



# Shivalik Solid Waste Management Limited

Regd. Office : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan, Himachal Pradesh – 174 101  
Zirakpur Office : SCO 20-21, 1st 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/ZKP/EIA/24-25/17761

Dated 31.05.2024

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 June-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 **31.03.2024**) 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*

**JUNE- 2024**

**TABLE OF CONTENT**

| <b>Sr. No.</b>     | <b>DESCRIPTION</b>                                                        | <b>Page No.</b> |
|--------------------|---------------------------------------------------------------------------|-----------------|
| <b>Chapter - 1</b> | Introduction                                                              | 3-4             |
| <b>1.1</b>         | Brief of The Project                                                      | 3               |
| <b>1.2</b>         | Purpose of The Report                                                     | 4               |
| <b>1.3</b>         | Current Status of the Project                                             | 4               |
| <b>Chapter - 2</b> | Compliance Report                                                         | 5               |
| <b>2.1</b>         | Point Wise Compliance of the Conditions imposed in Environment Clearance: | 5-20            |
| <b>ANNEXURE</b>    |                                                                           |                 |
| <b>I</b>           | EC Letter                                                                 |                 |
| <b>II</b>          | Environmental Monitoring Reports                                          |                 |

## **CHAPTER-1**

### **INRODUCTION:**

#### **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>i.e.</i> , 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>i.e.</i> , 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 1<sup>st</sup> June and 1<sup>st</sup> 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; Regional Office-MoEF (Dehradun) 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**

### **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.

#### **2.1 POINT WISE COMPLIANCE OF THE CONDITIONS IMPOSED IN ENVIRONMENT CLEARANCE:**

| <b>Sr. No.</b>               | <b>Condition Of Environment Clearances</b>                                                                                                                                                                                                                                                                        | <b>Compliance</b>                                                                                                                                                                              |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A. Specific Condition</b> |                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                |
| 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 <i>etc.</i> | Agreed.<br>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.<br>Firefighting facilities are available within the project site.                                                                                                                    |
| iv                           | Project Proponent should prepare and implement an on-site Emergency management plan.                                                                                                                                                                                                                              | Complied.<br>On-site Emergency management plan has been prepared.                                                                                                                              |
| v                            | Employees shall be provided work specific PPE such as helmets, safety shoes, masks <i>etc.</i>                                                                                                                                                                                                                    | Agreed.<br>Employees and Workers are provided with work specific PPE such as Helmets, safety shoes, masks <i>etc.</i>                                                                          |
| vi                           | Project Proponent should develop a 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                                          | Agreed.<br>Green belt has been developed around the periphery of the TSDF site.                                                                                                                |

|      |                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                 |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | tree species shall be selected as secured to site condition in consultation with concerned forest department.                                                                                                                                                                                                                                        |                                                                                                                                                                                                 |
| 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,<br>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. |
| 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 <b>Annexure-II</b> .                                                                                              |
| x    | The depth of the landfill site shall be decided based on the ground water table at the site                                                                                                                                                                                                                                                          | Agreed.<br>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.<br>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 Project. Toxicity characteristic Leaching procedure (TCLP) test to be performed on leachates.                                                                                      | Agreed.<br>Toxicity characteristic Leaching procedure test conducted on regular basis and record has been 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                                                                                                                                                                                                                      | Agreed.<br>During rainy season landfill operations are suspended and the                                                                                                                        |

|       |                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | treatment plant.                                                                                                                                                                                                                                                                                                                                                              | open cells are temporary 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.<br>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 and Transboundary Movement) Rules, 2016 to Prevent unwanted access.                  | Agreed.<br>The site is maintained properly. No unauthorized person or goods are allowed to enter the Premises without permission.                              |
| 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                                                                                                                                                                                             | Agreed.<br>There is no traffic congestion in the entry and exit points of the project site and no public space is being                                        |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                     |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                 | utilized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 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 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.<br>Project proponent has obtained all the applicable approvals/clearances.  |
| <b>B. STANDARD CONDITIONS :</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                     |
| <b>I. STATUTORY COMPLIANCES</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                     |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Conservation plan for Schedule-I species submitted at the time of Final EIA report. |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|      | 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).                                                                    |                                                                                                                                |
| 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.                                  |
| 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 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.                                                                                                                                                                         | Agreed.                                                                                                                        |
| ix   | A certificate of adequacy of available power from the agency supplying power to the                                                                                                                                                                                                                                                                                                                                 | Complied.                                                                                                                      |

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                           |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                                                      | 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 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.                                                                         |
| <b>II. AIR QUALITY MONITORING AND PRESERVATION :</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                           |
| 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.                       |
| 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.<br>Monitoring reports attached as <b>Annexure-II.</b>                                                             |
| 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 <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NO <sub>x</sub> 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 <b>Annexure-II</b> |
| iv.                                                  | Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual of emission.                                                                                                                                                                                                                                                                                                                                     | Agreed, sampling facilities have 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                                                                                                                                                                                                                                                                                               | Agreed, the reports are being submitted to the concerned authorities as and when asked for.                               |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|      | air quality/fugitive emission to Regional office of Mo EF&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 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 generating 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. |
| 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 <b>Annexure II</b>        |
| ix   | 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 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                                                                                                                                                                                                                                                                                                                                                                                                                                                     | This facility is located 2 km away from the main Road so there is no congestion on the roads.                                                  |

