearance to the project is primarily under provision of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/ Regulation or statutes as applicable to the project.	Agreed. Project proponent has obtained all the applicable approvals/ clearances.
B.	**STANDARD CONDITIONS :**	
I.	**STATUTORY COMPLIANCES**	
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	Not Applicable, as there is no forest land involved.

ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable.
iii	The project proponent shall prepare a Site-Specific Conservation plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the state forest department. The implementation report shall be furnished along with the six-monthly compliance report (In case of the presence of schedule-I species in the study area).	Conservation plan for Schedule-I species submitted at the time of Final EIA report.
iv	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee. A copy of the same shall be submitted to State Environment Impact Assessment Authority (SEIAA) before start of any construction work at the site.	Consent to Establish/Operate has been obtained from Himachal Pradesh Pollution Control Board. Copy of CTE and valid CTO is attached as **Annexure-V**
v	The PP should ensure that the TSDF fulfils all the provisions of Hazardous and other wasted (Management and Transboundary Movement) Rules, 2016.	Agreed. We are fulfilling all the provision of Hazardous and other wasted (Management and Transboundary Movement) Rules, 2016.
vi	The PP shall adhere to all conditions as prescribed in the protocol for performance Evaluation and Monitoring of the Common Hazardous waste Treatment, storage and disposal facilities Published by CPCB in May 2010.	Agreed. Conditions as prescribed in the protocol are being complied.
vii	Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.	Not applicable as this is a secure landfill facility without incinerator.
viii	The project proponent shall obtain necessary prior permission from the Central Ground	Agreed. Application for obtaining permission has been submitted to

	Water Authority, in case of drawl of ground water/ from the competent authority concerned in case of drawl of surface water required for the project.	State ground water authority. Copy of application is attached as **Annexure-XXI**
ix	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	Agreed. NOC has been obtained from the department for power supply and same attached as **Annexure- VI**
x	All other statutory clearances such as the approvals for storage of diesel from the Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	All applicable statutory clearances are in place.
II.	**AIR QUALITY MONITORING AND PRESERVATION :**	
i.	The Project Proponent shall install 24*7 Continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in environment (Protection) Rules 1986 and Connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment Protection Act, 1986 or NABL Accredited Laboratories.	Not Required, because this is SLF. Stack monitoring is done on regular basis for Boiler and DG set. For reference monitoring report is attached as **Annexure-XIX**
ii.	The PP shall monitor fugitive emission in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Agreed. Monitoring reports attached as **Annexure-IV.**
iii.	The project proponent shall install system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutant released (e.g., PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_X emission) within the outside the project area at least at four locations (one within and three outside the project area at the angle of 120° each), covering upwind direction.	Ambient Air Quality Monitoring is being conducted on regular basis. Monitoring reports are attached as **Annexure-IV**
iv.	Sampling facility at process stacks and at	Agreed, sampling facilities have

	quenching towers shall be provided as per CPCB guidelines for manual of emission.	been provided at required locations.
v.	The PP shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/fugitive emission to Regional office of Mo EF&CC, Zonal office of CPCB and Reginal office of SPCB along with six-monthly monitoring report.	Agreed, the reports are being submitted to the concerned authorities as and when asked for. Stack monitoring report is attached as **Annexure-XIX**
vi	Appropriate air pollution control (As Proposed, air pollution control device viz gas quencher , treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs(if any) bag filters/ESP for removal of particulate matter, venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas, and demister column for arresting water carry over will be provided to the incinerator system shall be provided for all the dust generating points system shall be provided for all the dust generating points including fugitive dust from all the dust greeting points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	No incinerator has been provided at site. However wet scrubber as APCD has been provided with the boiler and fume hood over stabilization pit. Stack monitoring reports are attached as **Annexure-XIX**
vii	The Periodical monitoring of Dioxin and Furans in the stack emission shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for interdisciplinary science and Technology (NIIST), Thiruvananthapuram or equivalent NABL accredited Laboratory.	NA, as there is no incinerator installed at site.
viii	Gas generated in the land fill should be properly collected monitored and flared.	Ammonia and hydrogen sulfide are being produced and are monitored in house on regular basis. Test report attached as **Annexure- IV**
ix	A detailed traffic management and traffic decongestion plan shall be drawn up to	This facility is located 2 km away from the main Road so there is no

	ensure that the current level of services of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 kms radius of the site in different scenarios of space and time and the certified by the state urban Development department and the P.W.D/Competent authority for road augmentation of components of the plan which involve the participation of these department.	congestion on the roads.
III.	**WATER QUALITY MONITORING AND PRESERVATION:**	
i.	The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules, 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	NA, as project is being operated on Zero liquid discharge and wastewater generated is being treated in MEE installed at site.
ii.	Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the SPCB/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to SPCB and the reginal office of MoEF& CC.	Agreed. 5 nos. of Piezometer wells are provided. Monitoring reports attached as **Annexure-IV.**
iii	The PP shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional office of Mo EF&CC, Zonal office of CPCB and Reginal office of SPCB along with six-monthly monitoring report.	The test reports are being submitted to concerned authorities through various platforms as and when required.
iv	No discharge in near river(s)/ pond(s)	Agreed and Noted.

v	The depth of the land fill site shall be decided based on the ground water table at the site.	Height of landfill above ground level is around 15 to 20 m based on the ground water table.
vi	The company shall ensure proper handling of all spillages by introducing spill control procedures of various chemicals.	Agreed.
vii	All leachates arising from premises should be collected and treated in the ETP followed by RO, RO rejects shall be evaporated in MEE. Toxicity Characteristic leaching procedure (TCLP) test to be performed on leachate.	Leachate generated is treated in MEE Plant. Leachate test report attached as **Annexure-XVIII**
viii	The company shall review the unit operations provided for the treatment of effluents, especially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluent shall be as permitted by the pollution control board/committee under the provisions of consent to establish.	Wastewater generated is being treated in MEE installed at site.
ix	Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.	MEE is provided to treat scrubber water, leachate water or wheel wash effluent. The condensate is recycled. Water Flow chart is attached as **Annexure-VII**
x	Total freshwater use shall not exceed the proposed requirement as provided in the project details, prior permission from competent authority shall be obtained for the use of fresh water.	Agreed. Application has been submitted to state ground water authority for obtaining the permission.
xi	Sewage Treatment plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.	STP of 20 KLD has been installed at site to treat the domestic wastewater generated at site.
xii	A certificate from the competent authority for discharging treated effluent/ untreated effluents into the public sewer/disposal/drainage system along with the final disposal point should be obtained.	Not Applicable, as this is a ZLD unit.

xiii	Rainwater runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.	Rainwater runoff from HW storage area is collected separately and treated in MEE.
IV.	**NOISE MONITORING AND PREVENTION:**	
i	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office of the Ministry as a part of six-monthly compliance report.	Agreed. Noise Monitoring has been done regularly, test report of the same is attached as **Annexure-IV.**
ii	The ambient noise levels should conform the standards prescribed under Environment (Protection) Act and Rules, 1986 viz. 75 dB(A) during daytime and 70 dB(A) during nighttime.	Agreed. Noise levels are within prescribed limits during daytime and nighttime i.e., 75 dB (A) and 70 dB (A).
iii	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel is being implemented. Test Report attached as **Annexure-IV.**
V.	**ENERGY CONSERVATIOB MEASURES :**	
i	Energy conservation measures like installation of LED/CFLs/TFLs for the lightning the areas outside the building should be integral part of the project design and should be in place before project commissioning.	Agreed. Solar lights, LED/CFLs/TFLs are used for energy conservation measures. Photographs attached as **Annexure-III**
VI.	**WASTE MANAGEMENT :**	
i	The TSDF should only handle the waste generated from the member units.	Agreed
ii	Periodical soil monitoring to check the contamination in and around the site shall be carried out.	Agreed. Monitoring reports of the same is attached as **Annexure-IV.**
iii	No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016, shall be handled in the premises.	Agreed.
iv	The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.	Agreed. Hazardous waste is being stored within the permitted limit.
v	The solid wastes shall be segregated,	Agreed.

	managed and disposed as per the norms of the Solid Waste Management Rules, 2016.	Solid waste is being segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
vi	The certificate from the competent authority handling municipal solid waste should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W, generated from project.	Municipal solid waste is being managed as per the Solid Waste Management Rules, 2016.
vii	Any waste from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.	Noted.
VII.	**GREEN BELT**	
i	Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.	Agreed. Photographs showing the greenbelt developed at the site are attached as **Annexure- III.**
ii	Topsoil shall be separately stored and used in the development of green belt.	Topsoil stored separately and used for green belt development.
VIII.	**PUBLIC HEARING AND HUMAN HEALTH ISSUES**	
i	Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized, and no public space should be utilized.	Agreed. Parking is fully internalized and there is no public space utilized.
ii	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Agreed, same has been submitted at the time of Final EIA Report.
iii	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	We are hiring local workers for the same, so there is no need to provide housing. Safe drinking water and Toilet facilities provided to all.
iv	Occupational health surveillance of the	Health Checkup of the workers is

	workers shall be done on a regular basis.	done periodically, and records are maintained for the same.
IX.	**MISCELLANEOUS**	
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the district or state, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's web site permanently.	Complied. It was advertised in the local newspaper. Copy of advertisement is attached as **Annexure- VIII.**
ii	The copies of the environment clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in tum has to display the same for 30 days from the date of receipt.	Submitted.
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their web site and update the same on half-yearly basis.	The status of compliance of the stipulated environment clearance conditions, including results of monitored data has been uploaded on our web site:- www.sswml.com
iv	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest & Climate Change on environment clearance portal.	Agreed.
v	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system reporting infringements/deviation/violation of	Agreed.

	environmental/forest/wildlife norms/conditions and/ or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	
vi	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.	Agreed. EMC details attached as **Annexure- IX.**
vii	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	EMP as attached in **Annexure- X** is being implemented at site.
viii	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Noted.
ix	The project proponent shall submit the environmental statement for each financial year to the concerned State Pollution Control Board as prescribed under Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company with a copy to SEIAA.	Complied. The environmental statement is being submitted to the concerned State Pollution Control Board. Copy of last submitted report is attached as A**nnexure-XV**
x	The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Agreed. It is being displayed at the entry gate of the company in the public domain.

xi	The project proponent shall inform the Regional Office as well as SEIAA the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Complied.
xii	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed.
xiii	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee	Agreed and complied.
xiv	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Agreed and Noted.
xv	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.
xvi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
xvii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted.
xviii	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agreed, full support is extended to the visiting officers.

xix	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.	Agreed.
xx	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	No such appeal was made against the EC granted to the project.

ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The CEO

SHIVALIK SOLID WASTE MANAGEMENT LTD

Village Majra, PO Dabhota,Tehsil Nalagarh, Distt Solan, Himachal Pradesh, 174101,,Solan,Himachal Pradesh-174101

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/HP/MIS/239636/2018 dated 02 Dec 2021. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A032HP155908**
2.	**File No.**	21-112/2021-IA-III
3.	**Project Type**	New
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs)
6.	**Name of Project**	Capacity Enhancement of Secured Landfill Facility (SLF) from 10 Lac MT to 20 Lac MT at Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF)
7.	**Name of Company/Organization**	SHIVALIK SOLID WASTE MANAGEMENT LTD
8.	**Location of Project**	Himachal Pradesh
9.	**TOR Date**	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 25/03/2022

(e-signed)
Dharmendra Gupta
Scientist F
IA - (INFRA-2 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

This is a computer generated cover page.

F. No. 21-112/2021-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 110003

22nd March, 2022

To,

Shri Ashok Sharma, CEO
M/s Shivalik Solid Waste Management Ltd.
Village Majra, PO Dabhota,
Tehsil Nalagarh, Distt. Solan,
Himachal Pradesh-174101
E. mail: shivaliksolidwastemanagement@gmail.com

Subject: **Environmental Clearance for Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh by M/s Shivalik Solid Waste Management Ltd-Regarding.**

Sir,

This has reference to your Application/Proposal No. IA/HP/MIS/239636/2018; received on 22nd November, 2021 through Parivesh Portal for Environmental Clearance (EC) for Proposed Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh by M/s Shivalik Solid Waste Management Ltd.

2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006; as amended and notified under the Environment (Protection) Act, 1986 (29 of 1986), the above-mentioned project/activity is covered under category 'B' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments. However, General Condition is applicable and the project falls under Category "A" since the interstate boundary of Himachal Pradesh and Punjab falls within 2.47 km (Arial Distance) and 4.5 km (Road distance) from the proposed site. Therefore, it requires appraisal at Central level by sectoral EAC.

3. Accordingly, the abovementioned proposal for Environmental Clearance has been examined by the Expert Appraisal Committee (Infra-2) first in its 78th meeting held during 14-15th December, 2021, thereafter in its 80th meeting held during 20-21st January, 2022 and in its 82nd meeting held on 16th February, 2022.

4. The details of the project, as per the application and documents submitted by the project proponent, and also as informed during the above-mentioned meetings of EAC (Infra-2) are as under:

i. The project is located at Khasra No. 1244/1, 1437/1, 1430/1, 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Distt. Solan, Himachal Pradesh.

ii. The project is an 'Expansion'.

iii. The project was granted Terms of Reference vide letter no. 10-73/2018-IA-III dated 30.11.2018 for capacity enhancement of existing Secured Landfill Facility (SLF) from 10 to 20 lacs MT.

iv. The consent to establish (CTE) for the unit was applied in 2005 under Air Act 1981 and Water Act 1974 and in accordance to Hazardous Wastes (Management and Handling) Amendment Rules, 2003 under rule 8-Para 5 (before the enforcement of EIA Notification 2006 dated 14th September, 2006). Before setting up the facility, Himachal Pradesh State Pollution Control Board (HPSPCB) conducted Public Hearing on 29.03.06 at the project site as per requirements of HW Rules and the State Government thereafter notified the site for development of Common Hazardous Waste Treatment Storage and Disposal Facility vide notification no. Ind. A(F)15-4/2003-II dated 07.03.2007. The TSDF site has been operational since June 2008 after obtaining Consent to Operate (CTO) from HP Pollution Control Board. Compliance to the conditions of CTO has been obtained from HPPCB and submitted on the Parivesh Portal.

v. The salient features of the project are given as follows:

S. No.	Particulars	Unit	Details
1	Plot area	sqm.	35 Acre (144,032 sqm.)
2	Green Area	sqm.	50,032 (35% of plot area)
3	Processing Capacity of Landfill Waste	MT/year	Existing- 50,000 Proposed- 50,000 Total= 10,00,00
4	Total no. of cells	No	13 SLF Cells
5	Manpower	Nos.	80
6	Source of Electricity Supply	-	Himachal Pradesh State Electricity Board.
7	Total Power Requirement	KW	373

8	DG Sets (Backup)	kVA	1 × 100
9	Fuel Requirement	L/hour	8-10 (Diesel) for DG set and 20-25 (Bio-Diesel) for Boiler
10	Source of Water	-	01 Tubewell (Permission for 15 KLD obtained)
12	Fresh Water Requirement	KLD	12
13	Wastewater Generation	KLD	10
14	Capacity of ETP/MEE	KLD	20
15	Total Vehicles at site	Numbers	58
16	Life of Landfill estimated	Years	25

vi. Existing Secured Landfill cells (13nos. in total) have been designed as per the recommendations of design of Indian Institute of Technology, Delhi (IIT-D) and till date two cells are capped and two are in operation. Now, enhancement in the capacity of SLF is proposed through change in the height of heap of the SLF and change in slope from 1:5 to 1:4 which results in increase of capacity from 10 Lac MT to 20 Lac MT. This change is proposed under the guidance from IIT-D. Details of proposed expansion are given as follows:

Details	Existing	Proposed
Capacity of Landfill	10 lac MT	20 Lac MT
Total Height	10m (Below the ground)+ 20m (Above the ground) = 30 m	9m (Below the ground)+ 25m (Above the ground) = 34 m
Slope	1:5	1:4
Area	72000 sqm.	77000 sqm.

vii. It is also proposed to expand the annual processing capacity of the unit as below:

S. No.	Category of Hazardous Waste	Type of Hazardous waste	Unit	Quantity of Hazardous waste (Tons/Annum)			Mode of Disposal
				Existing	Proposed	Total after Expansion	
1	Schedule-1 & schedule-2 of HOWR 2016	Land fillable waste	MTPA	50,000	50,000	100,000	Landfill at TSDF
2	5.1	Collection/ transportation of used oil	KL/ Year	600	600	1,200	To be sent for recycling to authorized recyclers
3	A4160	Collection/transportation of used batteries	MTPA	600	600	1,200	To be sent for recycling to authorized recyclers
4	33.1	Collection/tra	Nos/	48,000	0	48,000	Utilization as

		nsportation of discarded containers	year				per Rule 9 of HOWR, 2016
5	-	Pre-processing of Hazardous wastes for co-processing in cement kiln	MTPA	4,000	4,000	8,000	To be sent for co-processing in Cement Kilns in Himachal Pradesh

viii. Project is located on land measuring 35 Acres (1,44,032 sqm.) given on lease by HPSPCB. As per the land lease, proposed project site is registered for industrial use. The land use distribution for the unit as proposed is given as follows:

Particulars	Total area (sqm.)	% Area
Green Area	50,032	34.7
Landfill Area	77,000	53.5
Total Infrastructure Area	17,000	11.8
Total Area	**144,032**	**100.00**

ix. Total water requirement for the project will be 26.2 KLD during non-monsoon period and 22 KLD during monsoon period. The ultimate source of water will be tube well (1 no.). Fresh water demand for the project will be 12 KLD during non-monsoon period and 9 KLD during monsoon period. The remaining water demand will be met by treated water from MEE Condensate of 9 KLD and from collected rainwater reuse (5.2 KLD during non-monsoon period and 4 KLD during monsoon period) from onsite 1100 KL pond. Wastewater of 8 KLD generated from domestic use will be disposed to septic tank via soak pits. 10 KLD of wastewater generated from the processes will be treated in MEE of 20 KLD capacity. 9 KLD of treated water will be generated which will be utilized in wheel washing (3 KLD), scrubber (3 KLD) & boiler makeup (3 KLD).

x. There is use of approx. 19 no of vehicles daily for transportation purposes. For the proposed expansion, total parking space for 58 no. vehicles is earmarked for parking of trucks and cars within the facility premises.

xi. Total 12 kg/day of Municipal Solid Waste is being generated from 80 no. of workers out of which 7 kg/day is treated in existing biogas plant and 5 kg/day is recyclable waste which is treated within the site.

xii. The total power requirement will be 373 kW which will be met by Himachal Pradesh State Electricity Board. DG set (1× 100 KVA) will be provided for power backup. Adequate stack height of 7.6 m from roof level shall be maintained.

xiii. There is use of approx. 19 no of vehicles daily for transportation purposes. For the proposed expansion, total parking space for 58 no.

vehicles is earmarked for parking of trucks and cars within the facility premises.

xiv. Solar cells will be installed after total capping of the landfill. Tentative proposal for solar power installation is of 130 KW. Total Energy savings will be 34.8 % of the power load. 11 Solar Street lights of 7 watts have been installed within project premises in 2011.

xv. 2 Nos of rain water collection tanks are installed. One tank of 1100 KL capacity having catchment of nearby hilly terrain and second tank of 6 KL capacity collecting rooftop rainwater of laboratory block. The collected rainwater shall be reused within the facility for gardening on non-rainy days and cooling tower/lab water makeup. During the rainy season, a flexible geo-membrane cover shall be placed over the uncapped area of the landfill to minimize infiltration of rainfall into the landfill and the rainwater shall be diverted to join the surface water drains.

xvi. Public Hearing was conducted at the project site on 09.01.2020 at 11.30 AM. Major issues raised during the public hearing and response in the form of implementable action plan have been submitted.

xvii. Total capital cost towards EMP will be ₹ 2200 lakhs and recurring cost will be ₹ 19.2 lakhs per year.

xviii. Baseline study was conducted in the winter season from December 2018- February 2019 at 9 locations &revalidated baseline study was carried out for from 10th Oct- 10th Nov, 2021 at 9 no. of locations.

xix. The project is not located in a Critically Polluted area.

xx. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.

xxi. Forest Clearance is not required.

xxii. There is a litigation pending on this project in the High Court of Himachal Pradesh (Case No. CWPIL No. 45 of 2021). The court Order dated 14.10.2021 states that the concerned authority to carry out necessary inspection and take further action in accordance with law and also to submit an action taken report. The inspection was carried out by NPC and the report was submitted to SDM, Solan and HPSPCB.

xxiii. Green belt is developed along most of the periphery of the project area as well as along roads. Total of 50,032 sqm. (35% of plot area) shall be developed as green area. No tree cutting is involved in the project. About 10,006 no. of trees are proposed at site out of which 8000 no. of trees have already been planted.

xxiv. Investment/Cost of the total project is ₹ 22 crores.

xxv. Employment potential- About 33 persons during construction phase and 80 persons during operation phase.

xxvi. Benefits of the project-There are 3,078 numbers of hazardous waste generating industries in industrial area of Himachal Pradesh. This industrial growth has led to continuous increase in generation of Hazardous Waste. Hazardous waste and its related environmental problems have been recognized by HPSPCB. There is only one common secured landfill facility i.e. M/s Shivalik Solid Waste Management Ltd. Distt. Solan in Himachal Pradesh. Capacity

Enhancement of Secured Landfill Facility (SLF) from 10 Lacs to 20 Lac MT and processing capacity of landfill waste will also be increased from 50,000 TPA to 100,000 TPA at existing Facility. Thus the project will cater to the treatment of the increasing Hazardous waste in the entire state of Himachal Pradesh. The project will create direct and indirect employment for local people for which skilled and unskilled manpower will be needed. It promotes the proper disposal of hazardous waste in the state of Himachal Pradesh.

5. The EAC (Infra 2), based on information and clarifications provided by the project proponent and detailed discussions held on the issues, has recommended granting environment clearance to the project. The aforesaid recommendation of EAC (Infra-2) is subject to certain specific conditions, as stipulated during its 82nd meeting held on 16th February, 2022.

6. Based on recommendations of EAC (Infra-2), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project for Proposed Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh by M/s Shivalik Solid Waste Management Ltd, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the following specific and standard conditions:

A. Specific Conditions:

i. The proponent should ensure that the project fulfil all the provisions of Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the 'Protocol for Performance Evaluation and Monitoring' for the same as published by the CPCB including collection, transportation, design etc.
ii. Guidelines for Secured Landfill issued by CPCB shall be followed.
iii. Necessary provision shall be made for fire fighting facilities within the complex.
iv. Project proponent should prepare and implement an on-site Emergency Management Plan.
v. Employees shall be provided work specific PPE such as helmets, safety shoes, masks etc.
vi. Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement. Total green area of 50,032 sqm. (@ 35% of plot area) and 10,006 trees shall be maintained as proposed. The tree species shall be selected as suited to site conditions in consultation with concerned forest department.
vii. Fresh water requirement shall not exceed 12 KLD during operational phase. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).

viii. Gas generated in the Landfill should be properly collected, monitored and flared.

ix. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

x. The depth of the landfill site shall be decided based on the ground water table at the site.

xi. PP shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.

xii. Wastewater generated from the process including leachates arising from premises shall be treated in MEE of 20 KLD capacity. Treated water shall be reused within the project. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.

xiii. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in an effluent treatment plant.

xiv. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

xv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

xvi. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, shall be handled in the premises. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the MSW generated from project.

xvii. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 to prevent unwanted access.

xviii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.

xix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 2 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being

carried out or proposed to be carried out by the project or other agencies in this 2 kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the PWD/Competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

xx. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/ Regulations or Statutes as applicable to the project.

B. Standard Conditions:

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)

iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.

v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016.

vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.

vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.

viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water/from the competent authority concerned in case of drawl of surface water required for the project.

ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

i. The project proponent shall install 24×7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.

iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary

Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory

viii. Gas generated in the Land fill should be properly collected, monitored and flared

ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation:

i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. No discharge in nearby river(s)/pond(s).

v. The depth of the land fill site shall be decided based on the ground water table at the site.

vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.

vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.

viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after

tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.

ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.

x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.

xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.

xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management:

i. The TSDF should only handle the waste generated from the member units.

ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.

iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016, shall be handled in the premises.

iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VII. Green Belt:

i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.

ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues:

i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.

ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Miscellaneous:

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats

and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements /deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholder's/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

viii. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

x. The criteria pollutant levels namely; $PM_{2.5}$, PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

xi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the

project by the concerned authorities, commencing the land development work and start of production operation by the project.

xii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

xiii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xiv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xv. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xvi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xvii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xviii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

xix. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts/NGT and any other Court of Law relating to the subject matter.

xx. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010

7. The Environmental Clearance is being granted to M/s Shivalik Solid Waste Management Ltd, for Proposed Capacity enhancement of Secured Landfill Facility (SLF) from 10 to 20 lacs MT at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) at Survey No. 1244/1, 1437/1, 1430/1 & 1510/1, Village Majra, P.O. Dabhota, Tehsil Nalagarh, Solan District, Himachal Pradesh.

8. This issues with the approval of the Competent Authority.

(Dr. Dharmendra Kumar Gupta)
Director (S)

Copy to:

1. Principal Secretary, Department of Environment, Science and Technology, Paryavaran Bhawan, Near US Club, Shimla Himachal Pradesh-171001.
2. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Shimla 1st & 2nd Floor, C.G.O. Complex, Longwood, Shimla – 171001.
3. Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
4. Member Secretary, H.P. State Pollution Control Board, Head office, Him Parivesh, Phase-III, New Shimla-171009, H.P.,
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
6. Guard File/ Record File/ Notice Board/MoEF&CC website.

(Dr. Dharmendra Kumar Gupta)
Director (S)

	SHIVALIK SOLID WASTE MANAGEMENT LIMITED	DOC: W-E10-07 PAGE: 1 of 1 ISSUE: 1.6 DATE: 14.06.2021 APP. BY :
SSWML	PPE MATRIX	

Activity	Helmet	Safety Shoes	Goggles	Face Shield (Welding)	Disposable mask	Apron/Gowning	Full Body suit	Gum Boot	Gloves		
									Rubber	Cotton	Surgical Gloves
	Head Injury	Foot Injury	Eye Protection	Welding	Dust	Body Protection from Chemical	Body Protection from Chemical	Leg Protection	Acids/ Alkali	Hot Surface	Lab, Finish Goods
Sampling	√	√	√	-	√	√	-	-	√	-	-
Testing	-	-	√	-	√	√	-	-	-	-	√
Glass Ware Washing	-	-	-	-	√	√	-	-	√	-	-
Un-loading		√	√	-	√	-	√	√	√	-	-
Treatment & Mixing	√	-	√	-	√	√	√	√	√	-	-
Filling & Packing of waste material for coprocessing	√	-	√	-	√	√	√	√	**Anti cut gloves**	-	-
Disposal	√	√	√	-	√	-	√	-	√	-	-
Civil construction	√	√		√	√	-	-	-	-	-	-
Drum &Fuel tank cleaning	√	√	√	-	√	-	√	√	√	-	-
Drum Cutting	√	√	√	-	√	√	-	-	**Heavy Duty Gloves**	-	-
Liquid waste hadling	-	-	√	-	√	-	-	-	-	-	-
Transportation of waste		√	-	-	√	-	-	-	-	-	-
Maintenance	√	√	√	√	√					√	-

Housekeeping & sanitation	-		-	-	√	-	-	√	√	-	-
Horticulture	-		-	-	-	-	-	√	-	-	-
CFL Cutting	-	-	√	-	√	-	-	-	-	-	-
Microbial Teasting	Hair net	-	-	-	√	√	-	-	-	-	√
Vehicle washing		-	√	-	√	-	-	-	√	-	-
Febrication Work	Welding helmet with face shield	√	√	√	√	Welding apron	-	-	Welding Gloves	-	-

Site Photographs

Site Photographs

Workers With Personal Protective Equipment (PPE) Kit


NATIONAL ROAD
SAFETY WEEK-2023

GREEN BELT/AREA

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/15(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Stack Air Emission
Sampling Method:	CPTL/SM/01	**Point of Sample:**	From Port Hole On Stack
Date of Sample Collection:	24-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/15(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	Boiler @ 750kg/hr
2.	Source of Emission	Burning of Fuel
3.	*Type Of Fuel/Quantity	Bio Diesel @ 35.0ltr/hr
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	12" (Top) ; 12" (Median); 30" (Bottom)
6.	*Height of Stack	30 meter from ground level
7.	Sampling Time	70.0 min
8.	Ambient Air Temperature	34.9°C
9.	Stack Air Temperature	64.6°C
10.	Velocity of Flue Gases	8.27 m/sec
11.	*APCD	Wet Scrubber
12.	CO_2 % (v/v)	5.2%
13.	Volumetric Flow Rate	1575 Nm^3/hr

PARAMETERS	RESULTS	PRESCRIBED STANDARD	TEST METHOD
Particulate Matter (PM), at 3% O_2, mg/Nm^3	42.6	500	IS:11255 (P-1) 1985 (RA:2019)
Nitrogen Dioxide (NO_2), at 3% O_2, mg/Nm^3	14.6	300	IS:11255 (P-7) 1988 (RA:2017)
Sulphur Dioxide (SO_2), at 3% O_2, mg/Nm^3	ND (DL-3.0)	600	IS:11255 (P-2) 1985 (RA:2019)
Carbon Monoxide (CO), mg/Nm^3	38.4	--	IS:13720: 1992

*represent the information provided by the customer.
ND- Not Detected
DL-Detection Limit

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/14a(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Stack Air Emission
Sampling Method:	CPTL/SM/01	**Point of Sample:**	From Port Hole On Stack
Date of Sample Collection:	24-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/14(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	DG Set (100 KVA) (S. No. 62615938)
2.	Source of Emission	Burning of Fuel
3.	*Type Of Fuel/Quantity	Diesel@ 20.0 ltr/hr
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	0.1m (Top) ; 0.1m (Bottom)
6.	*Height of Stack	7.6 meter from Canopy
7.	Sampling Time	35 minutes
8.	Ambient Air Temperature	34.3°C
9.	Stack Air Temperature	156°C
10.	Velocity of Flue Gases	8.68 m/sec
11.	*APCD	NA
12.	Volumetric Flow Rate	178.0 Nm^3/hr

PARAMETERS	RESULTS	PRESCRIBED STANDARD BY CPCB	TEST METHOD
Particulate Matter (PM), g/kw-hr	0.046	≤0.2	IS:11255 (P-1) 1985 (RA:2019)
Nitrogen Dioxide (NO_2) g/kw-hr	0.024	≤4.0	IS:11255 (P-7) 1988 (RA:2017)
Carbon Monoxide (CO) g/kw-hr	0.72	≤3.5	IS:13720: 1992
Sulphur Dioxide (SO_2), mg/Nm^3	ND (DL-3.0)	----	IS:11255 (P-2) 1985 (RA:2019)

*represent the information provided by the customer
ND-Not Detected
DL-Detection Limit
NA-Not Applicable

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/14b(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Stack Air Emission
Sampling Method:	CPTL/SM/01	**Point of Sample:**	From Port Hole On Stack
Date of Sample Collection:	24-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/14(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	DG Set (100 KVA) (S. No. 62615938)
2.	Source of Emission	Burning of Fuel
3.	*Type Of Fuel/Quantity	Diesel@ 20.0 ltr/hr
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	0.1m (Top) ; 0.1m (Bottom)
6.	*Height of Stack	7.6 meter from Canopy
7.	Sampling Time	35 minutes
8.	Ambient Air Temperature	34.3°C
9.	Stack Air Temperature	156°C
10.	Velocity of Flue Gases	8.68 m/sec
11.	*APCD	NA
12.	Volumetric Flow Rate	178.0 Nm^3/hr

PARAMETERS	RESULTS	PRESCRIBED STANDARD BY CPCB	TEST METHOD
Hydrocarbon (as HC), mg/Nm^3	36.4	-	IS:11255 (P-1) 1985 (RA: 2009)

*represent the information provided by the customer

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified

END OF REPORT

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(N)

REPORT No. CPTL/HP/2024/10/17(N) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	DG Set Noise
Sampling Method:	CPTL/SM/01	**Point of Sample:**	1.0 meter from Canopy
Date of Monitoring.:	24-10-2024	**Environmental Conditions:**	Normal
Sample Identification No.:	CPTL/HP/2024/10/17(N)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Noise Level Monitoring		

TECHNICAL DATA

1.	Source of Noise Pollution	DG Set
2.	*Make of D.G. Set	Cummins
3.	*Capacity of D.G. Set	100.0 KVA
4.	*S. No. of D. G. Set	62615938
5.	*Date of Manufacturing of D.G. Set	Dec. 2007
6.	*Date of Installation of D.G. Set	2008

PARAMETERS	RESULTS dB(A)	PRESCRIBED STANDARD dB (A)	TEST METHOD
DG Set Off	62.1	--	IS 9989:1981(Rev.2002)
DG Set On (At 1.0 meter from enclosure surface)	70.4	Max. 75	IS 9989:1981(Rev.2002)

* represent the information provided by the customer.

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/11(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Ambient Air
Sampling Method:	CPTL/SM/01	**Point of Sample:**	At MEE Plant (Inside Premises)
Date of Sample Collection:	23-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/11(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Location of Sampling station	At MEE Plant (Inside Premises)
2.	Instrument used for Sampling	RDS, FPS, Benzene Sampler & Gaseous Attachment
3.	Time period for Sampling	1440 minutes

PARAMETERS	RESULTS	AS PER NAAQS-2009 PRESCRIBED BY CPCB	TEST METHOD
Particulate Matter (PM_{10}), $\mu g/m^3$	42.6	100	IS 5182 (P-23): 2006, (RA – 2012)
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	13.3	60	IS: 5182:(P-24):2019
Nitrogen Dioxide (NO_2), $\mu g/m^3$	13.8	80	IS 5182 (P-6): 2006, (RA – 2012)
Sulphur dioxide (SO_2), $\mu g/m^3$	6.8	80	IS 5182 (P-2): 2001, (RA-2012)
Ammonia (NH_3), $\mu g/m^3$	BDL (DL-20)	400	Indophenol Method, CPCB Guidelines (Vol. 1)
Ozone (O_3), $\mu g/m^3$	BDL (DL-10.0)	100	IS 5182 (P-9): 1974, (RA – 2012)
Benzene (C_6H_6), $\mu g/m^3$	BDL (DL-1.8)	05	IS 5182 (P-11): 2006
Benzo (a) Pyrene (BaP), ng/m^3	BDL (DL-0.9)	01	IS 5182 (P-12): 2004
Carbon monoxide (CO), mg/m^3	BDL (DL-0.5)	4	IS 5182 (Part-10): 1999, (RA – 2009)
Lead (Pb), $\mu g/m^3$	BDL (DL-0.1)	1.0	IS 5182 (Part-22): 2004
Nickel (Ni), ng/m^3	BDL (DL-5.0)	20	CPCB Guideline, Volume-1:2011
Arsenic (As), ng/m^3	BDL (DL-0.7)	06	CPCB Guideline, Volume-1:2011

BDL-Below Detection Limit
DL-Detection Limit

Chemist-In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/10(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Ambient Air
Sampling Method:	CPTL/SM/01	**Point of Sample:**	Village- Bara Basot
Date of Sample Collection:	23-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/10(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Location of Sampling station	Village- Bara Basot
2.	Instrument used for Sampling	RDS, FPS, Benzene Sampler & Gaseous Attachment
3.	Time period for Sampling	1440 minutes

PARAMETERS	RESULTS	AS PER NAAQS-2009 PRESCRIBED BY CPCB	TEST METHOD
Particulate Matter (PM_{10}), $\mu g/m^3$	57.8	100	IS:5182 (P-23): 2006, (RA – 2012)
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	19.5	60	IS: 5182:(P-24):2019
Nitrogen Dioxide (NO_2), $\mu g/m^3$	14.8	80	IS:5182 (P-6): 2006, (RA – 2012)
Sulphur dioxide (SO_2), $\mu g/m^3$	6.6	80	IS:5182 (P-2): 2001, (RA-2012)
Ammonia (NH_3), $\mu g/m^3$	BDL (DL-20)	400	Indophenol Method, CPCB Guidelines (Vol. 1)
Ozone (O_3), $\mu g/m^3$	BDL (DL-10.0)	100	IS:5182 (P-9): 1974, (RA – 2012)
Benzene (C_6H_6), $\mu g/m^3$	BDL (DL-1.8)	05	IS:5182 (P-11): 2006
Benzo (a) Pyrene (BaP), ng/m^3	BDL (DL-0.9)	01	IS:5182 (P-12): 2004
Carbon monoxide (CO), mg/m^3	BDL (DL-0.5)	4	IS:5182 (Part-10): 1999, (RA – 2009)
Lead (Pb), $\mu g/m^3$	BDL (DL-0.1)	1.0	IS:5182 (Part-22): 2004
Nickel (Ni), ng/m^3	BDL (DL-5.0)	20	CPCB Guideline,Volume-1:2011
Arsenic (As), ng/m^3	BDL (DL-0.7)	06	CPCB Guideline,Volume-1:2011