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                               |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|                                                        | 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.                          |                                                                                                                               |
| <b>III. WATER QUALITY MONITORING AND PRESERVATION:</b> |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                               |
| 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 regional office of MoEF& CC.                                                                 | Agreed.<br>5 nos. of Piezometer wells are installed. Monitoring reports attached as <b>Annexure-II</b> .                      |
| 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 Regional 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.                                                                 |
| 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. |
| 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.                           |
| <b>IV. NOISE MONITORING AND PREVENTION:</b> |                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                             |
| i                                           | Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office                                                                                                                                                                                                                                                       | Agreed. Noise Monitoring has been done regularly, test report of the same is                                |

|                                          |                                                                                                                                                                                                                     |                                                                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                          | of the Ministry as a part of six-monthly compliance report.                                                                                                                                                         | attached as <b>Annexure-II</b> .                                                                                                                                          |
| 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.<br>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 <b>Annexure-II</b> . |
| <b>V. ENERGY CONSERVATION MEASURES :</b> |                                                                                                                                                                                                                     |                                                                                                                                                                           |
| 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.<br>Solar lights, LED/CFLs/TFLs are used for energy conservation measures.                                                                                         |
| <b>VI. WASTE MANAGEMENT :</b>            |                                                                                                                                                                                                                     |                                                                                                                                                                           |
| 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.<br>Monitoring reports of the same is attached as <b>Annexure-II</b> .                                                                                             |
| 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.<br>Hazardous waste is being stored within the permitted limit.                                                                                                    |
| v                                        | The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.                                                                                              | Agreed.<br>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                                                                                       | Municipal solid waste is being managed as per the Solid Waste Management Rules, 2016.                                                                                     |

|                                                     |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                              |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | capacities of handling and their adequacy to cater to the M.S.W, generated from project.                                                                                                                                                                                                                                                              |                                                                                                                                              |
| 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.                                                                                                                                       |
| <b>VII. GREEN BELT</b>                              |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                              |
| 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.                                                                                                                                | Complied.                                                                                                                                    |
| ii                                                  | Topsoil shall be separately stored and used in the development of green belt.                                                                                                                                                                                                                                                                         | Topsoil stored separately and used for green belt development.                                                                               |
| <b>VIII. PUBLIC HEARING AND HUMAN HEALTH ISSUES</b> |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                              |
| 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.<br>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 workers shall be done on a regular basis.                                                                                                                                                                                                                                                                     | Health Checkup of the workers is done periodically, and records are maintained for the same.                                                 |
| <b>IX. MISCELLANEOUS</b>                            |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                              |
| 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                                                                                                                                                                                 | Complied.<br>It was advertised in the local newspaper.                                                                                       |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | 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.                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                |
| 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 turn 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.<br><a href="#">Link of website is ....</a> |
| 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 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. | Agreed.                                                                                                                                                                                        |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 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.                                                                                                     |
| 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. | Complied.                                                                                                   |
| 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.<br>The environmental statement is being submitted to the concerned State Pollution Control Board. |
| x    | The criteria pollutant levels namely; PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (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.<br>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

**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.                   | <b>EC22A032HP155908</b>                                                                                                                                       |
| 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

22<sup>nd</sup> 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](mailto: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 22<sup>nd</sup> 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 (Aerial 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 78<sup>th</sup> meeting held during 14-15<sup>th</sup> December, 2021, thereafter in its 80<sup>th</sup> meeting held during 20-21<sup>st</sup> January, 2022 and in its 82<sup>nd</sup> meeting held on 16<sup>th</sup> 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 14<sup>th</sup> 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<br>Proposed- 50,000<br>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)+<br>20m (Above the ground)<br>= 30 m | 9m (Below the ground)+<br>25m (Above the ground)<br>= 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 HWR 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                                   |

|   |   |                                                                     |      |       |       |       |                                                                  |
|---|---|---------------------------------------------------------------------|------|-------|-------|-------|------------------------------------------------------------------|
|   |   | transportation 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          |
| <b>Total Area</b>         | <b>144,032</b>    | <b>100.00</b> |

- 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 10<sup>th</sup> Oct- 10<sup>th</sup> 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. CWPIIL 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 82<sup>nd</sup> meeting held on 16<sup>th</sup> 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 24x7 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<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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 language within 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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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 Honble 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 1<sup>st</sup> & 2<sup>nd</sup> 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)**



# 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

REPORT No. CPTL/H.P/2024/04/23a(W)

Format No. CPTLF7.8-I(W)

REPORTING DATE: 04.05.2024

**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      | 25.04.2024                                                             |
| Date of Sample Received in Lab | 25.04.2024                                                             |
| 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)/2024/04/23(W)                                               |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                               |
| 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                                                | 7.99            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 682             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | BDL<br>(DL=0.5) | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 407             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | ND<br>(DL-1.0)  | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 155             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 32.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 26.4            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 320             | 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 $\text{SO}_4$ ), mg/l                | 29.4            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | ND<br>(DL-1.0)  | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/23(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected

DL- Detection Limit

BDL-Below Detection Limit

*S. P. J.*  
(Chemist In-Charge)  
Date: 04.05.2024

*S. Singh*  
Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04.05.2024

- 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\*\*\*

Page 2 of 2



# 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)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/23b(W)

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      | 25.04.2024                                                             |
| Date of Sample Received in Lab | 25.04.2024                                                             |
| 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)/2024/04/23(W)                                               |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                               |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected  
DL-Detection Limit

S-APJ  
(Chemist In-Charge)  
Date: 04.05.2024

Sital Singh (CEO)  
Date: 04/05/2024

- 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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : m/s. Shivalik Solid waste management  
Utd, Vill- Majra, Post Dabhola, Teh- Nalagarh,  
Distt- Solan (H.P.)

Name of representative of the Industry present: Mrs. Suman Katar  
at the time of Sampling with designation.

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (10:35 AM)

Point of Sample collection : Tubewell at house of Sh. Balwinder Majra (Outside Panna - Downstream)

Type & Nature of sample collected : Grab (L.W.)

Quantity/ Packing of Sample : 20 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 26.6

Parameter to be analyzed : As per IS 10500, 2012

Sample preserved for (Tick-✓)

i) Organic parameter (✓) ii) Metals (✓) iii) Cyanide (✓)

iv) Oil & grease (✓) v) Phenols (✓) vi) Any other (✓)

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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 : cptl126@gmail.com ; lab@cptl.co.in  
Website : www.cptl.co.in



## TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/24a(W)

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      | 25.04.2024                                            |
| Date of Sample Received in Lab | 25.04.2024                                            |
| 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)/2024/04/24(W)                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                              |
| 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                                                | 7.89            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 794             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | BDL<br>(DL=0.5) | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 471             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | ND<br>(DL-1.0)  | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 100             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 28.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 14.4            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 300             | 200              | 600               | IS:3025 (P-23): 2006                                            |
| 10.    | Chloride (as Cl), mg/l                            | 62.4            | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                  |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l                | 28.4            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | 3.3             | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(DL-0.04) | 0.05             | No relaxation     | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 17.    | Fluoride (as F ), mg/l                            | ND<br>(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



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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/24(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

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

*S. P. S.*  
(Chemist In-Charge)  
Date: 04.05.2024

*Sital Singh*  
Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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.