BDL-Below Detection Limit
DL-Detection Limit

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/13(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Ambient Air
Sampling Method:	CPTL/SM/01	**Point of Sample:**	Roof Of Laboratory Office
Date of Sample Collection:	23-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/13(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Location of Sampling station	Roof Of Laboratory Office
2.	Instrument used for Sampling	RDS, FPS, Benzene Sampler & Gaseous Attachment
3.	Time period for Sampling	1440 minutes

PARAMETERS	RESULTS	AS PER NAAQS-2009 PRESCRIBED BY CPCB	TEST METHOD
Particulate Matter (PM_{10}), $\mu g/m^3$	43.4	100	IS: 5182 (P-23): 2006, (RA – 2012)
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	13.7	60	IS: 5182:(P-24): 2019
Nitrogen Dioxide (NO_2), $\mu g/m^3$	13.6	80	IS: 5182 (P-6): 2006, (RA – 2012)
Sulphur dioxide (SO_2), $\mu g/m^3$	6.6	80	IS: 5182 (P-2): 2001, (RA-2012)
Ammonia (NH_3), $\mu g/m^3$	BDL (DL-20)	400	Indophenol Method, CPCB Guidelines (Vol. 1)
Ozone (O_3), $\mu g/m^3$	BDL (DL-10.0)	100	IS: 5182 (P-9): 1974, (RA – 2012)
Benzene (C_6H_6), $\mu g/m^3$	BDL (DL-1.8)	05	IS: 5182 (P-11): 2006
Benzo (a) Pyrene (BaP), ng/m^3	BDL (DL-0.9)	01	IS: 5182 (P-12): 2004
Carbon monoxide (CO), mg/m^3	BDL (DL-0.5)	4	IS: 5182 (Part-10): 1999, (RA – 2009)
Lead (Pb), $\mu g/m^3$	BDL (DL-0.1)	1.0	IS: 5182 (Part-22): 2004
Nickel (Ni), ng/m^3	BDL (DL-5.0)	20	CPCB Guideline,Volume-1:2011
Arsenic (As), ng/m^3	BDL (DL-0.7)	06	CPCB Guideline,Volume-1:2011

BDL-Below Detection Limit
DL-Detection Limit

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/12(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Ambient Air
Sampling Method:	CPTL/SM/01	**Point of Sample:**	Village- Majra
Date of Sample Collection:	23-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/12(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Location of Sampling station	Village- Majra
2.	Instrument used for Sampling	RDS, FPS, Benzene Sampler & Gaseous Attachment
3.	Time period for Sampling	1440 minutes

PARAMETERS	RESULTS	AS PER NAAQS-2009 PRESCRIBED BY CPCB	TEST METHOD
Particulate Matter (PM_{10}), $\mu g/m^3$	55.4	100	IS:5182 (P-23): 2006, (RA – 2012)
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	16.7	60	IS: 5182:(P-24): 2019
Nitrogen Dioxide (NO_2), $\mu g/m^3$	14.6	80	IS:5182 (P-6): 2006, (RA – 2012)
Sulphur dioxide (SO_2), $\mu g/m^3$	6.8	80	IS:5182 (P-2): 2001, (RA-2012)
Ammonia (NH_3), $\mu g/m^3$	BDL (DL-20)	400	Indophenol Method, CPCB Guidelines (Vol. 1)
Ozone (O_3), $\mu g/m^3$	BDL (DL-10.0)	100	IS:5182 (P-9): 1974, (RA – 2012)
Benzene (C_6H_6), $\mu g/m^3$	BDL (DL-1.8)	05	IS:5182 (P-11): 2006
Benzo (a) Pyrene (BaP), ng/m^3	BDL (DL-0.9)	01	IS:5182 (P-12): 2004
Carbon monoxide (CO), mg/m^3	BDL (DL-0.5)	4	IS:5182 (P-10): 1999, (RA – 2009)
Lead (Pb), $\mu g/m^3$	BDL (DL-0.1)	1.0	IS:5182 (P-22): 2004
Nickel (Ni), ng/m^3	BDL (DL-5.0)	20	CPCB Guideline,Volume-1:2011
Arsenic (As), ng/m^3	BDL (DL-0.7)	06	CPCB Guideline,Volume-1:2011

BDL-Below Detection Limit
DL-Detection Limit

Chemist In-Charge
Date: 28/10/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/21a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well Behind Landfill Site (Inside Premises-Upstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/21(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.29	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	652	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	5.6	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	379	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	3.6	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	260	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	52.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	24.0	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	330	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	12.4	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	44.4	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	5.8	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.44	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/21(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/21b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WAS/TE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well Behind Landfill Site (Inside Premises-Upstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/$_{(H.P)}$/2024/10/21(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date:

Sital Singh (CEO)
Date:

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/22a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell at House of Sh. Balwinder-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/22(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.42	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	654	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	BDL (DL=0.5)	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	438	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	185	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	28.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	14.4	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	310	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	47.5	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	44.4	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	ND (DL-1.0)	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.26	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/22(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit
BDL-Below Detection Limit

(Chemist In Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/22b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell at House of Sh. Balwinder-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/22(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 2/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/24a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Hand Pump at House of Sh. Gurubaksh-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/24(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.63	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	768	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	ND (DL=0.5)	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	457	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	320	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	40.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	24.0	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	355	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	34.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	36.5	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	ND (DL-1.0)	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	ND (DL-0.1)	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/24(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit
BDL-Below Detection Limit

(Chemist ~~In-Charge~~)
Date: 21/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 21/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/24b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Hand Pump at House of Sh. Gurubaksh-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/24(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist-In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/23a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Supply Water IPH (Outsides Premises)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/23(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.66	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	766	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	BDL (DL=0.5)	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	372	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	175	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	30.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	14.4	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	330	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	29.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	32.4	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	3.6	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	ND (DL-0.1)	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/23(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit
BDL-Below Detection Limit

(Chemist In-Charge)
Date: 21/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 21/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/23b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Supply Water IPH (Outsides Premises)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/$_{(H.P)}$/2024/10/23(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/28a (W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Borewell Behind Laboratory- Near Nursery (Inside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/28(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.59	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	566	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	BDL (DL=0.5)	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	344	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	150	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	28.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	16.8	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	290	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	34.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	52.4	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	ND (DL-1.0)	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.22	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/28(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit
BDL-Below Detection Limit

(Chemist In Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/28b(W) **REPORTING DATE:02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Borewell Behind Laboratory- Near Nursery (Inside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/28(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MB mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/27a(W) **REPORTING DATE:02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell Near Landfill-PAPA Vatika (Inside Premises- Upstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/27(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.65	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	448	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	4.4	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	394	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	8.8	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	275	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	38.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	13.2	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	330	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	14.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	26.6	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	ND (DL-1.0)	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.22	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/$_{(H.P)}$/2024/10/27(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/27b(W) **REPORTING DATE:02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell Near Landfill-PAPA Vatika (Inside Premises- Upstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/27(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/26a(W) **REPORTING DATE:02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well Near Time Office (Inside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/26(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.44	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	578	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	2.8	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	360	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	4.4	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	250	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	52.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	18.0	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	290	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	14.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	12.6	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	ND (DL-1.0)	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.26	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/26(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/26b(W) **REPORTING DATE:02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well Near Time Office (Inside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/26(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant
TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/25a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well at house of Sh. Rana-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/25(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.25	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	566	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	ND (DL=0.5)	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	422	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	ND (DL=1.0)	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	280	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	44.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	18.0	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	400	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	22.4	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	32.0	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	4.8	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.28	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/25(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit
BDL-Below Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/25b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tube well at house of Sh. Rana-Majra (Outside Premises-Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/25(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Clear & Colorless liquid

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MBAS), mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/29a(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell Behind Temple (Inside Premises- Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/29(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	6.89	6.5-8.5	No relaxation	IS:3025 (P-11): 2022
2.	Specific Conductance, µS/cm	646	-	-	IS:3025 (P-14): 2013 (RA-2019)
3.	Turbidity, NTU	4.2	1	5	IS:3025 (P-10): 1984 (RA-2017)
4.	Total Dissolved Solids, mg/l	368	500	2000	IS:3025 (P-16): 1999 (RA-2019)
5.	Total Suspended Matter, mg/l	18.6	-	-	IS:3025 (P-17): 2022
6.	Total Hardness (as $CaCO_3$), mg/l	230	200	600	IS:3025 (P-21): 2009 (RA-2019)
7.	Calcium (as Ca^{++}), mg/l	66.0	75	200	IS:3025 (P-40): 2004
8.	Magnesium (as Mg^{++}), mg/l	46.2	30	100	IS:3025 (P-46): 1994 (RA-2019)
9.	Total Alkalinity (as $CaCO_3$), mg/l	335	200	600	IS:3025 (P-23): 2006
10.	Chloride (as Cl), mg/l	59.9	250	1000	IS:3025 (P-32): 1998 (RA-2019)
11.	Sulphate (as SO_4), mg/l	2.42	200	400	IS:3025 (P-24): 2022
12.	Iron (as Fe), mg/l	ND (DL-0.1)	1.0	No relaxation	IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019)
13.	Hexavalent Chromium, (as Cr^{6+}),mg/l	ND (DL-0.1)	-	-	IS:3025 (P-52): 2003 (RA-2019)
14.	Zinc (as Zn), mg/l	ND (DL-0.5)	5	15	IS:3025 (P-49): 1994 (RA-2019)
15.	Nitrate (as NO_3), mg/l	4.4	45	No relaxation	IS:3025 (P-34): 2022
16.	Chromium (as Cr), mg/l	ND (DL-0.04)	0.05	No relaxation	IS:3025 (P-52): 2003 (RA-2019)
17.	Fluoride (as F), mg/l	0.24	1.0	1.5	IS:3025 (P-60): 2008

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

Type of Sample	Ground Water (Grab)
Date of Sample Received in Lab	23.10.2024
Sample Identification no.	CPTL/(H.P)/2024/10/29(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
18.	Manganese (as Mn), mg/l	ND (DL-0.09)	0.1	0.3	IS:3025 (P-59): 2006
19.	Lead (as Pb), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-47): 1994 (RA-2019)
20.	Copper (as Cu), mg/l	ND (DL-0.04)	0.05	1.5	IS:3025 (P-42): 1992 (RA-2019)
21.	Nickel (as Ni), mg/l	ND (DL-0.01)	0.02	No relaxation	IS:3025 (P-54): 2003 (RA-2019)
22.	Boron (as B), mg/l	ND (DL-0.1)	0.5	1.0	IS:3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	ND (DL-0.001)	0.003	No relaxation	IS:3025 (P-41):1992 (RA-2019)
24.	Arsenic (as As), mg/l	ND (DL-0.01)	0.01	No relaxation	IS:3025 (P-37): 2022
25.	Phenol (as C_6H_5OH), mg/l	ND (DL-0.001)	0.001	0.002	IS:3025 (P-43): 2022
26.	BOD (at 27°C for 3 Days), mg/l	ND (DL-2.0)	-	-	IS:3025 (P-44) 1993 (RA-2003)
27.	Chemical Oxygen Demand, mg/l	ND (DL-5.0)	-	-	IS:3025 (P-58): 2006 (RA-2017)
28.	Oil & Grease, mg/l	ND (DL-1.0)	-	-	IS:3025 (P-39): 2021

ND-Not Detected
DL- Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : **www.cptl.co.in**

TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORT No. CPTL/H.P/2024/10/29b(W) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA,TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Date of Sample Collection	23.10.2024
Date of Sample Received in Lab	23.10.2024
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Tubewell Behind Temple (Inside Premises- Downstream)
Quantity & Packaging	2.0 liters in Plastic Bottle+1.0 Ltrs in Glass bottle
Sample Identification no.	CPTL/(H.P)/2024/10/29(W)
Analysis Duration	23.10.2024 to 02.11.2024
Sample Collected By	Daljeet Singh & Team
Visual Observation	Colorless liquid with suspended solids

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	Cyanide (as CN^-), mg/l	ND (DL-0.02)	0.05	No relaxation	IS:3025 (P-27): 2022
2.	Anionic detergents (as MB mg/l	ND (DL-0.05)	0.2	1.0	IS:13428 (Annex-k): 2022
3.	Mineral Oil, mg/l	ND (DL-0.5)	0.5	No relaxation	IS:3025 (P-39): 2021 Clause 6
4.	Sulphide (as S), mg/l	ND (DL-0.01)	0.05	No relaxation	IS:3025 (P-29): 1986 (RA-2017)
5.	Barium (as Ba), mg/l	ND (DL-0.03)	0.7	No relaxation	IS:15302:2003 (RA-2018)
6.	Aluminum (as Al), mg/l	ND (DL-0.002)	0.03	0.2	IS:3025 (P-55): 2003 (RA-2019)
7.	Mercury (as Hg), mg/l	ND (DL-0.001)	0.001	No relaxation	IS:3025:P-48:1994:RA-2003

ND-Not Detected
DL-Detection Limit

(Chemist-In-Charge)
Date:

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/03a(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Near Temporary Storage Shed
Quantity & Packaging:	1000 gm in plastic sealed bag
Sample Identification No.:	CPTL/(H.P)/2024/10/03(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	pH	--	7.69	IS 2720 (P-26): 1987 (RA-2021)
2.	Conductivity	mS/cm	0.291	IS 14767:2000
3.	Organic Matter	%	2.46	IS: 2720 (Part-22):2001
4.	Arsenic (as As)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
5.	Mercury (as Hg)	mg/Kg	ND (DL-0.2)	USEPA-3050B: 1996
6.	Lead (as Pb)	mg/Kg	2.66	USEPA-3050B: 1996
7.	Chromium (as Cr)	mg/Kg	2.46	USEPA-3050B: 1996
8.	Copper (as Cu)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
9.	Cadmium (as Cd)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
10.	Zinc (as Zn)	mg/Kg	1.59	USEPA-3050B: 1996
11.	Nickel (as Ni)	mg/Kg	2.42	USEPA-3050B: 1996
12.	Manganese (as Mn)	mg/Kg	1.55	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/03b(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Near Temporary Storage Shed
Quantity & Packaging:	1000 gm in plastic bag
Sample Identification No.:	CPTL/(H.P)/2024/10/03(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	Colour	--	Brown	Visual
2.	Cyanide (as CN)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/02a(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Composite Soil Sample Outside Premises
Quantity & Packaging:	1000 gm in plastic sealed bag
Sample Identification No.:	CPTL/(H.P)/2024/10/02(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	pH	--	7.69	IS 2720 (P-26): 1987 (RA-2021)
2.	Conductivity	mS/cm	0.388	IS 14767:2000
3.	Organic Matter	%	2.87	IS: 2720 (Part-22):2001
4.	Arsenic (as As)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
5.	Mercury (as Hg)	mg/Kg	ND (DL-0.2)	USEPA-3050B: 1996
6.	Lead (as Pb)	mg/Kg	3.58	USEPA-3050B: 1996
7.	Chromium (as Cr)	mg/Kg	2.94	USEPA-3050B: 1996
8.	Copper (as Cu)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
9.	Cadmium (as Cd)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
10.	Zinc (as Zn)	mg/Kg	2.69	USEPA-3050B: 1996
11.	Nickel (as Ni)	mg/Kg	2.97	USEPA-3050B: 1996
12.	Manganese (as Mn)	mg/Kg	1.88	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
(Authorized Signatory)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/02b(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Composite Soil Sample Outside Premises
Quantity & Packaging:	1000 gm in plastic bag
Sample Identification No.:	CPTL/(H.P)/2024/10/02(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	Colour	--	Brown	Visual
2.	Cyanide (as CN)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 02/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/01a(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Composite Soil Sample Inside Premises
Quantity & Packaging:	1000 gm in plastic sealed bag
Sample Identification No.:	CPTL/(H.P)/2024/10/01(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	pH	--	7.78	IS 2720 (P-26): 1987) (RA-2021)
2.	Conductivity	mS/cm	0.284	IS 14767:2000
3.	Organic Matter	%	2.54	IS: 2720 (Part-22):2001
4.	Arsenic (as As)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
5.	Mercury (as Hg)	mg/Kg	ND (DL-0.2)	USEPA-3050B: 1996
6.	Lead (as Pb)	mg/Kg	2.76	USEPA-3050B: 1996
7.	Chromium (as Cr)	mg/Kg	2.58	USEPA-3050B: 1996
8.	Copper (as Cu)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
9.	Cadmium (as Cd)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996
10.	Zinc (as Zn)	mg/Kg	1.66	USEPA-3050B: 1996
11.	Nickel (as Ni)	mg/Kg	2.36	USEPA-3050B: 1996
12.	Manganese (as Mn)	mg/Kg	1.49	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist-In-Charge)
Date:

Sital Singh (CEO)
(Authorized Signatory)
Date: 2/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(S)

REPORT NO. CPTL/H.P/2024/10/01b(S) **REPORTING DATE: 02.11.2024**

NAME OF INDUSTRY:	**M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH, DISTT.- SOLAN (H.P) 174101.**

SAMPLE PARTICULARS

Date of Sample Collected:	23.10.2024
Date of Sample Received:	23.10.2024
Type of Sample:	Soil
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection:	Composite Soil Sample Inside Premises
Quantity & Packaging:	1000 gm in plastic bag
Sample Identification No.:	CPTL/(H.P)/2024/10/01(S)
Analysis Duration:	23.10.2024 to 02.11.2024
Sample Collected By:	Daljeet Singh & Team
Visual Observation:	Brown in color

TEST RESULTS

S. No.	Test Parameters	Unit	Results	Test method
1.	Colour	--	Brown	Visual
2.	Cyanide (as CN)	mg/Kg	ND (DL-0.5)	USEPA-3050B: 1996

ND-Not Detected
DL-Detection Limit

(Chemist In-Charge)
Date: 2/11/24

Sital Singh (CEO)
Date: 02/11/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant

TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(N)

REPORT No. CPTL/HP/2024/10/16(N) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Ambient Noise
Sampling Method:	CPTL/SM/01	**Point of Sample:**	At different locations
Date of Monitoring.:	23-10-2024	**Environmental Conditions:**	Normal
Sample Identification No.:	CPTL/H.P/2024/10/16(N)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Noise Level Monitoring		

NOISE LEVEL

S. No.	Location	Value in dB(A) (Average) Day Time	Value in dB(A) (Average) Night Time	Test Method
01.	Near Main Gate	41.7	32.1	IS 9989:1981(Rev.2002)
02.	Near Utility Area	43.4	31.8	IS 9989:1981(Rev.2002)
03.	Near Landfill	42.4	31.4	IS 9989:1981(Rev.2002)
	Prescribed Standard	**75**	**70**	--

Chemist In-Charge
28/10/24
Date:

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

CHANDIGARH POLLUTION TESTING LABORATORY
(Environmental Monitoring, EIA, NOC, ETP, STP)
NABET Accredited EIA Consultant
TC-6728

H.O. : #372, Sector 15-A, Chandigarh-160 015
Phone : 0172-4669295
Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
Phone : 0172-5090312
E-mail : cptle126@gmail.com ; lab@cptl.co.in
Website : www.cptl.co.in

TEST CERTIFICATE

Format No. CPTLF7.8-I(A)

REPORT No. CPTL/HP/2024/10/16(A) **REPORTING DATE: 28-10-2024**

NAME OF INDUSTRY: **M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD., VILL.-MAJRA, P.O.- DABHOTA, TEH.- NALAGARH, DISTT.- SOLAN (H.P.).**

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	**Type of Sample:**	Stack Air Emission
Sampling Method:	CPTL/SM/01	**Point of Sample:**	From Port Hole On Stack
Date of Sample Collection:	24-10-2024	**Environmental Conditions:**	Normal
Date of Sample Received in Lab.:	24-10-2024	**Analysis Duration:**	24-10-2024 to 28-10-2024
Sample Identification No.:	CPTL/HP/2024/10/16(A)	**Sample Collected By:**	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	Fume Hood (Exhaust) Over Stabilization Pit
2.	Source of Emission	Process Emissions
3.	*Type Of Fuel/Quantity	NA
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	0.2m (Top) ; 0.2m (Bottom)
6.	*Height of Stack	7.0 meter from ground
7.	Sampling Time	35.0 minutes
8.	Ambient Air Temperature	34.6°C
9.	Stack Air Temperature	35.2°C
10.	Velocity of Flue Gases	15.2 m/sec
11.	*APCD	Wet Scrubber

PARAMETERS	RESULTS	PRESCRIBED STANDARD	TEST METHOD
Particulate Matter (PM), mg/Nm^3	35.4	150	IS:11255 (P-1) 1985 (RA:2019)
Nitrogen Dioxide (NO_2), mg/Nm^3	12.6	-	IS:11255 (P-7) 1988 (RA:2017)
Sulphur Dioxide (SO_2), mg/Nm^3	ND (DL-3.0)	-	IS:11255 (P-2) 1985 (RA:2019)
Carbon Monoxide (CO), %	ND (DL-0.2)	1.0	IS:13720: 1992

*represent the information provided by the customer.
ND- Not Detected
DL-Detection Limit

Chemist In-Charge
Date: 28/10/2024

Sital Singh (CEO)
(Authorized Signatory)
Date: 28/10/2024

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

*****END OF REPORT*****

ANNEXURE-V

H.P.STATE POLLUTION CONTROL BOARD

HIM PARIVESH, PHASE-III, NEW SHIMLA-171009

HPSPCB

HPSPCB No : 1141 **Date: 24/10/2024**

Industry Registration ID: 11035 **Application No :** *11387096*

To,

SHIVALIK SOLID WASTE MANAGEMENT LIMITED
VILL MAJRA PO DABHOTA TEHSIL NALAGARH DISTT SOLAN (H.P)
Solan
Solan Baddi
174101

Subject: Renewal of 'Consent to Operate' u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of Air (Prevention & Control of Pollution) Act, 1981.

With reference to your application for obtaining Renewal of 'Consent to Operate' u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit subject to the Terms and Conditions as mentioned in this Consent letter.

1.Particulars of Consent to Operate under the Water Act, 1974 and Air Act, 1981 granted to the industry

Consent No.	*CTO/BOTH/RENEW/RO/2024/11387096*
Consent valid from:	*01/04/2024*
Consent valid upto:	*31/03/2029*
Certificate Type :	*RENEW*
Previous CTE/CTO No. & Validity :	

2. Particulars of the Industry

Name & Designation of the Applicant	*SHRI ASHOK PANJWANI, (DIRECTOR)*
Address of Industrial premises	*SHIVALIK SOLID WASTE MANAGEMENT LIMITED, VILL MAJRA PO DABHOTA TEHSIL NALAGARH DISTT SOLAN (H.P), Solan ,Solan Baddi-174101*
Capital Investment of the Industry	*1329.0 lakhs*
Category of Industry	*Red*
Type of Industry	*1072-Common treatment and disposal facilities-TSDF*
Scale of the Industry	*Large*
Office District	*Solan Baddi*
Capacity	

Raw Materials (Name with quantity per day)

Raw Materials	Quantiry	Unit
As per Haz Waste Received Sch1 & 2 of HWOR2016	2500	M.T./Month

Products (Name with quantity per day)

Name of Products	Unit	Quantity	Intermediate Product	Principal Use
Landfillable Haz Waste Sch1 2 of HWOR2016	M.T./Year	50000	No intermediate product formed	Disposed in Secured Landfill/Send to authorized recycler

By-Products, if any,(Name with quantity per day)

Name of By Products	Unit	Installed Capacity	Average Production
Nil	K.G./Month	Nil	Nil

Details of the Effluent Treatment Plant

Type of Effluent	Capacity	Quantity
ETP	No ETP Plant Installed, we have 20 KLD Capacity Multi Effect Evaporator system for the treatment of leachate generated from secured Landfill and waste water generated from other processes KLD	1 No. KLD

Mode of Disposal

Description	Quantity(in KLD)	Method of Treatment	Method of Disposal
Domestic	8	Soak Pit/Septic Tank	Irrigation/Gardening
Boiler Cooling	0.2	Other	Recycle
Industrial Process	8	Other	Recycle

Quantity of fuel required (in TPD) and capacity of boilers/ Furnace/Thermo heater etc.

Type	No.of Boiler/'Heater /Evaporator/Incinerator/DG Set/Other	Capacity	Type of Boiler/'Heaters/Evaporators /Incinerator/DGSets/Others	Type of Fuel	Fuel consumption rate in MT/hour or KL/hour or M3 /hour
Boilers	1	750 kg/hr	Fire tube Boiler	Biodiesel	20-25 liter/hr
DG Sets	1	100 KVA	Silent Type	Diesel	8-20 litre

Type of Air Pollution Control Devices installed

Equipment Type	Equipment Name	Date/proposed date of installation	Efficiency(%reduction)	Final concentration of pollution being emitted
Wet Scrubber	Boilers	Tue Jan 01 00:01:00 IST 2013	71%	NO2=6 mg/Nm3
Wet Scrubber	Boilers	Tue Jan 01 00:01:00 IST 2013	72%	CO=48mg/Nm3
Wet Scrubber	Boilers	Tue Jan 01 00:01:00 IST 2013	75%	Particulate Matter at 12% CO2=30 mg/Nm3

Sources of emissions and type of pollutants

Name and location of the process vessel to which the stack/ vent is attached	Rate of emission in Kg./hr	Concentration of pollution like SO 2 , NOX, H 2 S, Cl, HCl etc. in mg/NM 3	Height of Vent/outlet/stack from ground level in meters
Fume Hood (Exhaust) over stabilization Pit with wet scrubber	Particulate Matter = 0.033 kg/hr, Nitrogen Oxides as NO2 = 0.012 kg/hr, Sulphur Dioxide as SO2 = Not Detected, Carbon Monoxide as CO = Not Detected	Particulate Matter = 28.6 mg/Nm3, Nitrogen Oxides as NO2 = 10.8 mg/Nm3, Sulphur Dioxide as SO2 = Not Detected, Carbon Monoxide as CO = Not Detected	6 m

Approved By
Chairman
(H. P. State Pollution Control Board)

Endst. No.:

Copy To:-

Regional Officer, HPSPCB, Baddi for information and shall ensure the operation of the unit as per consent and with adequate PCDs.

Anil Joshi, IFS

Member Secretary
For & on behalf of
(H. P. State Pollution Control Board)

TERMS AND CONDITIONS

A. SPECIFIC CONDITIONS

1. This 'Renewal of Consent to Operate' is only for the purpose and under the provision of Water Act, 1974 and Air Act, 1981 as the case may be, and will not construed as substitute for mandatory clearances required for the project under any other law/regulation/direction/order and the applicant shall obtain any such mandatory clearance before taking any steps to establish industry/ industrial plant, operation or process or any treatment and disposal system or an extension or addition thereto.

2. Nothing in this Consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.

3. The unit shall apply for further renewal/extension in the validity of the Consent, before the expiry of this 'Renewal of Consent to Operate'.

4. i) The unit shall ensure compliance of Waste Management Rules i.e. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016/ Plastic Waste Management Rules, 2016/ E-Waste (Management) Rules, 2016/Construction & Demolition Waste Management Rules, 2016 and Manufacture, Storage & Import of Hazardous Chemical Rules, 1989 and provisions made thereunder, as amended from time to time, without any adverse effect on the environment, in any manner (As Applicable).

   ii) The unit shall made provisions for the compliance Solid Waste Management Rules, 2016 and provisions made thereunder and unit shall also not practice burning activity of solid waste/waste generated from fuel within/outside premises, to avoid public nuisance.

5. This 'Renewal of Consent to Operate' is for:-

i) The emissions from all sources conforming to the norms as prescribed in Schedule-I of Environment (Protection) Rules, 1986 as amended from time to time.

ii) Noise and Ambient Air Quality shall be maintained within Ambient Air Quality Standards for noise as specified in Schedule-III of Environment (Protection) Rules, 1986 and Noise Pollution (Regulation and Control) Rules, 2000, as amended from time to time.

iii) The effluent (Domestic/Industrial) shall conform to the limits as prescribed in Schedule-I or Schedule-VI or Industry specific standards of Environment (Protection) Rules, 1986 as amended from time to time.

iv) Sewage and sullage generated from the unit to be disposed-off in a properly designed septic tank system/Sewage Treatment Plant/ Public Sewer System (as applicable).

6. The unit shall ensure regular operation and maintenance of Pollution Control Devices to achieve the norms as prescribed in Environment (Protection) Act, 1986 and the achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re-circulation system installed shall be the entire responsibility of the unit.

7. The unit shall ensure regular operation and maintenance of separate energy meter/flow meter for running pollution control devices and shall also maintain record with respect to operation of air pollution control device/effluent treatment plant, so as to the satisfy the Board regarding the regular operation of air pollution control device/effluent treatment plant and shall maintain log book for the monthly reading / record.

8. **CONDITIONS UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974.**

a) The unit shall maintain the record regarding the daily water consumption as per flow meter installed.

b) The unit shall ensure that terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.

c) The pollution control devices shall be interlocked with the manufacturing process of the industry (if applicable) and the authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board. Unit shall not use any unauthorized out-let(s) for discharging effluents from its premises.

d) Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed-off in scientific manner.

9. **CONDITIONS UNDER AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981.**

a) The unit shall ensure port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets as per the specifications.

b) The unit shall discharge air emissions through a stack of minimum height as specified in 'Consent to Establish' and shall follow standards laid down from time to time.

c) For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation & as per specification.

d) Unit shall ensure Stack height for diesel generating sets as per specification.

e) The unit shall ensure regular operation and maintenance of installed canopy and stack of the D.G sets so as to control the noise & air pollution in order to comply with the provision of notification No GSR-371 E dated 17-5-2002 or direction as issued by MOEF from time to time, under Environment (Protection) Act, 1986.

f) The unit shall ensure disposal of boiler ash/fuel ash through authorized person or within premises in a scientific manner (as the case may be) and shall maintain proper record for the same, if applicable.

g) The unit shall ensure regular operation and maintenance of air pollution control arrangements for control emission from its coal/fuel handling area and from handling, transportation and processing of raw material & product of the industry.

10. The unit shall ensure valid and approved on-site and off-site emergency plan, approved by the Chief Inspector of Factories, Himachal Pradesh (If applicable).

11. The unit shall ensure regular operation and maintenance of real time online monitoring equipment's and provisions for the un-interrupted transfer of data as per guidelines of CPCB (if applicable).

12. The unit shall provide adequate arrangements for fighting the accidental leakages/ discharge of any air pollutant/gas/liquids from the vessels, mechanical equipment's etc. which are likely to cause environmental pollution.

13. The unit shall plant & maintain minimum three layer of trees so far possible as per plantation guide (may be download from the website http://hppcb.nic.in/plantationguide.pdf) all along the boundary of the industrial premises and check air/water/noise pollution at source.

14. Any guidelines issued by the Central Government/State Government/MoEF/CPCB/SPCB/any other authority concerned, shall be binding.

15. This 'Renewal of Consent to Operate' is subject to orders on any litigation pending in any Court of Law. Any direction/order issued by any court shall be binding (if any).

16. The Board reserves the right to revoke the 'Renewal of Consent to Operate' granted to the industry at any time, in case the industry is found violating the provisions of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.

17. The unit shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981.

B. OTHER CONDITIONS

1. The unit shall comply with the conditions imposed by the MoEF/State Level Environment Impact Assessment Authority/ District Level Environment Impact Assessment Authority in the environmental clearance granted to it as required under EIA notification dated 14-9-06, if applicable.

2. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.

3. Stone Crusher units shall comply with the provisions of guidelines notified by the State Government vide Notification No. STE-E(3)-11/2012, dated 29-05-2014 (If Applicable).

4. Brick Kiln units shall comply with the provisions of guidelines notified by the MoEF vide Notification No. G.S.R.233.(E), dated-15-03-2018 and by the State Government vide Notification No. STE-E(5)-6/2013, dated-07-03-2014 (If Applicable).

5. Hydroelectric Projects shall install Online Real Time Monitoring System for the measurement of 15% of minimum discharge in lean season as per orders of Court/Government. The unit shall also ensure provisions for the regular and uninterrupted transfer of data from the real time online monitoring system for 15% of minimum discharge of flow to SPCB, failing which unit shall be liable for action on account of violation of the directions issued by Court/Government/SPCB in this regard (If Applicable).

6. Unit shall strictly adhere to the capacity approved by the Industries Department/ Department of Tourism & Civil Aviation/any other concerned Authority (As Applicable).

7. The unit shall not cause any nuisance/traffic hazard in vicinity of the area.

8. The unit shall ensure that there will not be significant visible dust emissions beyond the property line.

9. The unit shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.

10. Unit shall submit all the annual/quarterly returns, as per timeline.

11. The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/ modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.

12. The unit shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.

13. Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.

C. SPECIAL CONDITIONS

1. The Unit shall neither change the type of products nor shall exceed the production beyond the approved capacity without obtaining consent of the state Board.
2. This consent of the State Board shall be only for the purpose and under the provisions of the Water Act, 1974, Air Act, 1981 shall not be considered as substitute or pre-requisite clearances required from other departments.
3. This consent is subject to ratification of State Board or any litigation pending at any Court of Law.
4. Pollution Control devices provided by the unit shall comply with norms as prescribed under Environment protection rules, 1986.
5. Regional Officer to ensure that unit doesn't attract the provisions of EIA, 2006.
6. Unit shall comply with the fuel policy of the State Government as notified from time to time and as per various directives of the Hon'ble National Green Tribunal for use of fuel in the unit furnace.
7. Unit shall ensure compliance under PWMR and HWMR.

By Order
Chairman
(H. P. State Pollution Control Board)

ANNEXURE-VI

TO WHOM IT MAY CONCERN

It is certified that the Extended load to M/S Shivalik Solid Manegment Ltd at village Majhra P.O Daobhota Teh. Nalagarh Distt Solan (H.P.) has released vide SJO 13770 dt 21.4.17from connected load 224.55 KW to 373.855 KW & Contact Demand from 170 KVA to 188 KVA 11 KV against Account No LSDT6/09 LS

Assistant Engineer,
Electrical Sub Division NO.II,
HPSEBL, Nalagarh

No. HPSEB/ESDNII/C-CASE/20017-18- **Dated:**

Copy to M/s Shivalik Solid Manegment Ltd at villageMajhra Nalagarh Distt Solan (H.P.)

Assistant Engineer,
Electrical Sub Division NO.II,
HPSEBL, Nalagarh

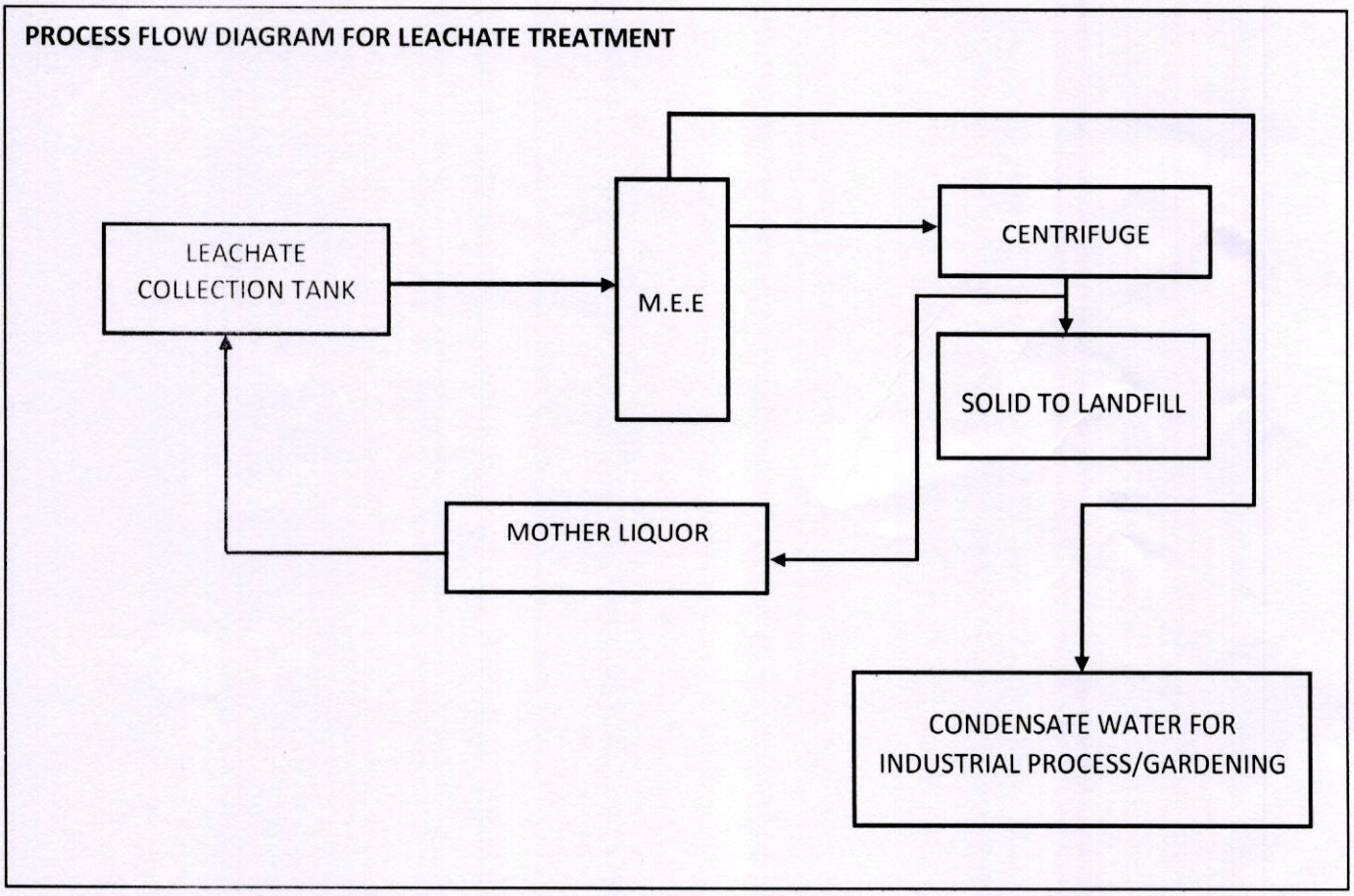
18

Multiple Effect Evaporator (M.E.E)

Design Capacity of Leachate Treatment Plant is 20 KLD

We have Multi Effect Evaporator for treatment of Leachate. The leachate is collected at the leachate collection tank, from leachate collection tank leachate has taken to Multi Effect Evaporator. In Multi Effect Evaporator the water has distilled, and the precipitated dissolved solids are separated in centrifuge and the collected solids are taken to landfill for disposal, the condensate water is used for industrial process /gardening.