# 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)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/24b(W)

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      | 25.04.2024                                            |
| Date of Sample Received in Lab | 25.04.2024                                            |
| 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/(HLP)/2024/04/24(W)                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                              |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)  
Date: 04.05.2024

Sital Singh (CEO)

Date: 04.05.2024

- 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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/S. Shivalik Solid Waste management  
Utd, Vrd- nagra, Pos Dabhota, Teh- Nalagarh,  
Distt- Solan (HP)

Name of representative of the Industry present:  
at the time of Sampling with designation. Mrs. Suman Rata

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (11:00 AM)

Point of Sample collection : Supply water (IPH) (Outside premises)

Type & Nature of sample collected : Grab (G.W)

Quantity/ Packing of Sample : 2.0 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 26.9

Parameter to be analyzed : As per IS 10500, 2012

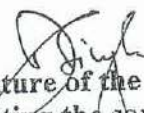
Sample preserved for (Tick- ✓)

i) Organic parameter ( ☒ ii) Metals ( ☒ iii) Cyanide ( ☒ )

iv) Oil & grease ( ☒ v) Phenols ( ☒ vi) Any other ( ☒ )

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/25a(W)

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      | 25.04.2024                                                              |
| Date of Sample Received in Lab | 25.04.2024                                                              |
| 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)/2024/04/25(W)                                                |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                                |
| 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                                                | 7.89            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 788             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | ND<br>(DL=0.5)  | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 459             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | ND<br>(DL-1.0)  | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 145             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 32.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 16.0            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 350             | 200              | 600               | IS:3025 (P-23): 2006                                            |
| 10.    | Chloride (as Cl), mg/l                            | 49.9            | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                  |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l                | 30.7            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | ND<br>(DL-1.0)  | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(DL-0.04) | 0.05             | No relaxation     | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 17.    | Fluoride (as F ), mg/l                            | ND<br>(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



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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/25(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected

DL- Detection Limit

BDL-Below Detection Limit

(Chemist In-Charge)

Date: 04.05.2024

Sital Singh (CEO)  
(Authorized Signatory)

Date: 04.05.2024

- 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.



# 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/2024/04/25b(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                                              |
| Date of Sample Received in Lab | 25.04.2024                                                              |
| 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)/2024/04/25(W)                                                |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                                |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 04.05.2024

Sital Singh (CEO)

Date: 04/05/2024

- 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\*\*\*

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/s. Shivank Solid waste management Ltd,  
Vill - Majra, P.O. Dabhota, Teh - Nalagarh,  
Distt Solan (HP)

Name of representative of the Industry present: Mrs. Suman Pata  
at the time of Sampling with designation.

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : N A

Manufacturing process involved : N A

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (9:00AM)

Point of Sample collection : At House of Gurbaksh (Handpump) - Outside premises Douthstream

Type & Nature of sample collected : Grab

Quantity/ Packing of Sample : 2.0 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 26.2

Parameter to be analyzed : AS per IS 10500:2012

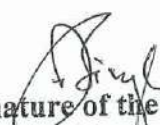
Sample preserved for (Tick- ✓)

i) Organic parameter ( ✓ ) ii) Metals ( ✓ ) iii) Cyanide ( ✓ )

iv) Oil & grease ( ✓ ) v) Phenols ( ✓ ) vi) Any other ( ✓ )

Remarks:

  
Signature of the Occupier/  
Representative of the industry  
with designation and seal

  
Signature of the officer  
collecting the sample



# 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/2024/04/26a(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                                         |
| Date of Sample Received in Lab | 25.04.2024                                                         |
| 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)/2024/04/26(W)                                           |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                           |
| 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                                                | 7.98            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 736             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | ND<br>(DL=0.5)  | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 432             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | ND<br>(DL=1.0)  | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 170             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 42.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 22.6            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 350             | 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 $\text{SO}_4$ ), mg/l                | 20.2            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | 2.4             | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(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



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 | 25.04.2024                |
| Sample Identification no.      | CPTL/(H.Py)/2024/04/26(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected

DL- Detection Limit

BDL-Below Detection Limit

(Chemist In-Charge)

Date: 04.05.2024

Sital Singh (CEO)  
(Authorized Signatory)

Date: 04/05/2024

- 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.



# 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/2024/04/26b(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                                         |
| Date of Sample Received in Lab | 25.04.2024                                                         |
| 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)/2024/04/26(W)                                           |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                           |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 04.05.2024

Sital Singh (CEO)

Date:

04/05/2024

- 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\*\*\*

Page 1 of 1

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/s. Shivalik Solid waste management  
Utd, Vill- Nagra, P.O. Dabhota, Teh- Nalagarh,  
Distt- Solan (H.P)

Name of representative of the Industry present:  
at the time of Sampling with designation. Mrs. Suman Rata

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (9:05 AM)

Point of Sample collection : Tubewell at (Rana ji) Vill- Nagra (outside - premises, downstream)

Type & Nature of sample collected : Grab (G.U)

Quantity/ Packing of Sample : 2.0 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 26.4

Parameter to be analyzed : AS per IS 10500: 2012

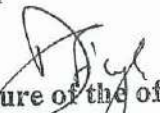
Sample preserved for (Tick- ☒)

i) Organic parameter ( ☒ ), ii) Metals ( ☒ ), iii) Cyanide ( ☒ )

iv) Oil & grease ( ☒ ), v) Phenols ( ☒ ), vi) Any other ( ☒ )

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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)

REPORTING DATE:04.05.2024

REPORT No. CPTL/H.P/2024/04/27a(W)