PROCESS FLOW DIAGRAM FOR LEACHATE TREATMENT



ANNEXURE-VIII

Punjab Kesari Dated - 30.3.2022

सार्वजनिक सूचना

सूचित किया जाता है कि शिवालिक सॉलिड वेस्ट मैनेजमेंट, गाँव (मौजा) माजरा, डाकघर दभोटा, तहसील नालागढ़, जिला सोलन, हिमाचल प्रदेश को पर्यावरण वन और जलवायु परिवर्तन मंत्रालय नई दिल्ली से पर्यावरणीय स्वीकृति मिल चुकी है। यह स्वीकृति मंत्रालय के EC पहचान संख्या EC22A032HP155908, फाइल संख्या 21.112/2021-IA-III, दिनांक 25 .3.2022 को प्रदान किया गया है। मंजूरी पत्रों की प्रतियां पर्यावरण और वन मंत्रालय के पास उपलब्ध हैं और उनकी वेबसाइट https://parivesh.nic.in पर भी देखी जा सकती हैं।

Divya Himachal Dated- 30-3-2022

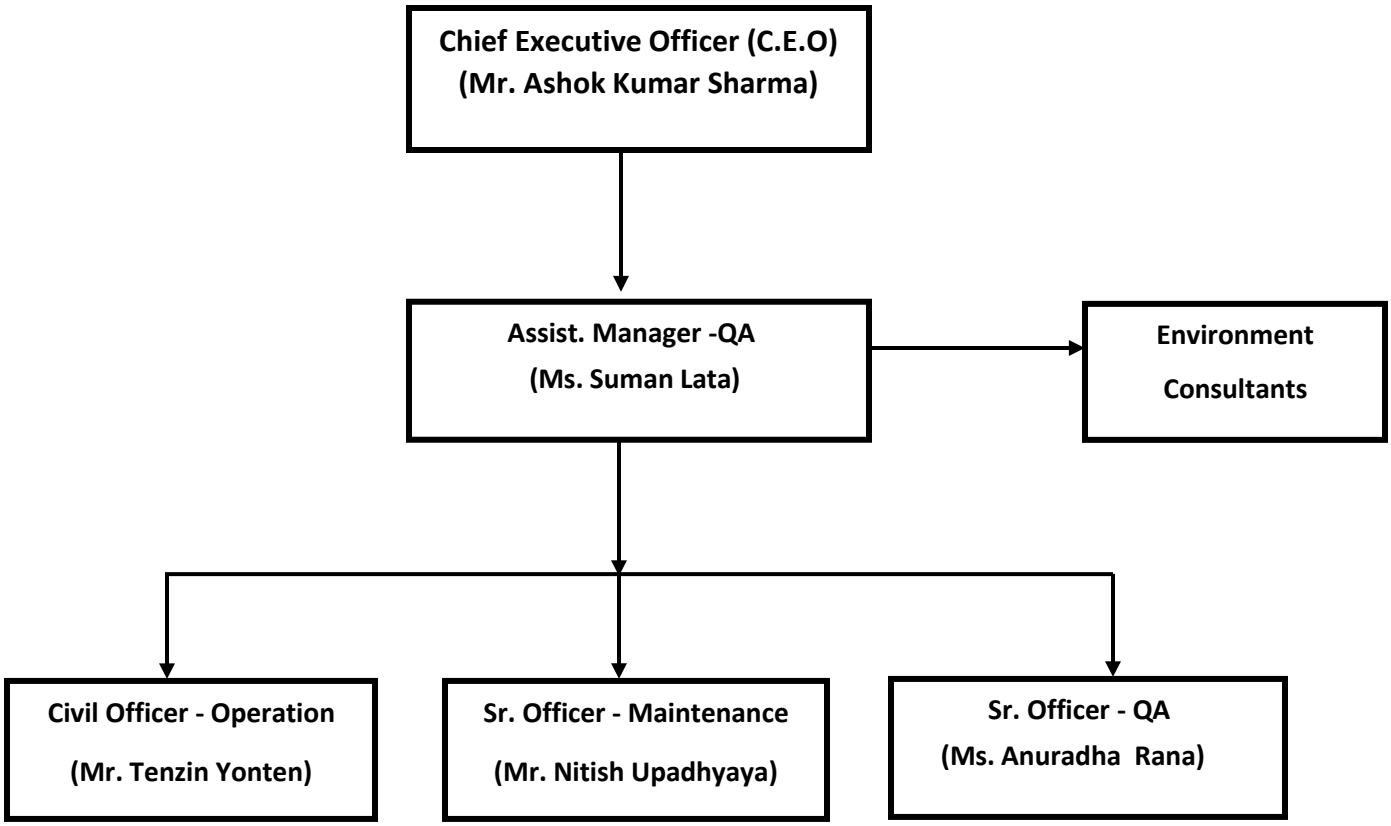
PUBLIC NOTICE

M/s Shivalik Solid Waste Management Limited is pleased to inform that the"Capacity Enhancement of Secured Land fill Facility (SLF) from 10 Lac MT to20 Lac MT at Common Hazardous WasteTreatment, Storage and Disposal Facility(TSDF)" at Dabhota, Nalagarh, Solan (HP)has been accorded with Environmental Clearance vide **EC Identification No.** EC22A032HP155908,File No. *21-112/2021-IA-III, on* dated 25 -3-2022 from Ministry of Environment, Forests and Climate Change, Govt. of India. The copies of the clearance letters are available with the Ministry of Environment & Forests and can also be seen on their website https://parivesh.nic.in

M/s Shivalik Solid Waste Management Limited

Shivalik Solid Waste Management Ltd.

Environment Cell Detail



SHIVALIK SOLID WASTE MANAGEMENT LTD.

Amount spent on Environment Management Plan in Last Six Months.

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkups of workers	Rs. 2,05,700/-
2.	Environment Health & Safety for Workers	Rs. 4,25,238/-
3.	On obtaining the PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,855/-
6.	On green belt development	Rs. 5,70,000/-
7.	Environment monitoring (External Agency & In-house Laboratory Testing)	External – Rs. 3,40,380/- Inhouse – Rs. 4, 22,520/-

Shivalik Solid Waste Management Ltd.

CER Activities completed in Last Six Months (July 2024 to Dec. 2024)

Description	Area	Expenditure (Lacs)	No. of Beneficiaries
Installation of Solar Light. at Villages- 1. Majra, 2. Bara Basot, 3. Butta Plasi in sports play ground	Dabhota, Nalagarh, Solan, Himachal Pradesh	2.03	200

1.6 IMS Policy

A policy has been defined as follows & communicated to all concerned in the organisation at various functions & levels. Awareness & understanding on the policy is generated within the organisation through a wide publicity & training. Policy is available to all relevant interested parties on demand.

INTEGRATED MANAGEMENT SYSTEM POLICY

We at Shivalik Solid Waste Management Ltd. are committed to implement ISO 9001, ISO 14001, and ISO 45001 & NABET guidelines as instrument for continual improvement in services leading to stakeholder's satisfaction.

This will be achieved through:

1. Providing Quality services w.r.t. Waste Treatment, Re-processing & Disposal activities, Environment Impact Assessment Studies, Laboratory and Testing Services.
2. Maintaining reliability, integrity, impartiality & efficient services.
3. Ensuring employee's involvement, motivation & training.
4. Provide healthy & safe working conditions to prevent work related injury and ill health to all our associates
5. Eliminate hazards and reduce OH&S risks through consultation and participation of workers protecting them from reprisals when reporting incidents, hazards, risks & opportunities.
6. Protection of environment including Prevention of pollution through control of resource use & releases
7. Fulfill compliance obligations including legal & other requirements related with quality, environment, health & safety.
8. Periodical review by the management.

Place: Nalagarh
Date: 01.02.2018

Ashok Kumar Sharma
Chief Executive Officer

PREPARED BY:	REVIEWED & APPROVED BY:
Lata	
MANAGEMENT REPRESENTATIVE	CHIEF EXECUTIVE OFFICER

ANNEXURE-XIII

LORD MAHAVIRA HOSPITAL

Approved by: ECHS (Ex Servicemen Contributory Health Scheme), ESI, RSBY (BPL), H.P. Govt. Employees & othe
Insurance TPA Ayushman Bharat & Himacre

Dattowal, Nalagarh - 174 101 (Solan) H.

Phone: 01795-220728 | 222838 | Fax: 01795-22283

e-mail: lordmahaviranlg@gmail.con

SHIVALIK SOLID WASTE MANAGEMENT LTD - MAJRA

SN	NAME	FATHER'S NAME	AGE/ SEX	BP	ECG	SUGER			X-RAY	CHO	OT	TG	URINE	PT
						FBS	RBS	PPBS						
1	DR SIMRANJIT KAUR	APURVA SHARMA	38/F	112/80	NORMAL	143			NAD					
2	MONIKA PATIAL	ANISH THAKUR	40/F	110/80	NORMAL	108			NORMAL					
3	RAJEEV KUMAR THAKUR	PRITAM SINGH	47/M	120/80	NORMAL	129			NORMAL					
4	RAJEEV SHARMA	RAM KRISHAN SHARMA	49/M	120/80	NORMAL	113			NORMAL					
5	SANDEEP SINGH	PARAMJIT SINGH	37/M	120/80	NORMAL	195			NORMAL					
6	HEMA KANGO	PARSHANT BEHAL	34/F	110/70	NORMAL	140			NORMAL					
7	BHARTI	HARI NAUDIYAL	34/F	110/70	NORMAL	154			NORMAL				P C 2-4 /S+	
8	MANISH	GOVERDHAN PARSAD	55/M	124/82	NORMAL	169			NORMAL	213			S+	
9	ASHOK KUMAR SHARMA	LATE SH RAJ KUMAR SHARMA	65/M	120/80	NORMAL	203			NORMAL				S++	
10	SUNITA DEVI	BAROORAL	38/F	100/60	NORMAL	128			NORMAL		46			
11	SILBHADRA BRAHMA	C.N BHARMA	53/M	140/95	NORMAL	133			NORMAL		47	189		42
12	SANDEEP KAPOOR	SURAJ MANI KAPOOR	54/M	149/80	NORMAL	130			NORMAL					
13	RAHUL VERMA	ANIL VERMA	38/M	124/80	NORMAL	198			NORMAL				S++	
14	NAVEEN KUMAR	JAGDISH KUMAR	27/M	140/90	NORMAL	138	138		NORMAL					
15	MRINMOY DEB NATH	MANIK DEV NATH	28/M	118/74	NORMAL	209			NORMAL				L.YELLOW,S++	
16	DINESH SHARMA	LATE SH SURINDER PAL SHARMA	44/M	115/70	NORMAL	133			NORMAL					
17	RAJESH CHANDRA ARYA	DEEP CHANDRA ARYA	44/M	120/80	NORMAL	222		222	NORMAL				S++/P C 2-3	
18	AKANSHA SINGH	DEVENDER SINGH	40/F	120/80	NORMAL	149			NORMAL				S+	
19	VIDUSHI SHARMA	AJAY SHARMA	27/F	104/84	NORMAL	114			NORMAL					
20	RIDHI SHUKLA	GOPAL SHUKLA	25/F	110/70	NORMAL	152			NORMAL				S+	
21	BOBY	DUNI CHAND	34/M	114/84	NORMAL	145			NORMAL				P.YELLOW/ S+	
22	LAKSHMI	RAM BAHADUR SINGH	35/F	100/70	NORMAL	NORMAL			NORMAL			184		
23	KAMINI	LATE SH DARSHAN	27/F	100/70	NORMAL	128			NORMAL					
24	NEERAJ JASWAL	DHANWANT JASWAL	37/M	118/80	NORMAL	136			NORMAL				P C 2-4	
25	PARUL THAKUR	SANJAY THAKUR	29/F	110/70	NORMAL	156			NORMAL					
26	PAWAN KUMAR	SUDARSHAN KUMAR	33/M	120/80	NORMAL	129			NORMAL				P C 2-4	






ICU, INDOOR, LITHOTRIPSY, LAPROSCOPY, ENDOSCOPY, EEG, CT SCAN, LAB, ALL FACILITIES UNDER ONE ROOF

LORD MAHAVIRA HOSPITAL

Approved by: ECHS (Ex Servicemen Contributory Health Scheme), ESI, RSBY (BPL), H.P. Govt. Employees & other
Insurance TPA Ayushman Bharat & Himacre

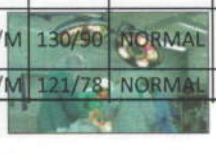
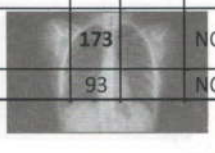
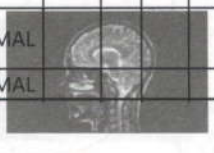
Dattowal, Nalagarh - 174 101 (Solan) H.P

Phone: 01795-220728 | 222838 | Fax: 01795-222838

e-mail: lordmahaviranlg@gmail.com

27	ABHINAV SHARMA	JITENDER KUMAR	25/M	104/74	NORMAL	132			NORMAL					
28	VAKIL SINGH	LAKSHMI RAM	50/M	114/80	NORMAL	122			NORMAL		45			
29	JITENDER	RAM PARVESH PAL	43/M	130/90	NORMAL	118			NORMAL					
30	AJAY KUMAR	MANSUKH RAM CHOUHAN	35/M	120/82	NORMAL	169			NORMAL				S+	
31	RAFIQ MOHAMMAD	GULAM MOHAMMAD	43/M	114/72	NORMAL		97		NORMAL		46		P C 2-3	
32	JAGDISH KUMAR	NAIN SINGH	48/M	127/75	NORMAL		95		NORMAL	209				
33	GURUCHARAN SINGH	BACHITAR SINGH	44/M	130/75	NORMAL	108			NORMAL		48			43
34	AKSHAY RAJPUT	GIRISH PAL SINGH	27/M	127/85	NORMAL		116		NORMAL					
35	PRITI DHIMAN	VINOD KUMAR	26/F	100/60	NORMAL		89		NORMAL					
36	NAVNEET DHALORIA	RAJMAL	34/M	137/82	NORMAL		112		NORMAL				P C 3-4	
37	VISHAL MANKOTIA	VIJAY SINGH MANKOTIA	34/M	135/90	NORMAL		87		NORMAL					
38	SATNAM SINGH	BURA SINGH	28/M	132/79	NORMAL		119		NORMAL					
39	SURESH KUMAR	NARINDER SINGH	36/M	135/80	NORMAL		90		NORMAL				P C 2-3	
40	SANJEEV KUMAR	AJMER SINGH	38/M	116/74	NORMAL		91		NORMAL		43			
41	LAKHVIR SINGH	SOHAN LAL	29/M	125/82	NORMAL		91		NORMAL					
42	TENZIN YONTEN	CTIHERING	31/M	120/90	NORMAL		97		NORMAL					
43	SUDARSHAN SINGH	RATTAN SINGH	53/M	133/90	NORMAL		112		NORMAL	213				
44	SANJAY KUMAR	BHUNDA RAM	51/M	112/74	NORMAL		110		NORMAL			181		
45	ANURADHA	RAJ SHEKHAR SINGH	31/F	102/69	NORMAL		108		NORMAL					
46	SUBHA RANA	RAVINDER SINGH RANA	28/F	112/72	NORMAL		96		NORMAL					
47	SURJEET SINGH	MADAN LAL	32/M	117/74	NORMAL		115		NORMAL					
48	DR. DEEP KUMAR	BHAG SINGH	44/M	113/71	NORMAL		122		NORMAL		46			
49	SUMAN LATA	SANJEEV KUMAR	38/F	129/83	NORMAL		98		NORMAL					
50	GURDEEP SINGH	BALVEER SINGH	27/M	121/80	NORMAL		90		NORMAL				P C 2-3	
51	ASHOK KUMAR	BHANWAR SINGH	57/M	135/74	NORMAL		93		NORMAL	225		183	P C 2-3	
52	JAI PAL	LALA RAM	43/M	130/60	NORMAL		134		NORMAL	211				
53	NITESH UPADHYAY	SHATRUDHAN UPADHYAY	30/M	118/71	NORMAL		98		NORMAL					
54	ANAND KUMAR SINGH	SURINDRA SINGH	40/M	134/88	NORMAL		87		NORMAL					
55	ARVIND YADAV	JAMUNA YADAV	40/M	130/90	NORMAL		173		NORMAL					
56	AJAY KUMAR	NAGESH KUMAR	44/M	121/78	NORMAL		93		NORMAL					




ANNEXURE-XIV

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By :
Government of Himachal Pradesh

Date	:	17/05/2024
Time	:	16:19:13 PM
Validity upto	:	16/05/2025

Certificate SL. No.	:	HP09300110013754
Registration No.	:	HP642482
Date of Registration	:	22/Sep/2010
Month & Year of Manufacturing	:	August-2010
Valid Mobile Number	:	******1299
Emission Norms	:	BHARAT STAGE IV
Fuel	:	DIESEL
PUC Code	:	HP0930011
GSTIN	:	
Fees	:	Rs.60.00
MIL observation	:	No

Vehicle Photo with Registration plate
60 mm x 30 mm

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	1.62	0.95

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://puc.parivahan.gov.in

Authorised Signature with stamp of PUC operator
60mm x 20 mm

The Nalagarh Work Shop Co-op. Ind. Service Society Ltd. V.P.O. Rajpura, Tehsil Nalagarh (H.P.)

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By :

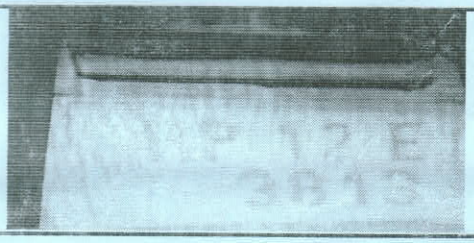
Government of Himachal Pradesh

Date	:	08/11/2024
Time	:	09:01:33 AM
Validity upto	:	07/05/2025

HP12E3813

Certificate SL. No.	:	HP07200600005287
Registration No.	:	HP12E3813
Date of Registration	:	04/Feb/2012
Month & Year of Manufacturing	:	November-2011
Valid Mobile Number	:	******2222
Emission Norms	:	EURO 1
Fuel	:	DIESEL
PUC Code	:	HP0720060
GSTIN	:	
MIL observation	:	No

Vehicle Photo with Registration plate
60 mm x 30 mm



Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	2.45	0.26

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://puc.parivahan.gov.in

Authorised Signature with stamp of PUC Operator
60mm x 20 mm

Himachal Pradesh State Pollution Control Board

'Him Parivesh', Phase –III, New Shimla-171009, HP.

Form-V

(See Rule 14)

(To be enclosed along with Consent Renewal Application Form for the subsequent year)

Submission of Environmental Statement is in accordance with the provisions of Rule-14 of the Environment (Protection). Amendment Rules, 1993 of the Environment (Protection)Act, 1986 (29 of 1986) published vide Notification dated 22-04-1993-G.S.R. 386 (E) in the Gazette of India – Extraordinary- Part-II Section-3 Subsection (i). No. 155 dated 28-04-1993 by the Ministry of Environment and Forests, Government of India: read with the Notification dated 13-02-1993 G.S.R. 329 (E) of the Gazette of India-Extraordinary Part-II Section-3 Subsection (i) No. 120 dated 13-03-1993.

"Every Person carrying on an industry, operation, operation or process requiring Consent under Section-25 of the Water (Prevention & Control of Pollution)Act, 1974 (6 of 1974) or under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 (14 of 1981) or both or authorization under the Hazardous Wastes (Management, Handling and Transboundary Movement)Rules, 2008 published under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an Environmental Statement for the financial for the financial year ending the 31st March in Form V to the concerned State Pollution Control Board on or before the Thirtieth day of September every year, beginning 1993."

From:

___M/s Shivalik Solid Waste Management Limited__

___Vill. Majra, P.O. Dabhota, Teh. Nalagarh___

__Distt. Solan (H.P.)_____

To

Member Secretary,
Himachal Pradesh State Pollution Control Board
Him Parivesh, Phase-III, New Shimla,
Shimla-171009, HP.

ENVIRONMENT STATEMENT for the financial year ending the 31st March ___2024_____

PART-A

(iv)	Name and address of the owner/occupier of the industry operation or process.	Ashok Panjwani (Authorized Signatory Ashok Kumar Sharma)
(v)	Industry category- Primary-(STC Code) Secondary-(SIC Code)	Treatment, Storage and Disposal Facility
(vi)	Production capacity–Units per annum	TSDF site (Planed capacity 50000 MT/Year). No Manufacturing
(iv)	Year of establishment	2008
(v)	Date of the last Environmental Statement submitted	26.06.2023

PART-B

Water and Raw Material Consumption

(iii) Water Consumption m^3 per day

Process	2.5 KL
Cooling	1.3 KL (Whenever required, including MEE feed water)
Domestic	9.0 KL

Name of Products	Process water consumption per unit of product output	
	During the previous Financial year	During the current Financial year
	(1)	(2)
(1) No Product Manufactured	---N.A.----	----N.A.---
(2)		
(3)		

(iv) Raw material consumption

*Name of raw materials	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
Haz. Waste from Different Industries (Majorly sludge from ETPs of various industries)	---N.A.---	Nil	Nil
For stabilization wherever required we use nominal quantities of of materials		Attached Annex –VIA	Attached Annex -VIB

*Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART-C

Pollution discharged to environment /unit of output

(Parameter as specified in the Consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standard with reasons
(c) Water	No Discharge	----N.A. ---	---N.A.---
(d) Air	Chimney attached to boiler DG run only in case of HPSEB power failure.	Attached report Attached report	

PART-D

Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008]

Hazardous Wastes	Total Quantity (Kg.)	
	During the previous Financial year	During the current Financial year
1. Solid Waste including Slag (Received from Member Industries)	38039634 kg	35676.071 kg. (Attached Annex. I)
2. Drums/ Containers (Received from the parties)		
a) HDPE & MS drums of different Capacity calculated as per 200 Ltr. capacity	33903	Detail attached 29843 (Attached Annex. II)
3. RO Reject (Received from the parties)	1469.980 KL	564.700 KL (Attached Annex.III)
4. Oil a) Generation	10 Litres	14 Litres (Attached Annex.V
b) Received from Parties	285.211 KL	261.107 KL (Attached Annex.IV)
5. CFL	12252 kg,	10058 kg (Attached Annex.V)
6. Battery Waste VI)	13158 kg	18609 kg (Attached Annex

Note: All above quantities are of the materials received from member industries

PART-E

PART-E

Solid Wastes generated

	Total Quantity (Kg.)	
	During the previous financial year	During the current financial year
(g) From process	Detail attached (Annex-VIII)	Detail attached (Annex-VII)
(h) From pollution control (i)	Detail attached (Annex-VIII)	Detail attached (Annex-VII)
(j) 1. Quantity recycled or re-utilized within the unit (k)	Nil Oil	Detail attached (Annex-VII)
(l) 2 Sold	----Nil----	Detail attached (Annex-VII)
3 Disposed	---Nil---	Detail attached (Annex-VII)

PART-F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

A) **Hazardous Waste :** The Waste received from the various Industries as well as generated from Pollution control devices is tested w.r.t. disposal parameters prior to transportation. The Passed material is collected from the party, tested for finger print Analysis on receipt & afterwards disposed to secured landfill. This comprises of the sludge generated from primary & secondary operations of effluent treatment plants with the various industries.

The material which can be made Landfillable by physical treatment is first treated & then disposed to landfill.

Material having high calorific value (i.e. >2500 K Cal/Kg) are pre-mixed, packed in HDPE bags & sent for Co-processing.

B) Drums/Containers: These contain quantities of chemicals which on mixing with water increase the COD/BOD level. These are washed properly at the designed plant (Twice each). Checked for proper washing Then cleared for reuse.

C) R.O. Reject: Treated in Multi Effect evaporator. The recovered water is used for gardening/process. Sludge generated from the process is disposed to landfill directly/after treatment.

D) OIL: Collected is sent for recycling.

F) CFL: Collected, Stored & Crushed in Specially designed machine (Approved by CPCB).

H) Batteries: Collected & stored in designated place till shifted to authorized recycler.

PART-G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

The Leachate generated from the landfill as well as RO Reject received from the industries is collected in the Tank. This is treated in the multi effect evaporator. The treated water (final water) is collected in separate tanks. The treated water is tested for its characteristics after meeting the standard, this water is used for gardening/industrial process purposes. This reduces the water intake from the Borewell for gardening.

Rainwater Harvesting: We have constructed a storage facility for run off water. The total capacity of the reservoir is 11000 KL. This water is used for gardening. Hence, Borewell water intake is reduced.

Roof water of the Laboratory building is stored in a tank having capacity 6KL and used for gardening.

PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution/prevention of pollution.

In every Financial Year planted near 100 trees in the premises or Near Premises. We have planted 2000 plants in F. Year 2022-2023 in the Landfill area and outside main gate along the road. We will plant more trees in the Financial Year 2022-2023 too.

associated & pursued to utilize the facility & hence ensure the safe disposal of the haz. Waste.

PART-I

Any other particulars for improving the quality of the environment.

6. More & more industries are generating Haz. Waste in State site generations in the State.
7. Started Sending Paint sludge for recycling.
8. Created awareness among the industries for the proper disposal of contaminated drums.
9. Collection of Used Oil/Waste oil from the industries.
10. Driving for the Co-Processing of the waste.

(Signature of a person carrying out an industry – operation or process)

Date: 26.06.2024

Name:

Designation

Address: M/s Shivalik Solid Waste Management Ltd.
Vill. Majra, P.O. Dabhota, Teh. Nalagarh,
Distt. Solan (H.P.)

Seal/ Stamp:

ANNEX-I B

SHIVALIK SOLID WASTE MANAGEMENT LTD

Summary of waste generated during the F. Year 2023-24

S.No.	Waste Type	Category	Quantity	Disposal
1	Sludge from operation of MEE Plant	37.3	1.770 MT	Disposed in Land fill
2	APCD Dust (Boiler Ash)	37.1	8 kg	Sent for co processing
3	Used Oil	5.1	14 Ltr	Sent for recycling to
4	PPEs & Cloth Wastes	33.2	177 kg	Sent for co processing
5	Residue waste (form Drum Washing)	34.2	595 kg	Disposed in Landfill
6	E-waste	----	314 kg	Sent for recycling to SSWML Unit -II
7	Acid from Battery	----		Disposed in landfill

Shivalik Solid Waste Management Ltd. NALAGARH

ANNEX – II

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF WASTE RECEIVED IN F.Y. 2023-2024

MONTH	WASTE RECEIVED (IN MT)
April, 23	2980.545
May, 23	3614.646
June, 23	3373.200
July, 23	2372.240
Aug., 23	2525.829
Sept., 23	2575.817
Oct., 23	2771.818
Nov., 23	2583.683
Dec., 23	2678.485
Jan., 24	3163.202
Feb., 24	3426.692
March, 24	3609.914
TOTAL	**35676.071 MT**

Shivalik Solid Waste Management Ltd. NALAGARH

ANNEXURE-IX

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF RO REJECT RECEIVED IN F.Y. 2023-2024

MONTH	RECEIVED (IN KL)
April, 23	17.130
May, 23	72.020
June, 23	67.840
July, 23	62.710
Aug., 23	79.560
Sept., 23	38.310
Oct., 23	35.220
Nov., 23	32.710
Dec., 23	37.310
Jan., 24	31.140
Feb., 24	47.450
March, 24	43.300
TOTAL	**564.700 KL**

Shivalik Solid Waste Management Ltd. NALAGARH

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF OIL RECEIVED IN THE F.Y. 2023-2024

MONTH	RECEIVED (IN KL)
April, 23	12.393
May, 23	19.619
June, 23	20.673
July, 23	12.171
Aug., 23	14.185
Sept., 23	27.059
Oct., 23	19.811
Nov., 23	13.817
Dec., 23	34.586
Jan., 24	38.314
Feb., 24	19.102
March, 24	29.377
TOTAL	**261.107 KL**

Shivalik Solid Waste Management Ltd. NALAGARH

ANNEXURE-V

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF USED BATTERIES RECEIVED DURING F.Y. 2023-2024

MONTH	RECEIVED (IN Kg)
April, 23	3395
May, 23	1903
June, 23	1561
July, 23	2299
Aug., 23	340
Sept., 23	125
Oct., 23	2792
Nov., 23	415
Dec., 23	4638
Jan., 24	229
Feb., 24	202
March, 24	710
TOTAL	18609 Kg

Shivalik Solid Waste Management Ltd. NALAGARH

SHIVALIK SOLID WASTE MANAGEMENT LTD

ANNEXURE – VIB

RAW MATERIAL USED

LIST OF MATERIALS USED FOR TREATMENT IN THE FY YEAR 2023-2024

Lime	:	617389 kg
Cement	:	3921600 kg
Calcium Carbonate	:	485465 kg
Pond Ash	:	358065 kg

SHIVALIK SOLID WASTE MANAGEMENT LTD

ANNEXURE – VIC

RAW MATERIAL USED

LIST OF MATERIALS USED FOR Pre-PROCESSING OF HAZ. WASTE FOR CO-PROCESSING IN THE FY YEAR 2023-24

Saw Dust : **1080320** kg

Shivalik Solid Waste Management Ltd. NALAGARH

	32.540
June, 23	21.945
July, 23	0.000
Aug., 23	26.155
Sept., 23	10.263
Oct., 23	0.000
Nov., 23	0.000
Dec., 23	0.000
Jan., 24	15.075
Feb., 24	16.949
March, 24	47.068

ANNEXURE – VII

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF HAZ. WASTE SENT FOR CO-PROCESSING IN MT [F.Y. 2023-24]

MONTH	Quantity Sent to Ambuja Darlaghat (MT)	Quantity Sent To ACC Ltd. (Barmana) (MT)	Quantity Sent to ACL LTD-Rabriyawas (Rajasthan) (MT)	Quantity Sent to ACC Ltd. (Lakheri) (Rajasthan) (MT)	Quantity Sent to DALMIA (Bihar) (MT)
April, 23	418.925	0.000	22.175	0.000	0.000
May, 23	350.065	31.055	78.435	0.000	109.205
June, 23	288.915	0.000	24.465	0.000	81.675
July, 23	250.995	0.000	25.605	30.210	216.220
Aug., 23	305.575	0.000	0.000	77.975	321.465
Sept., 23	359.28	0.000	0.000	77.96	107.07
Oct., 23	330.750	0.000	0.000	51.550	214.920
Nov., 23	273.385	0.000	0.000	36.330	267.600
Dec., 23	312.925	0.000	26.785	28.840	296.935
Jan., 24	110.800	0.000	0.000	100.550	269.430
Feb., 24	330.375	0.000	0.000	74.665	271.630
March, 24	343.385	0.000	0.000	48.405	295.475
Total	3675.375 MT	31.055MT	177.465 MT	526.485 MT	2451.625 MT
Total Comm. Waste sent Coprocessing	6862.005 MT				

NOTE: - Above mentioned Quantity of pre-processed Hazardous Waste sent for co-processing including raw material (Raw material used for pre-processing =1067.811 MT)

Shivalik Solid Waste Management Ltd. NALAGARH

SHIVALIK SOLID WASTE MANAGEMENT LTD

SUMMARY OF DRUMS RECEIVED DURING F.Y. 2023-2024

MONTH	QUANTITY (In 200Ltr. Capacity) IN Nos.
April, 23	2568
May, 23	2450
June, 23	2958
July, 23	2153
Aug., 23	2240
Sept., 23	2498
Oct., 23	2663
Nov., 23	2070
Dec., 23	2669
Jan., 24	2207
Feb., 24	1915
March, 24	3398
TOTAL	29789

Shivalik Solid Waste Management Ltd. NALAGARH

SSWML	**SHIVALIK SOLID WASTE MANAGEMENT LIMITED** **ON SITE EMERGENCY PLAN**	**DOC: P-E50-01** **PAGE: 1 of 20** **ISSUE: 1.3** **DATE: 01.04.2023** **APPROVED BY:**

Contents

IDENTIFIED EMERGENCY SITUATIONS

S. No.	Identified Emergency	Amenable Area/Department
01	Fire , Electrical Shock & Personnel accident	Stores
		QC
		DG
		General Maintenance
		Transformer & Switch Yard
		Scrap Yard
		Waste treatment & Disposal
		Offices
		Transport
02	Large Scale Spillage of Chemicals	Stores
		QC
03	Accidental Blast / Explosion/ chemicals over a person	QC
		Waste treatment & Disposal
		Stores

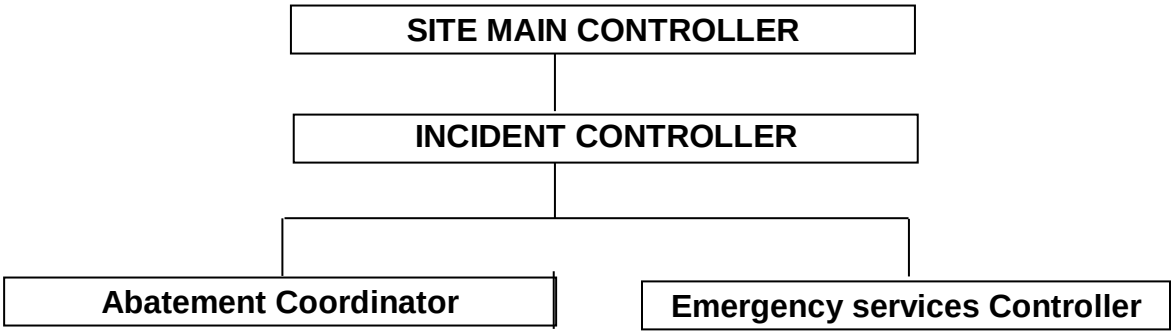
IDENTIFIED LIST OF HAZARDOUS CHEMICALS

S. No.	Name of Hazardous Chemicals	S.No. as per EP Act	Storage quantity in M.T.	Permissible quantity in M.T.	Availability of MSDS	Applicable Area / Deptt.	Application Code (S-Storage, U-Use, T-Transfer)
1.	Acetic Acid	2	0.005	----	Yes	QC	S & U
2.	Ammonia	31	0.005	60.000	Yes	QC	S & U
3.	Formaldehyde	285	0.005	5.000	Yes	QC	S & U
4.	ISO Propyl alcohol	334	0.005	7000.000	Yes	QC	S & U

5.	Nitric Acid	423	5	----	Yes	Acid Store Q C	S & T S, U & T
6.	Phosphoric Acid	497	0.005	----	Yes	Q C	S & U
7.	Potassium Hydroxide	522	0.005	----	Yes	Q C	S & U
8.	Sodium Hydroxide (Caustic Soda)	571	0.002	----	Yes	Q C	S & U
9.	Sulphuric Acid	591	5	----	Yes	Acid Store QC	S & T S & U
10.	Hydrogen Peroxide	317	0.002	----	Yes	Q C	S & U
11.	Acetone	4	0.010	7000.000	Yes	Q C	S & U
12.	Liquefied Petroleum Gas	347	0.200	5.000	Yes	Panetary	S,T & U
13.	Chloroform	130	0.002	----	Yes	Q C	S & U
14.	Ethyl Alcohol	248	0.005	7000.000	Yes	QC	S, U & T
15.	Iodine Crystal	323	0.001	----	Yes	QC	S, U & T

Note: To Keep MSDS of all above.

EMERGENCY COMMAND STRUCTURE



S. No.	Role	Designated Personnel	Alternate Personnel	Other than general shift
1.	Site Main Controller	Site in-charge	Senior most person in plant	Senior most person in plant
2.	Incident Controller	HOD (maintenance & Utility)	MR	Supervisor
3.	Emergency Services Controller	HOD (HR)	HOD (QC)	Supervisor
4.	Abatement Coordinator	MR	HOD (QC)	Supervisor

Note: This structure shall be responsible for on site as well as offsite emergency. In case there is any emergency during off the office hours above structure remain responsible, they are informed by the security and security keep following their instructions till they reach at site.