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      | 25.04.2024                                              |
| Date of Sample Received in Lab | 25.04.2024                                              |
| 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)/2024/04/27(W)                                |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                |
| 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                                               | 7.96            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                               |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$    | 428             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                     |
| 3.     | Turbidity, NTU                                   | 2.2             | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                     |
| 4.     | Total Dissolved Solids, mg/l                     | 311             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                     |
| 5.     | Total Suspended Matter, mg/l                     | 4.6             | -                | -                 | IS:3025 (P-17): 2022                                               |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l       | 220             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                     |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l             | 32.0            | 75               | 200               | IS:3025 (P-40): 2004                                               |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l           | 16.0            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                     |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l     | 265             | 200              | 600               | IS:3025 (P-23): 2006                                               |
| 10.    | Chloride (as Cl), mg/l                           | 19.9            | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                     |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l               | 10.8            | 200              | 400               | IS:3025 (P-24): 2022                                               |
| 12.    | Iron (as Fe), mg/l                               | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10<br>Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ),mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                     |
| 14.    | Zinc (as Zn), mg/l                               | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                     |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                | ND<br>(DL-1.0)  | 45               | No relaxation     | IS:3025 (P-34): 2022                                               |
| 16.    | Chromium ( as Cr), mg/l                          | ND<br>(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



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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(HLP)/2024/04/27(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected  
DL- Detection Limit

S-TPJ  
(Chemist In-Charge)  
Date: 04.05.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04.05.2024

- 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.



# 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. CPTLF7.8-1(W)

REPORT No. CPTL/H.P/2024/04/27b(W)

REPORTING DATE:04.05.2024

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      | 25.04.2024                                              |
| Date of Sample Received in Lab | 25.04.2024                                              |
| Type of Sample                 | Ground Water (Grab)                                     |
| Sampling Plan Ref. No.         | CPTLF7.3-1                                              |
| 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)/2024/04/27(W)                                |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 04.05.2024

Sital Singh (CEO)

Date:

04/05/2024

- 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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/s. Shivalik Solid Waste Management  
Ltd, Vill - Majra, Post Dabhota, Teh - Nalagarh,  
Distt - Solan (H.P)

Name of representative of the Industry present:  
at the time of Sampling with designation. : Mrs. Suman Pata

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (12:00 PM)

Point of Sample collection : Tubewell at (Near Time offra) - Inside Premises Downstream

Type & Nature of sample collected : Grab (G.W)

Quantity/ Packing of Sample : 20 Ltr in plastic bottle + 10 Ltr in glass bottle

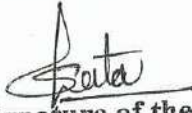
Sample temperature of °C : 26.1

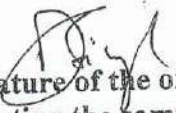
Parameter to be analyzed : As per IS 10500, 2012

Sample preserved for (Tick- ✓)

i) Organic parameter (✓), ii) Metals (✓), iii) Cyanide (✓),  
iv) Oil & grease (✓), v) Phenols (✓), vi) Any other (✓).

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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)

REPORTING DATE:04.05.2024

REPORT No. CPTL/H.P/2024/04/28a(W)

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      | 25.04.2024                                                     |
| Date of Sample Received in Lab | 25.04.2024                                                     |
| 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)/2024/04/28(W)                                       |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                       |
| 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                                               | 7.97            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$    | 662             | -                | -                 | 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                     | 375             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                     | 5.6             | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l       | 260             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l             | 46.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l           | 14.4            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l     | 355             | 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 $\text{SO}_4$ ), mg/l               | 16.6            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                               | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ),mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                               | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                | ND<br>(DL-1.0)  | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                          | ND<br>(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



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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/28(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected  
DL- Detection Limit

(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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.



# 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/2024/04/28b(W)

REPORTING DATE:04.05.2024

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      | 25.04.2024                                                     |
| Date of Sample Received in Lab | 25.04.2024                                                     |
| 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)/2024/04/28(W)                                       |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                       |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 4.5.2024

Sital Singh (CEO)

Date: 04/05/2024

- 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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/s. Shivalik solid waste management  
Ltd, Vill- Majra, P.O. Dabhota, Teh- Nalagarh,  
Distt- Solan (HP)

Name of representative of the Industry present:  
at the time of Sampling with designation. Mrs. Suman Katar

## GENERAL INFORMATION

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (12:20 PM)

Point of Sample collection : Tubewell (Near landfill Papa Vatika) - Inside Premises  
Downstream

Type & Nature of sample collected : Grab (G.W)

Quantity/ Packing of Sample : 2.0 ltr in plastic bottle + 1.0 ltr in glass bottle

Sample temperature of °C : 26.4

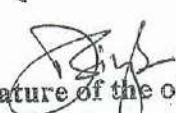
Parameter to be analyzed : As per IS 10500:2012

Sample preserved for (Tick- ✓)

i) Organic parameter ( / ), ii) Metals ( / ), iii) Cyanide ( / ),  
iv) Oil & grease ( / ), v) Phenols ( / ), vi) Any other ( / ).

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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 : cptl126@gmail.com ; lab@cptl.co.in  
Website : www.cptl.co.in



## TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/29a (W)

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      | 25.04.2024                                                            |
| Date of Sample Received in Lab | 25.04.2024                                                            |
| 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)/2024/04/29(W)                                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                              |
| Sample Collected By            | Daljeet Singh & Team                                                  |
| Visual Observation             | Clear & Colorless                                                     |

### TEST RESULTS

| S. No. | Parameters                                        | Results         | Acceptable Limit | Permissible Limit | Test Method                                                     |
|--------|---------------------------------------------------|-----------------|------------------|-------------------|-----------------------------------------------------------------|
| 1.     | pH                                                | 7.89            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 564             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | BDL<br>(DL=0.5) | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 415             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | ND<br>(DL-1.0)  | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 100             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 20.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 13.2            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 280             | 200              | 600               | IS:3025 (P-23): 2006                                            |
| 10.    | Chloride (as Cl), mg/l                            | 32.4            | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                  |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l                | 34.8            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | ND<br>(DL-1.0)  | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(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



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 | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/29(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected

DL- Detection Limit

BDL-Below Detection Limit

S. P. J.  
(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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.



# 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/2024/04/29b(W)

REPORTING DATE:04.05.2024

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      | 25.04.2024                                                            |
| Date of Sample Received in Lab | 25.04.2024                                                            |
| 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)/2024/04/29(W)                                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                              |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MB mg/l)     | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 4.5.2024

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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : m/s. Shivalik Solid waste management  
Ltd, Vill- magra, Post Dabhota, Teh- Nalagarh,  
Distt- Solan (H.P)

Name of representative of the Industry present: Mrs. Suman Pata  
at the time of Sampling with designation.

## GENERAL INFORMATION

Product & by Product : waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (12:40 PM)

Point of Sample collection : Borewell behind Laboratory - Inside Premises - Downstream  
(Near Nurgay)

Type & Nature of sample collected : Grab (a.w)

Quantity/ Packing of Sample : 2.0 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 25.7

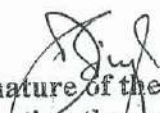
Parameter to be analyzed : As per IS 10500, 2012

Sample preserved for (Tick- ✓)

i) Organic parameter ( ✓ ), ii) Metals ( ✓ ), iii) Cyanide ( ✓ ),  
iv) Oil & grease ( ✓ ), v) Phenols ( ✓ ), vi) Any other ( ✓ ).

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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)

REPORTING DATE: 04.05.2024

REPORT No. CPTL/H.P/2024/04/30a(W)

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      | 25.04.2024                                            |
| Date of Sample Received in Lab | 25.04.2024                                            |
| 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)/2024/04/30(W)                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                              |
| 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                                                | 7.66            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 682             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | 5.2             | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 463             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | 18.4            | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 480             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 48.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 26.4            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 330             | 200              | 600               | IS:3025 (P-23): 2006                                            |
| 10.    | Chloride (as Cl), mg/l                            | 62.4            | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                  |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l                | 24.8            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | 8.2             | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(DL-0.04) | 0.05             | No relaxation     | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 17.    | Fluoride (as F ), mg/l                            | 0.38            | 1.0              | 1.5               | IS:3025 (P-60): 2008                                            |



# 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

|                                |                          |
|--------------------------------|--------------------------|
| Type of Sample                 | Ground Water (Grab)      |
| Date of Sample Received in Lab | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/30(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected  
DL- Detection Limit

(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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.



# 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/2024/04/30b(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                            |
| Date of Sample Received in Lab | 25.04.2024                                            |
| 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)/2024/04/30(W)                              |
| Analysis Duration              | 25.04.2024 to 04.05.2024                              |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MB mg/l)     | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected  
DL-Detection Limit

(Chemist In Charge)  
Date: 4.5.2024

Sital Singh (CEO)

Date:

04/05/2024

- 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.

# DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY THE LABORATORIES RECOGNIZED BY THE BOARD

Name of the laboratory collecting the sample : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry : M/s. Shivalik Solid Waste Management  
Ltd, Vill - Nagra, Post Dabhota, Teh - Nalgaurh,  
Distt - Solan (H.P)

Name of representative of the Industry present at the time of Sampling with designation. : Mrs. Suman Rata

**GENERAL INFORMATION**

Product & by Product : Waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## SAMPLE COLLECTION DATA

Date & Time of Collection the sample: 25/04/2024 (12:55 PM)

Point of Sample collection : Tubewell behind Temple - inside Premises-Downstream

Type & Nature of sample collected : Grab (G.W)

Quantity/ Packing of Sample : 2.0 Ltr in plastic bottle + 1.0 Ltr in glass bottle

Sample temperature of °C : 26.2

Parameter to be analyzed : AS per IS 10500:2012

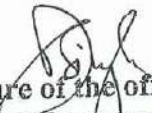
Sample preserved for (Tick- ✓)

i) Organic parameter ( ☒ ) ii) Metals ( ☒ ) iii) Cyanide ( ☒ )

iv) Oil & grease ( ☒ ), v) Phenols ( ☒ ), vi) Any other ( ☒ )

Remarks:

  
Signature of the Occupier/  
Representative of the industry

  
Signature of the officer  
collecting the sample



# 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/2024/04/31a(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                                |
| Date of Sample Received in Lab | 25.04.2024                                                |
| 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)/2024/04/31(W)                                  |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                  |
| 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                                                | 7.96            | 6.5-8.5          | No relaxation     | IS:3025 (P-11): 2022                                            |
| 2.     | Specific Conductance, $\mu\text{S}/\text{cm}$     | 590             | -                | -                 | IS:3025 (P-14): 2013 (RA-2019)                                  |
| 3.     | Turbidity, NTU                                    | 4.8             | 1                | 5                 | IS:3025 (P-10): 1984 (RA-2017)                                  |
| 4.     | Total Dissolved Solids, mg/l                      | 354             | 500              | 2000              | IS:3025 (P-16): 1999 (RA-2019)                                  |
| 5.     | Total Suspended Matter, mg/l                      | 3.8             | -                | -                 | IS:3025 (P-17): 2022                                            |
| 6.     | Total Hardness (as $\text{CaCO}_3$ ), mg/l        | 200             | 200              | 600               | IS:3025 (P-21): 2009 (RA-2019)                                  |
| 7.     | Calcium (as $\text{Ca}^{++}$ ), mg/l              | 38.0            | 75               | 200               | IS:3025 (P-40): 2004                                            |
| 8.     | Magnesium (as $\text{Mg}^{++}$ ), mg/l            | 22.0            | 30               | 100               | IS:3025 (P-46): 1994 (RA-2019)                                  |
| 9.     | Total Alkalinity (as $\text{CaCO}_3$ ), mg/l      | 300             | 200              | 600               | IS:3025 (P-23): 2006                                            |
| 10.    | Chloride (as Cl), mg/l                            | 9.9             | 250              | 1000              | IS:3025 (P-32): 1998 (RA-2019)                                  |
| 11.    | Sulphate (as $\text{SO}_4$ ), mg/l                | 22.9            | 200              | 400               | IS:3025 (P-24): 2022                                            |
| 12.    | Iron (as Fe), mg/l                                | ND<br>(DL-0.1)  | 1.0              | No relaxation     | IS: 3025 (P-53): 2003 & C/1, 10 Phenanthroline Method (RA-2019) |
| 13.    | Hexavalent Chromium, (as $\text{Cr}^{6+}$ ), mg/l | ND<br>(DL-0.1)  | -                | -                 | IS:3025 (P-52): 2003 (RA-2019)                                  |
| 14.    | Zinc (as Zn), mg/l                                | ND<br>(DL-0.5)  | 5                | 15                | IS:3025 (P-49): 1994 (RA-2019)                                  |
| 15.    | Nitrate (as $\text{NO}_3$ ), mg/l                 | 3.2             | 45               | No relaxation     | IS:3025 (P-34): 2022                                            |
| 16.    | Chromium ( as Cr), mg/l                           | ND<br>(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