RESPONSIBILITIES & AUTHORITIES

SITE MAIN CONTROLLER

He has overall responsibility for directing operations and calling out side help depending upon the situation.

Responsibilities / Duties: -

Immediately being aware of the emergency, he will go to the emergency site / emergency control centre. ON arrival he will;

1. Relieve the I.C. of responsibility of overall main control.
2. On consultation with the incident controller, decide whether make emergency exit on declaration of a major emergency, ensure that, the outside emergency services and mutual help are called and if necessary, nearby factories and population are informed.
3. Ensure that the key personnel are called in.
4. Exercise direct operational control of those parts of the works outside the affected area.
5. Continuously review and assess possible development to determine the most probable course of events.
6. Direct the safe close down and evacuation of plants in consultation with the I.C. and key personnel. If necessary, arrange for evacuation of neighboring population.
7. Ensure that casualties are receiving adequate attention. Arrange for hospitalization of victims and additional help if required. Ensure that the relatives are advised.
8. Inform and liaise with the Chief Officer of the fire and police services, District Emergency Authorities and with the Factory Inspectorate and experts on health and safety.
9. Ensure for accounting for personnel and rescue of missing persons.
10. Control vehicle movement within factory.
11. Arrange for chronological record of the emergency to be maintained.

12. Where the emergency is prolonged, arrange for the relief of personnel and the provision of catering facilities.
13. Issue authorized statement to the news media. Where necessary inform Head Office.
14. Ensure that proper consideration is given to the preservation of evidence. Arrange for photographs / video.
15. Control rehabilitation of affected areas and victims on cessation of emergency. Do not restart the plant unless it is ensured safe to start and cleared by the authorities.

INCIDENT CONTROLLER:-

His primary duty is to take charge of the scene of the incident. In the initial stages, he may be required to take decisions involving the operation of other plants / processing area or to stop or to continue any process and to take technical decision to control the incident.

Responsibilities / Duties of Incident Controller: -

Immediately being aware of the emergency and its location, he will proceed to the scene. ON arrival, he will;

1. Assess the scale of emergency and decide if a major emergency exists or is likely. On his decision he will activate the on-site plan.
2. Assume the duties of the site Main Controller pending the later's arrival. For this purpose, he will depute his deputy Incident Controller on the scene and particularly he will,
   (a) Direct the shutting down and evacuation of plant and areas likely to be affected by the emergency.
   (b) Ensure that the outside emergency services, including mutual aid, have been called in.
   (c) Ensure that, key personnel have been called in.
3. Direct all operations within the affected area with the following priorities: -
   (a) Secure the safety of personnel.
   (b) Minimize the damage to plant, property and the environment.
   (c) Minimize the loss of material.

4. Direct rescue and fire fighting operation until the arrival of the outside Fire Brigade.
5. Search for casualties.
6. Evacuate non-essential workers to the assembly points.
7. Give advice and information as requested by the head of the Fire Brigade and other emergency services. Brief them the name and quantity, fire and toxic hazards of the materials involved in the emergency area. Also brief them regarding any special care to be taken depending upon the chemicals used / stage of the process.
8. Brief the site main controller and keep informed of developments.
9. Preserve evidences that will be necessary for subsequent enquiry into the cause of the emergency and concluding preventive measures.

EMERGENCY SERVICES CONTROLLER

1. Will inform to all nearby hospitals for medical aid for sufferers and fire station for fire brigade.
2. Will arrange tea, snacks, and food etc. for disaster team.
3. Will ensure that breathing apparatus, torches and proper lighting arrangement is made at the place of emergency.
4. Will ensure proper arrangement of water.
5. Will arrange adequate work force for assistance.
6. Assist external services in directing them to the areas of incident and providing any help and assistance to them on their arrival.

ABATEMENT CO-ORDINATOR:

1. Team leader along with his team shall keep watch on entire emergency operation. He should be motivating force and lead the team in the front.
2. He shall ensure that water, air and any other disaster fighting operation does not pollute the environment.
3. If required he shall get the necessary test done on air/water discharge through Q. C. or through outside test laboratory.

4. Make all possible arrangement for preventing or mitigating, the effects of the incident on the environment.
5. Shall investigate the cause of disaster and submit a report to management.

KEY PERSONNEL OF DISASTER MANAGEMENT TEAM:-

The duties / responsibilities of key personnel are to provide advice and to implement the decisions made by the site main controller / incident controller in the light of information received on the developing situation at the emergency. Such key personnel are responsible for safety, security, fire, gas and spill control, pollution control, communication system including telephone, telex, medical services, transport, engineering, production, technical services, stores and personnel.

As necessary, they will decide the actions needed to shut down plants, evacuate personnel, carry out emergency engineering work, arrange for supplies of equipment, utilities (fuel, water, power etc.) liaise with police, fire brigade, emergency planning authority, factory inspectorate, hospitals, neighboring industries and population, safe assembly points, outside shelters, mutual aid centers, relatives of casualties, press and as on, under the direction of site main controller / incident controller.

At the declaration of a major emergency, all key personnel and other called into assist shall report the emergency control centre. They shall be available at any time on duty or on call on / off duty or holiday.

EMERGENCY CONTROL CENTRE

The security office building has been earmarked as an emergency control center. All the operations to handle an emergency are directed & coordinated from the emergency control Centre. The in-charge persons during various shifts are also trained on various emergency aspects like actions in case of emergency, emergency communications, first aid, fire fighting etc. He will handle the charge till another senior officer arrives and takes over the command.

One telephone with ST/mobile phone facility is kept in the emergency control center. The details of all the employees working in the plant / area are all the time available in the emergency control center.

The emergency control center will co-ordinate with all the outside agencies for necessary help in the emergency.

The emergency control center is having following facilities / equipment: -

1.	Mobile Phone/walkie-talkie	1 No.
2.	Rubber Gum Shoes	3 Pair
3.	Hand Gloves (PVC)	6 Pairs
4.	Face Mask	10 Pairs
5.	Helmet	6 No.
6.	First Aid Box	1 No.
7.	Safety Glasses	6 No.
8.	Axe Felling	1 No.
9.	Shovel	1 No.
10.	Torch	2 No.
11.	On site emergency Plan	1 Copy
12.	Material safety data sheet of hazardous chemicals used and processed.	1 Copy
13.	Layout of plant and surrounding areas showing assembly points and location of fire fighting equipments etc.	1 Copy
14.	Plant layout indicating storage tanks, equipments, individual equipments layout and location of safety equipments.	1 Copy
15.	Sufficient note books, pens / pencils to record message received and sent outside.	
16.	Stretcher	1 No.
17.	Snake Catcher	1 No.

MODE OF COMMUNICATION DURING EMERGENCY

Following modes of communications are provided

Internal Phone: Intercom to be used to inform security gate, unit head.

Emergency siren: It can be used to communicate emergency & all clear. The mode of communication is as under,

a. Emergency siren: Long short (wailing) siren for one minute.

b. All clear : 1 minute long siren.

A **stand by manual siren** is also installed near ECC. In case of Power failure / Power cut manual siren can be used for communication

External phone: Used to communication govt. bodies viz. fire station, hospital, blood bank, police, district collector, factory inspector etc.

Any emergency is first informed to site main controller who evaluate the type of emergency and decide partial or full emergency. In case of small emergency in a particular area is termed as partial emergency during which siren not blown, total evacuation not carried out and this emergency is handled locally by the disaster management team.

ASSEMBLY POINT

To gather in an emergency, an assembly point has been earmarked near laboratory block. A board for assembly point at the above location is fixed. The appropriate action required to be taken by each employee is as under: -

(i) Do not become panicky.

(ii) See the wind direction and assembly towards upwind direction near assembly point.

(iii) Do not run, walk fast. Use wet cloth or handkerchief to close your mouth and nose.

(iv) Wait for instruction from evacuation commander / shift in-charge.

(v) All the vehicles meant for evacuation will start from Assembly Point only, wait and board them. All the employees know regarding the location of the assembly point and location to be taken in emergency.

(vi) Vehicle is available and as & when required this can be called and utilized.

(vii) Those employees who have own vehicles will make their own arrangement for shifting so as to reduce the strain on the general arrangement.

(viii) On pick-up point location for evacuation has been identified i.e. assembly point where from the emergency evacuation vehicles will start.

(ix) Since numbers of employees working in each shift are less, available resources to evacuate them are sufficient. If the emergency becomes severe affecting near by areas then assistance from Mutual Aid Agencies can also be sought.

EMERGENCY PREVENTION SYSTEMS

Fire Protection Systems

Following are the measure taken for Prevention of Fire

1. Board installed at the gate and at relevant location having statutory warning "No Smoking".
2. Visitors visiting plant are given visitor slip having printed warning.
3. Security checks of workers coming on duty for searching cigarettes, match boxes etc.
4. Maintenance of electrical panels by maintenance departments as per schedule.
5. Fire fighting classes being taken for all new joiners.
6. Various types of fire extinguisher used to control fire depending upon the nature of fire. Sand buckets are placed as per the requirement at various sections.
7. Fire extinguishers installed in all sections as per lay out plan.

Manpower Training & Response

1. HOD (Maint & Utility) will prepare the list of disaster team and first aid team.
2. After the preparation of disaster team, will prepare training plan for disaster management team.
3. Training will be imparted as per training plan.
4. Disaster team will be consisting of security staff and selected senior person of the unit.
5. Training of disaster team will be covering
   A) How to use various types of fire equipments.
   B) Types of fire.
   C) Up dating the knowledge of safety equipments.
   D) Providing First–Aid training by co`s faculty and through outside agency.
   E) Practical use of fire fighting equipments through mock drills.
6. Training to disaster management team will be provided on half yearly basis.
8. Records pertaining to training of disaster team will be maintained by HOD (PER & SEC).

Prevention of Hazardous release

1. Empty tray is used while removing the waste oil from the machines.
2. Oil is removed from machines through drain valve or pump.
3. Oil barrels are shifted to waste yard by proper care to avoid any kind of spillage during shifting.
4. It is ensured that lid of the containers is tight fit.
5. Separate area has been demarcated for keeping the waste oil in waste yard.
6. All waste packing material after major removal of chemical, from it, stored in designated area in scrap yard.

Personnel Protective Equipment

As per work instruction W-E10-07

EMERGENCY HANDLING PROCEDURES

Evacuation

In case of emergency, after instruction from the concerned HOS or by hearing emergency siren, stop all running machines / processes. Evacuation should be carried out in an orderly fashion. No body should run or shout unnecessarily, as it may create panic among all employees. Supervisor should ensure before leaving that all personnel from the area are evacuated and all machines were stopped. Both Emergency exits and normal exits can be used for evacuation. Complete evacuation to be ensured with respect to attendance and visitors records through head count.

Fire

1. Workers /Security Guards /Persons noticing fire should immediately shout AAG AAG AAG to announce the fact that fire has taken place and should inform security supervisor on duty.
2. Security Supervisor on duty will instruct security guard to blow fire siren.
3. Security Supervisor shall also inform the location of fire to Incident Controller.

4. Incident Controller along with fire fighting team will reach where the fire has taken place and start the fire fighting operation.
5. Incident Controller will inform emergency services controller for help of fire station in case of major fire.
6. The abatement coordinator will see that there is no adverse effect on environment.
7. Disaster team (F-E50-05) shall segregate the burnt material and shift it to a safer place.
8. All concerned will operate as per their defined responsibilities as given under the command structure.
9. In case if Incident Controller feels situation is likely to escalate & may lead to events like endanger human lives, plant, equipments and environment and are beyond to control then he will communicate the information to incident controller & site main controller.
10. After any incident like fire, large scale release of chemical, blast or electric shock or any personal injury, it is recorded in Incident/ Accident record (F-M30-02).

Electrical Shock

1. In case of electric shock switch off the main line.
2. Touch the person after switching off the main line.
3. Evaluate the condition of the patient and provide required first aid.
4. If required take him to doctor or hospital
5. After removal of electrical fault switch on the main line.

Large Scale Spillage of Chemicals/ Major Hazardous Substance release

1. If the spillage is noticed during unloading operator / store assistant will inform the same to HOD of respective department and security gate.
2. The Operator will immediately stop all the drain channels of that tank.
3. After getting the information of spillage, security supervisor will inform Incident Controller and Abatement coordinator and rush the disaster management team (F-E50-05) on the location of spillage.
4. Incident Controller will take the charge of management activities like, any outside assistance required.

5. All the team members will act as per instruction from HOD of respective department and Abatement coordinator to control the spillage.
6. The disaster team will make all out efforts to control the emergency as follows:
   a) To plug the leakage points, if possible.
   b) Use of trays, drums or other containment to avoid further spillage of oil / chemical from the source.
   c) Collection of the oil / chemical that has spilled over to land.
   d) Use of other means of containment like sandbags, wooden chips etc.
7. All concerned will operate as per their defined responsibilities as given under the command structure.

Accidental Blast / Explosion/ chemicals over a person

1. Don't allow the people to go near the blast site.
2. Try to evacuate the other material from the blast site.
3. Inform the incident to Incident Controller & Abatement Coordinator to content the spillage.
4. Switch off all electrical appliances.
5. Try to isolate the site.
6. If there is any fire, spillages of hazardous chemical follow their respective system.

Personal Accident

1. Take the person carefully out of the incident.
2. Provide him preliminary first aid through trained first aiders.
3. If required, take him to nearby hospital/ nursing home.

Action to Be Taken In case of Earthquake

4. In case you feel tremors of earthquake, below guidelines should be followed:
5. Ask maintenance department to cut off electricity main supply
6. Quickly exit to the open space.
7. If not possible, slip under to a wooden/metal surface to protect yourself from rubbles of the roof.

8. Stand in corners of the building.

Action to Be Taken In case of severe cyclonic storm

9. In case you feel severe storm, below guidelines should be followed:
10. Ask maintenance department to cut off electricity main supply
11. Take shelter in covered space.

Action to be taken in case of Medical Emergencies

12. Inform to the security immediately.
13. Security to contact the nearest available First Aider to provide first aid to the victim and shall inform the incident controller & emergency services controller.
14. If need be the affected person to be shifted to the hospital.
15. First Aider to accompany and take care, of the affected personnel during shifting to the hospital.

Emergency shut down of the plant

1. Switch off the main power supply
2. For lighting use emergency light or torch light.
3. Ensure that all valves from chemical settling tanks are closed.
4. Windows and doors of the accident section should be opened but all other section's windows and doors should be closed.

First Aid and medical Aid

As per Checklist for first Aid Box (F-E50-01) & enter all first aids in first aid register (F-E50-02)

Environmental Impact & Mitigation

Environmental impacts associated with Fire emergencies will be air pollution due to combustion products. Chemical spillage from storage tanks will result in soil pollution and subsequently may contaminate ground water if spillage remains unattended for long periods. These emergencies can also result in property damage or material loss. Impacts can be minimized by earliest possible response to the Emergency situation by plant personnel.

The following action will be taken during and after emergency control operations to minimize environmental impact.

- The Disaster management team will take planned actions to extinguish fire in shortest possible time. This will reduce persistence of fire situation and the persistence of combustion products in atmosphere thus helping in controlling the Environmental impact.
- Leakage shall be controlled to minimize further spillage, material loss & environmental pollution.
- While reducing environmental impact the planned action will also minimize property damage and material loss.
- The solid waste burned material generated during Emergency operation will be collected in separate container for disposal.
- In case of Chemical /Oil spillage, soil contamination will be controlled by absorption of spilled material. The absorbents contaminated with material will be collected in a container for subsequent disposal.

MAINTENANCE PROCEDURE FOR FIRE & SAFETY EQUIPMENT

1 All the fire fighting equipments installed in plant are checked as per monthly checklist (F-E50-03)

MOCK DRILLS

1. The Mock drill will be conducted quarterly.
2. Date & time will be fixed by HOS (HR) under intimation to site in-charge, M.R. and one observer shall be appointed.
3. On the given date & time telephone will be received at security gate regarding the accident by some of our associates.
4. Security Supervisor on duty will instruct the guard to blow the fire alarm & will also inform Incident Controller. All disaster team will gather at main security gate & wait for further instructions.
5. Incident Controller on duty will send fire fighting team to the site, with all fire fighting equipments.

6. Security Supervisor shall inform to all concerned regarding the accident.
7. HOD (Maintenance & Utility) shall keep the entire vehicle ready at the gate along with drivers.
8. Incident Controller and Site Main Controller will also reach to the site immediately after the information.
9. HOD (Maintenance & Utility) will also inform about the incident to Unit Head.
10. After the drill records shall be kept in Mock drill records (F-E50-04) & suitable corrective & preventive actions shall be taken on the observation of the observer.

EXTERNAL AUTHORITIES TO BE INFORMED

1.	Labour Inspector	:	Nalagarh
2.	Police Station	:	Nalagarh

Annexure-I Internal and External Emergency Contacts

Annexure –II Site Map

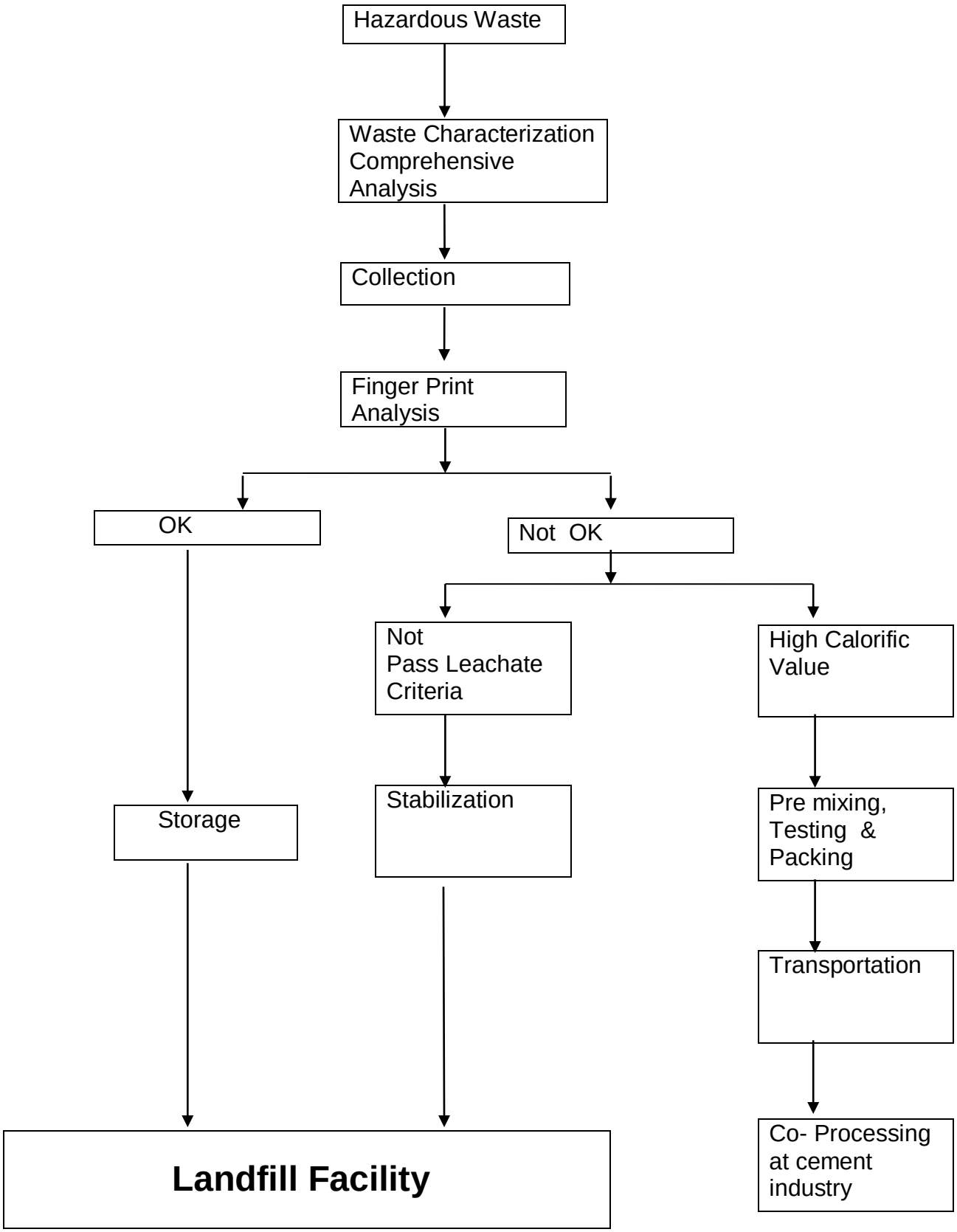
ANNEXURE – 1

INTERNAL AND EXTERNAL EMERGENCY CONTACTS

Name, Designation / Service	Location	Tele. Nos.	
		Office	Resi./ Mobile
Internal			
Mr. Ashok Sharma	-	-	9316028131
Mr. Sudershan Singh	-	-	9816397601,9805516112
Mr. Ajay Thakur	-	-	9805516134
Mr. Gurcharan Singh	-	-	9805516118
Mr. Jai Pal Chaudhary	-	-	9418798970,9805516101
Ms Suman Lata	-	-	9625491885
Dr. Deep Kumar			9418901683
Ms Anuradha	-	-	8628844807
Mr. Lakhveer Singh	-	-	9816486969
Mr. Satnam Singh	-	-	9805352455
Mr. Jagdish Chandel	-	-	9418752471,9805516104
Mr. Anand Singh	-	-	8988354677,9805516120
Mr. Sanjeev kumar	-	-	9805516106
Mr. Arvind Yadab	-	-	9805516113
Mr. Sanjay Kumar	-	-	9805516123
Mr. Vineet Singh	-	-	7703837389
Mr. Nitish Upadhyay	-	-	9648336544
External			
Fire Brigade	Nalagarh	01795-223294	-
Fire Brigade	Baddi	01795-101 / 245352	01795-244402
Fire Brigade	Parwanoo	233223	-
Fire Brigade	Solan	223888	-
Fire Brigade	GGS TPP Ghanauli	-	096461-21436
Civil Hospital	Nalagarh	01795-223023	-
Police Chauki	Dabhota	01795-260422	9418299936
Police Station	Nalagarh	01795-223045	-

Name, Designation / Service	Location	Tele. Nos.	
		Office	Resi./ Mobile
Dy. Commissioner	Solan	220656	220655
Supdt. Of Police	Solan	220567	220568
Dy. Supdt. Of Police	Nalagarh	01795-223109	01795-221170
SDM	Nalagarh	01795-223024	01795-223049
Inspector of factories	Shimla	0177-2625277	-
PCB	Baddi	01795-245374	01795-246569
Pradhan, Gram Panchyat	Majra	-	9816609218
H.P.S.E.B.	Nalagarh	01795-223098	-

PROCESS FLOW CHART



Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in , Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TC-12094

TEST REPORT

F/7.8-01
Rev 01

Report No.:	SSWML/INH/Nov (24-25)/EM/TLC/04	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.** Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101		
Customer Reference	----		
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML		
Sample Marking/ Identity:	5 Ltr., Received in plastic bottle, Wastewater [Condensate Water from MEE]		
Sampling / Testing Protocol:	Lab SOP		
Sampling Date:	26.10.2024	**Sampling Team:**	Mr. Akshay Rajput
Period of Analysis:	26.10.2024 – 04.11.2024		

S. No.	Test Parameters	Units	Results	Standard Limits [Environment(Protection) Rules,1986 Sch-VI]	Test Method
1	pH	---	7.32	5.5 to 9.0	APHA 24rd Ed.2017 4500H+-B
2	Total Suspended Solids	mg/L	ND(DL=2)	100	APHA 24rd Ed.2017 2540-D
3	Total Dissolved Solids	mg/L	236	----	APHA 24rd Ed.2017 -C
4	Chemical Oxygen Demand	mg/L	96	250	APHA 24rd Ed.2017 5220 B
5	Biochemical Oxygen Demand at 27 ^{0}C for 3 Days	mg/L	16	30	IS:3025 (Part-44)1993
6	Phenolic Compound as (C_6H_5OH)	mg/L	ND(DL=0.05)	1.0	IS:3025(Part-43)1992
7	Sulphate	mg/L	44	----	IS:3025 (Part-24):1986
8	Chloride as Cl^{-1}	mg/L	32	----	APHA 24rd Ed.2017 4500Cl-B
9	Hexavalent Chromium as Cr^{+6}	mg/L	ND(DL=0.1)	0.1	APHA 24rd Ed.2017 3500Cr B
10	Ammonical Nitrogen (as NH_3-N)	mg/L	ND(DL=0.5)	50	APHA 24rd Ed.2017 4500NH_3B&C
11	Fluoride	mg/L	ND(DL=0.1)	2.0	APHA 24rd Ed.2017 4500-F- D
12	Iron as Fe	mg/L	0.8	3.0	APHA 24rd Ed.2017 3111 B
13	Chromium as Cr	mg/L	ND(DL=0.1)	2.0	APHA 24rd Ed.2017 3111 B
14	Copper as Cu	mg/L	ND(DL=0.1)	3.0	APHA 24rd Ed.2017 3111 B
15	Lead as Pb	mg/L	ND(DL=0.05)	0.1	APHA 24rd Ed.2017 3111 B
16	Cadmium as Cd	mg/L	ND(DL=0.1)	2.0	APHA 24rd Ed.2017 3111 B
17	Arsenic as As	mg/L	ND(DL=0.05)	0.2	APHA 24rd Ed.2017 3113 B
18	Mercury as Hg	mg/L	ND(DL=0.01)	0.01	APHA 24rd Ed.2017 3112 B
19	Nickel as Ni	mg/L	ND(DL=0.1)	3.0	APHA 23rd Ed.2017 .3111 B
20	Zinc as Zn	mg/L	ND(DL=0.1)	5.0	APHA 23rd Ed.2017 .3111 B

Remarks: - Standard Limits* are General Standards* for Discharge of Environmental Pollutants on Inland Surface Water.
Where ND is Not detected & DL is detection limit

Reviewed By

ANURADHA

*****END OF REPORT *****

Authorized Signatory

SUMAN LATA

Terms and conditions governing the test report issued

1. **The test report shall not be reproduced in full or Part nor shall be used for promotional or publicity purpose without approval of the lab in writing.**
2. **The results relate only to the items tested.**

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in , Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01
Rev 01

Report No.:	SSWML/INH/Nov (24-25)/EM/TLC/04	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.** Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101		
Customer Reference	----		
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML		
Sample Marking/ Identity:	5 Ltr., Received in plastic bottle, Wastewater [Condensate Water from MEE]		
Sampling / Testing Protocol:	Lab SOP		
Sampling Date:	26.10.2024	**Sampling Team:**	Mr. Akshay Rajput
Period of Analysis:	26.10.2024 – 04.11.2024		

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Total hardness as $CaCO_3$	mg/L	32	----	$APHA_{24rd\ Ed.2017}$ 2340-C
2	Total Alkalinity	mg/L	152	----	$APHA_{24rd\ Ed.2017}$ 2320-B

Reviewed By
ANURADHA

Verified By
(Technical Manager)
SUMAN LATA

*****END OF REPORT *****

Terms and conditions governing the test report issued

1. The test report shall not be reproduced in full or Part nor shall be used for promotional or publicity purpose without approval of the lab in writing.
2. The results relate only to the items tested.

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in, Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/11	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.5 at Cell No.2]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	03:35 PM - 04:15 PM	**Sampling Team**	Mr. Sanjeev & Team
Period of Analysis	26.10.2024– 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	26	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	28	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.93	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	40	8.	Flow Rate (Nm^3/hr)	364

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g /m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By

ANURADHA

Verified By
(Technical Manager)

SUMAN LATA

*****END OF REPORT *****

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in , Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/06	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.6 at Cell No.2]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	04:20 PM - 05:01 PM	**Sampling Team**	Mr. Sanjeev & Team
Period of Analysis	26.10.2024– 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	27	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	28	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.74	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	41	8.	Flow Rate (Nm^3/hr)	355

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g /m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By

ANURADHA

Verified By
(Technical Manager)

SUMAN LATA

*******END OF REPORT *******

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in, Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/07	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.1 at Cell No.1]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	10:12 AM - 10:52 AM	**Sampling Team**	Mr. Sanjeev & Team
Period of Analysis	26.10.2024 – 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	26	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	30	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.96	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	40	8.	Flow Rate (Nm^3/hr)	374

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g/m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By

ANURADHA

Verified By
(Technical Manager)

SUMAN LATA

*****END OF REPORT *****

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in, Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/08	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.2 at Cell No.1]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	10:57 AM - 11:39 AM	**Sampling Team**	Mr. Sanjeev & Team
Period of Analysis	26.10.2024 – 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	26	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	30	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.73	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	42	8.	Flow Rate (Nm^3/hr)	354

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g/m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By
ANURADHA

Verified By
(Technical Manager)
SUMAN LATA

*****END OF REPORT *****

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in, Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/09	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	04.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.3 at Cell No.1]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	11:00 AM - 11:43 AM	**Sampling Team**	Mr Sanjeev & Team
Period of Analysis	26.10.2024 – 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	25	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	27	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.64	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	43	8.	Flow Rate (Nm^3/hr)	354

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g /m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By

ANURADHA

Verified By
(Technical Manager)

SUMAN LATA

*****END OF REPORT *****

Shivalik Solid Waste Management Limited

(LABORATORY DIVISION)

Regd. Office : Vilage Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101
Telefax : 01795-260427, E-mail : rajeev.thakur@beil.co.in , Website : www.sswml.com
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

TEST REPORT

F/7.8-01.A
Rev 01

Report No.:	SSWML/LAB/Nov (24-25)/INH/VS/10	Dated:	04.11.2024	Pages	1/1

To	**M/s Shivalik Solid Waste Management Ltd.,** Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101				
Customer Reference	----				
Date & Mode of Receipt of Sample:	26.10.2024, Sampled by SSWML				
Sample Marking/ Identity:	Received in plastic bottles, Air Emission [Vent Stack No.4 at Cell No.2]				
Sampling / Testing Protocol:	Lab SOP/OA/03 dtd.15.05.19				
Sampling Date	26.10.2024	**Sampling Time**	12:40 PM - 01:21 PM	**Sampling Team**	Mr. Sanjeev & Team
Period of Analysis	26.10.2024 – 04.11.2024				

Sampling Details:

1.	Ambient air Temperature (°C) avg.	26	5.	Stack height from the ground level;(m)	4
2.	Stack Gas Temperature (°C) avg.	26	6.	Stack Diameter (m)	0.15
3.	Stack Gas Velocity avg. (m/Sec)	5.76	7.	General Environmental Conditions	Clear Sky
4.	Actual duration of sampling (Minutes)	41	8.	Flow Rate (Nm^3/hr)	384

S. No.	Test Parameters	Units	Results	Standard Limits	Test Method
1	Ammonia (NH_3)	mg/Nm^3	ND(DL=1)	---	IS:11255(P-6):1999
2	Hydrogen Sulphide as H_2S	$\mu g /m^3$	ND(DL=1.0)	---	IS:5182(Part VII)-1973

Note:- 1. Where ND is Not Detected & DL is Detection Limit.

Reviewed By
ANURADHA

Verified By
(Technical Manager)
SUMAN LATA

*****END OF REPORT *****

ANNEXURE-XX

1st April to 30th Sept. 2022

Amount spent on Environment Management Plan till date

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkup of workers	Rs. 2,33,470/-
2.	Environment Health & Safety for workers	Rs. 7,69,000/-
3.	On obtaining PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets-
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,988/-
6.	On green belt development	Rs. 6,92,880/-
7.	Environmental monitoring during construction (External Agency)	Rs. 4,10,876/-
	Inhouse-laboratory Testing	Rs. 4,45,500/-

SHIVALIK SOLID WASTE MANAGEMENT LTD.

Amount spent on Environment Management Plan till date

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkups of workers	Rs. 3,35,000/-
2.	Environment Health & Safety for Workers	Rs. 3,57,085/-
3.	On obtaining the PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,855/-
6.	On green belt development	Rs. 5,70,000/-
7.	Environment monitoring (External Agency & In-house Laboratory Testing)	External – Rs. 3,40,380/- Inhouse – Rs. 4, 22,520/-

SHIVALIK SOLID WASTE MANAGEMENT LTD.

Amount spent on Environment Management Plan in Last Six Months.

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkups of workers	Rs. 1,94,000/-
2.	Environment Health & Safety for Workers	Rs. 2,47,095/-
3.	On obtaining the PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,855/-
6.	On green belt development	Rs. 5,70,000/-
7.	Environment monitoring (External Agency & In-house Laboratory Testing)	External – Rs. 3,40,380/- Inhouse – Rs. 4, 22,520/-

SHIVALIK SOLID WASTE MANAGEMENT LTD.

Amount spent on Environment Management Plan in Last Six Months.

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkups of workers	Rs. 1,94,000/-
2.	Environment Health & Safety for Workers	Rs. 2,47,095/-
3.	On obtaining the PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,855/-
6.	On green belt development	Rs. 5,70,000/-
7.	Environment monitoring (External Agency & In-house Laboratory Testing)	External – Rs. 3,40,380/- Inhouse – Rs. 4, 22,520/-

SHIVALIK SOLID WASTE MANAGEMENT LTD.

Amount spent on Environment Management Plan in Last Six Months.

S. No.	Activities	Actual Amount
1.	Amount spent on medical checkups of workers	Rs. 2,05,700/-
2.	Environment Health & Safety for Workers	Rs. 4,25,238/-
3.	On obtaining the PUC certificate of the vehicles	Rs. 781/-
4.	Provision of portable toilets for workers	Fixed Existing Toilets
5.	Sprinkling of water for dust suppression (Dust Control)	Rs. 26,855/-
6.	On green belt development	Rs. 5,70,000/-
7.	Environment monitoring (External Agency & In-house Laboratory Testing)	External – Rs. 3,40,380/- Inhouse – Rs. 4, 22,520/-

FORM-6
(See Rule 25 (2)

CERTIFICATE OF REGISTRATION OF THE GROUND WATER SOURCE
THE HIMACHAL PRADESH GROUND WATER AUTHORITY SHIMLA

Certified that the GROUND WATER SOURCE known as **Existing 01 No. Tubewell** located at **Latitude N** 31°04'29.24" **Longitude** 76°37'55.66" in area **Mauza/ Khata No. 284, Khatoni No. 412 - 427, Khasra No. 1437/1,** in **Vill. Majra, PO. Dhabota, Tehsil Nalagarh, Distt. Solan (HP)** and the water extracted there from is being used for the purpose of **Industrial use** is registered with this Authority in favour of **M/S Shivalik Solid Waste Mangement Ltd., Village Majra, PO. Dabhota, Tehsil Nalagarh, Distt. Solan (HP)** vide **REGISTRATION NO. HPGWA-EU/470** of **2020-21** subject to the following terms and conditions:-

a) The applicant is allowed to extract maximum 15,000 ltrs/day of ground water from above mentioned well.
(b) The applicant shall construct a rainwater harvesting structure for the conservation and re-charge of ground water in his\her\their premises as per section-15 of the Himachal Pradesh Ground Water (Regulation and Control of Development and Management) Act, 2005 within six months of issuance of this **CERTIFICATE OF REGISTRATION** and intimation will be given to the **EXECUTIVE ENGINEER, JSV DIVISION, NALAGARH** on its completion
(c) The applicant shall install a water meter on the ground water extraction pipe so as to check the water drawl at any time and will maintain its log book.
(d) The applicant shall have to pay royalty through **EXECUTIVE ENGINEER, JSV DIVISION NALAGARH** for the use of ground water to the **MEMBER SECRETARY, HIMACHAL PRADESH GROUND WATER AUTHORITY** as per the Himachal Pradesh Ground Water (Regulation and Control of Development and Management) Rules 2007 or the rules which may, subsequently, be made applicable by the State of HP.
(e) In case of Industrial connection, the firm shall not use waste water of the Industry for recharging of Ground Water.
(f) That the permission/sanction can be withdrawn or the quantity of water to be extracted can be restricted in case the ground water in the area is adversely affected in terms of quantity and/or quality.

The holder of the registration of certificate shall be duly bound to maintain the aforementioned source in an efficient, coordinated and economical manner and to use the water for the purpose for which certificate of registration has been given. The applicant shall abide by all provisions contained in the Himachal Pradesh Ground Water (Regulation and Control of Development and Management) Act- 2005 (Act No. 31 of 2005) and the rules framed there under, and the conditions of the registration certificate issued or specified by this Authority failing which the Authority shall have the full powers to withdraw the registration and the amount deposited as registration fee and royalty charges shall be forfeited

Given under the seal of Himachal Pradesh Ground Water Authority.

Place : Shimla
Dated : 21.09.2020.

SEAL

Member Secretary (HPGWA)
Member Secretary,
H.P. Ground Water Authority,
Jal Shakti Bhawan, Shimla-5

"SAVE WATER SAVE LIFE"