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 : cptl126@gmail.com ; lab@cptl.co.in  
Website : www.cptl.co.in

|                                |                          |
|--------------------------------|--------------------------|
| Type of Sample                 | Ground Water (Grab)      |
| Date of Sample Received in Lab | 25.04.2024               |
| Sample Identification no.      | CPTL/(H.P)/2024/04/31(W) |

| S. No. | Parameters                                         | Results          | Acceptable Limit | Permissible Limit | Test Method                    |
|--------|----------------------------------------------------|------------------|------------------|-------------------|--------------------------------|
| 18.    | Manganese (as Mn), mg/l                            | ND<br>(DL-0.09)  | 0.1              | 0.3               | IS:3025 (P-59): 2006           |
| 19.    | Lead (as Pb), mg/l                                 | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-47): 1994 (RA-2019) |
| 20.    | Copper (as Cu), mg/l                               | ND<br>(DL-0.04)  | 0.05             | 1.5               | IS:3025 (P-42): 1992 (RA-2019) |
| 21.    | Nickel (as Ni), mg/l                               | ND<br>(DL-0.01)  | 0.02             | No relaxation     | IS:3025 (P-54): 2003 (RA-2019) |
| 22.    | Boron (as B), mg/l                                 | ND<br>(DL-0.1)   | 0.5              | 1.0               | IS:3025 (P-57): 2021           |
| 23.    | Cadmium (as Cd), mg/l                              | ND<br>(DL-0.001) | 0.003            | No relaxation     | IS:3025 (P-41):1992 (RA-2019)  |
| 24.    | Arsenic (as As), mg/l                              | ND<br>(DL-0.01)  | 0.01             | No relaxation     | IS:3025 (P-37): 2022           |
| 25.    | Phenol (as C <sub>6</sub> H <sub>5</sub> OH), mg/l | ND<br>(DL-0.001) | 0.001            | 0.002             | IS:3025 (P-43): 2022           |
| 26.    | BOD (at 27°C for 3 Days), mg/l                     | ND<br>(DL-2.0)   | -                | -                 | IS:3025 (P-44) 1993 (RA-2003)  |
| 27.    | Chemical Oxygen Demand, mg/l                       | ND<br>(DL-5.0)   | -                | -                 | IS:3025 (P-58): 2006 (RA-2017) |
| 28.    | Oil & Grease, mg/l                                 | ND<br>(DL-1.0)   | -                | -                 | IS:3025 (P-39): 2021           |

ND-Not Detected  
DL- Detection Limit

S-TP1  
(Chemist In-Charge)  
Date: 4.5.2024

  
Sital Singh (CEO)  
(Authorized Signatory)  
Date: 6.5.2024

- 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

REPORT No. CPTL/H.P/2024/04/31b(W)

Format No. CPTLF7.8-I(W)

REPORTING DATE: 04.05.2024

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      | 25.04.2024                                                |
| Date of Sample Received in Lab | 25.04.2024                                                |
| 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)/2024/04/31(W)                                  |
| Analysis Duration              | 25.04.2024 to 04.05.2024                                  |
| 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 <sup>-</sup> ), mg/l | ND<br>(DL-0.02)  | 0.05             | No relaxation     | IS:3025 (P-27): 2022           |
| 2.     | Anionic detergents (as MBAS), mg/l  | ND<br>(DL-0.05)  | 0.2              | 1.0               | IS:13428 (Annex-k): 2022       |
| 3.     | Mineral Oil, mg/l                   | ND<br>(DL-0.5)   | 0.5              | No relaxation     | IS:3025 (P-39): 2021 Clause 6  |
| 4.     | Sulphide (as S), mg/l               | ND<br>(DL-0.01)  | 0.05             | No relaxation     | IS:3025 (P-29): 1986 (RA-2017) |
| 5.     | Barium (as Ba), mg/l                | ND<br>(DL-0.03)  | 0.7              | No relaxation     | IS:15302:2003 (RA-2018)        |
| 6.     | Aluminum (as Al), mg/l              | ND<br>(DL-0.002) | 0.03             | 0.2               | IS:3025 (P-55): 2003 (RA-2019) |
| 7.     | Mercury (as Hg), mg/l               | ND<br>(DL-0.001) | 0.001            | No relaxation     | IS:3025:P-48:1994:RA-2003      |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 4.5.2024

Sital Singh (CEO)

Date:

04/05/2024

- 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\*\*\*

**DETAILS TO BE SUPPLIED FOR THE COLLECTION OF WATER SAMPLE BY  
THE LABORATORIES RECOGNIZED BY THE BOARD**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : m/s. Shivalik Solid waste management  
Ltd, Vill - Nagra, P.O. Dabhota, Teh - Nalagarh,  
Distt. Solan (HP)

Name of representative of the Industry present: Mrs. Suman Kataria  
at the time of Sampling with designation.

**GENERAL INFORMATION**

Product & by Product : waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

**SAMPLE COLLECTION DATA**

Date & Time of Collection the sample: 25/04/2024 (11.05 PM)

Point of Sample collection : Tube well behind landfill site (Inside Premises Downstream)

Type & Nature of sample collected : Grab (a.w)

Quantity/ Packing of Sample : 20 Ltr in plastic bottle + 10 Ltr in glass bottle

Sample temperature of °C : 26.4

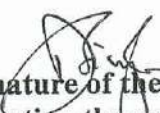
Parameter to be analyzed : AS per IS 10500:2012

Sample preserved for (Tick- ✓)

i) Organic parameter ( ✓ ), ii) Metals ( ✓ ), iii) Cyanide ( ✓ )  
iv) Oil & grease ( ✓ ), v) Phenols ( ✓ ), vi) Any other ( ✓ )

**Remarks:**

  
Signature of the Occupier/  
Representative of the industry  
with designation and seal

  
Signature of the officer  
collecting the sample



# 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/2024/04/27(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                    |
| Date of Sample Received in Lab.: | 26-04-2024            | Analysis Duration:        | 26-04-2024 to 29-04-2024  |
| Sample Identification No.:       | CPTL/HP/2024/04/27(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-<br>2009 PRESCRIBED<br>BY CPCB | TEST METHOD                                 |
|-------------------------------------------------------------|-----------------|---------------------------------------------|---------------------------------------------|
| Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>   | 48.8            | 100                                         | IS: 5182 (P-23): 2006, (RA – 2012)          |
| Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>  | 14.2            | 60                                          | IS: 5182(P-24): 2019                        |
| Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>      | 13.2            | 80                                          | IS: 5182 (P-6): 2006, (RA – 2012)           |
| Sulphur dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>       | 6.4             | 80                                          | IS: 5182 (P-2): 2001, (RA-2012)             |
| Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>               | ND<br>(DL-20)   | 400                                         | Indophenol Method, CPCB Guidelines (Vol. 1) |
| Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>                  | ND<br>(DL-10.0) | 100                                         | IS: 5182 (P-9): 1974, (RA – 2012)           |
| Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup> | ND<br>(DL-1.8)  | 05                                          | IS: 5182 (P-11): 2006                       |
| Benzo (a) Pyrene (BaP), ng/m <sup>3</sup>                   | ND<br>(DL-0.9)  | 01                                          | IS: 5182 (P-12): 2004                       |
| Carbon monoxide (CO), mg/m <sup>3</sup>                     | ND<br>(DL-0.5)  | 4                                           | IS: 5182 (Part-10): 1999, (RA – 2009)       |
| Lead (Pb), µg/m <sup>3</sup>                                | ND<br>(DL-0.1)  | 1.0                                         | IS: 5182 (Part-22): 2004                    |
| Nickel (Ni), ng/m <sup>3</sup>                              | ND<br>(DL-5.0)  | 20                                          | CPCB Guideline, Volume-1:2011               |
| Arsenic (As), ng/m <sup>3</sup>                             | ND<br>(DL-0.7)  | 06                                          | CPCB Guideline, Volume-1:2011               |

ND-Not Detected

DL-Detection Limit

Chemist In-Charge  
Date: 29.4.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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.

# **DETAILS TO BE SUPPLIED FOR THE COLLECTION OF AMBIENT AIR SAMPLE BY THE LABORATORY**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : m/s. Shivalik Solid waste management  
Ltd, Vill- Majra, P.O- Dabhota, Teh- Nalagarh  
Distt- Solan (H.P)

Name of representative of the Industry present at the time of Sampling with designation. : Mrs. Suman Katar

## **GENERAL INFORMATION**

Product & by Product : waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## **SAMPLING COLLECTION DATA**

Date & Time of Sample Collection : 25/04/2024 (9:15 AM)

Location of Sampling Station/Code : Roof of laboratory office

Type of Instrument Used (✓) : RDS (✓), HVS ( ), FPS (✓), Benzex Samples

Instrument code : 8 gaseous attachment

|                              |        |   |    |          |
|------------------------------|--------|---|----|----------|
| Time Totalizer Reading (RDS) | : From | / | To | (Minute) |
| Elapsed Time                 | : From | / | To | (Minute) |
| Time Totalizer Reading (FPS) | : From | / | To | (Minute) |
| Elapsed Time                 | : From | / | To | (Minute) |

1440 minutes



# 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

REPORT No. CPTL/HP/2024/04/28(A)

Format No. CPTLF7.8-I(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 26-04-2024            | Analysis Duration:        | 26-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/28(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                                   |                                                      |                                             |
| <u>PARAMETERS</u>                                           |                              | <u>RESULTS</u>                                 | <u>AS PER NAAQS-<br/>2009 PRESCRIBED<br/>BY CPCB</u> | <u>TEST METHOD</u>                          |
| Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>   |                              | 54.2                                           | 100                                                  | IS: 5182 (P-23): 2006, (RA – 2012)          |
| Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>  |                              | 17.9                                           | 60                                                   | IS: 5182:(P-24): 2019                       |
| Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>      |                              | 12.4                                           | 80                                                   | IS: 5182 (P-6): 2006, (RA – 2012)           |
| Sulphur dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>       |                              | 6.2                                            | 80                                                   | IS: 5182 (P-2): 2001, (RA-2012)             |
| Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>               |                              | ND<br>(DL-20)                                  | 400                                                  | Indophenol Method, CPCB Guidelines (Vol. 1) |
| Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>                  |                              | ND<br>(DL-10.0)                                | 100                                                  | IS: 5182 (P-9): 1974, (RA – 2012)           |
| Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup> |                              | ND<br>(DL-1.8)                                 | 05                                                   | IS: 5182 (P-11): 2006                       |
| Benzo (a) Pyrene (BaP), ng/m <sup>3</sup>                   |                              | ND<br>(DL-0.9)                                 | 01                                                   | IS: 5182 (P-12): 2004                       |
| Carbon monoxide (CO), mg/m <sup>3</sup>                     |                              | ND<br>(DL-0.5)                                 | 4                                                    | IS: 5182 (Part-10): 1999, (RA – 2009)       |
| Lead (Pb), µg/m <sup>3</sup>                                |                              | ND<br>(DL-0.1)                                 | 1.0                                                  | IS: 5182 (Part-22): 2004                    |
| Nickel (Ni), ng/m <sup>3</sup>                              |                              | ND<br>(DL-5.0)                                 | 20                                                   | CPCB Guideline,Volume-1:2011                |
| Arsenic (As), ng/m <sup>3</sup>                             |                              | ND<br>(DL-0.7)                                 | 06                                                   | CPCB Guideline,Volume-1:2011                |

ND-Not Detected  
DL-Detection Limit

Satp  
Chemist In-Charge  
Date: 29.4.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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\*\*\*

# **DETAILS TO BE SUPPLIED FOR THE COLLECTION OF AMBIENT AIR SAMPLE BY THE LABORATORY**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : **m/s. Shivalik Solid waste management  
Ltd, Vill - magra, P.O. Dabhota, Teh - Nalagarh,  
Dist. Solan (H.P)**

Name of representative of the Industry present at the time of Sampling with designation. : **Mrs. Suman Tata**

## **GENERAL INFORMATION**

Product & by Product : **waste management**

Complete List of raw material used : **NA**

Manufacturing process involved : **NA**

Whether all processes were in working at the time of visit. : **Yes**

## **SAMPLING COLLECTION DATA**

Date & Time of Sample Collection : **25/04/2024 (11:00 AM)**

Location of Sampling Station/Code : **Vill - Bara Basot**

Type of Instrument Used (✓) : **RDS (✓), HVS ( ), FPS (✓), Benzene Sample**

Instrument code : **8 gaseous attachment**

|                              |        |    |          |
|------------------------------|--------|----|----------|
| Time Totalizer Reading (RDS) | : From | To | (Minute) |
| Elapsed Time                 | : From | To | (Minute) |
| Time Totalizer Reading (FPS) | : From | To | (Minute) |
| Elapsed Time                 | : From | To | (Minute) |

**1440 minutes**



# 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

REPORT No. CPTL/HP/2024/04/29(A)

Format No. CPTLF7.8-I(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 26-04-2024            | Analysis Duration:        | 26-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/29(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                                   |                                                      |                                             |
| <u>PARAMETERS</u>                                           |                              | <u>RESULTS</u>                                 | <u>AS PER NAAQS-<br/>2009 PRESCRIBED<br/>BY CPCB</u> | <u>TEST METHOD</u>                          |
| Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>   |                              | 52.6                                           | 100                                                  | IS: 5182 (P-23): 2006, (RA – 2012)          |
| Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>  |                              | 15.8                                           | 60                                                   | IS: 5182:(P-24): 2019                       |
| Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>      |                              | 13.8                                           | 80                                                   | IS: 5182 (P-6): 2006, (RA – 2012)           |
| Sulphur dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>       |                              | 6.6                                            | 80                                                   | IS: 5182 (P-2): 2001, (RA-2012)             |
| Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>               |                              | ND<br>(DL-20)                                  | 400                                                  | Indophenol Method, CPCB Guidelines (Vol. 1) |
| Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>                  |                              | ND<br>(DL-10.0)                                | 100                                                  | IS: 5182 (P-9): 1974, (RA – 2012)           |
| Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup> |                              | ND<br>(DL-1.8)                                 | 05                                                   | IS: 5182 (P-11): 2006                       |
| Benzo (a) Pyrene (BaP), ng/m <sup>3</sup>                   |                              | ND<br>(DL-0.9)                                 | 01                                                   | IS: 5182 (P-12): 2004                       |
| Carbon monoxide (CO), mg/m <sup>3</sup>                     |                              | ND<br>(DL-0.5)                                 | 4                                                    | IS: 5182 (Part-10): 1999, (RA – 2009)       |
| Lead (Pb), µg/m <sup>3</sup>                                |                              | ND<br>(DL-0.1)                                 | 1.0                                                  | IS: 5182 (Part-22): 2004                    |
| Nickel (Ni), ng/m <sup>3</sup>                              |                              | ND<br>(DL-5.0)                                 | 20                                                   | CPCB Guideline, Volume-1:2011               |
| Arsenic (As), ng/m <sup>3</sup>                             |                              | ND<br>(DL-0.7)                                 | 06                                                   | CPCB Guideline, Volume-1:2011               |

ND-Not Detected

DL-Detection Limit

S-TPJ  
Chemist In-Charge

Date: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)

Date: 29/04/2024

- 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\*\*\*

# **DETAILS TO BE SUPPLIED FOR THE COLLECTION OF AMBIENT AIR SAMPLE BY THE LABORATORY**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : m/s. Shivalik solid waste management  
Ltd, Vill - magra, P.O. Dabhota, Teh - Nagarkh,  
Distt- Solan (H.P)

Name of representative of the Industry present at the time of Sampling with designation. : Mrs. Suman Pata

## **GENERAL INFORMATION**

Product & by Product : waste management

Complete List of raw material used : NA

Manufacturing process involved : NA

Whether all processes were in working at the time of visit. : Yes

## **SAMPLING COLLECTION DATA**

Date & Time of Sample Collection : 25/04/2024 (10:30 AM)

Location of Sampling Station/Code : Vill - magra

Type of Instrument Used (✓) : RDS (✓), HVS ( ), FPS (✓), Bengers Sampler

Instrument code : 8 gaseous attachment

|                              |        |    |          |
|------------------------------|--------|----|----------|
| Time Totalizer Reading (RDS) | : From | To | (Minute) |
| Elapsed Time                 | : From | To | (Minute) |
| Time Totalizer Reading (FPS) | : From | To | (Minute) |
| Elapsed Time                 | : From | To | (Minute) |

1440 minutes



# 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

REPORT No. CPTL/HP/2024/04/30(A)

Format No. CPTLF7.8-I(A)

REPORTING DATE: 29-04-2024

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  
Sampling Method: CPTL/SM/01  
Date of Sample Collection: 25-04-2024  
Date of Sample Received in Lab.: 26-04-2024  
Sample Identification No.: CPTL/HP/2024/04/30(A)  
Nature of Sample: Air Sample  
Type of Sample: Ambient Air  
Point of Sample: At MEE Plant (Inside Premises)  
Environmental Conditions: Normal  
Analysis Duration: 26-04-2024 to 29-04-2024  
Sample Collected By: Daljeet Singh & Team

### 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                                   |                                                      |                                             |
| <u>PARAMETERS</u>                                           |                              | <u>RESULTS</u>                                 | <u>AS PER NAAQS-<br/>2009 PRESCRIBED<br/>BY CPCB</u> | <u>TEST METHOD</u>                          |
| Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>   |                              | 46.2                                           | 100                                                  | IS: 5182 (P-23): 2006, (RA – 2012)          |
| Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>  |                              | 14.6                                           | 60                                                   | IS: 5182:(P-24): 2019                       |
| Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>      |                              | 13.4                                           | 80                                                   | IS: 5182 (P-6): 2006, (RA – 2012)           |
| Sulphur dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>       |                              | 6.2                                            | 80                                                   | IS: 5182 (P-2): 2001, (RA-2012)             |
| Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>               |                              | ND<br>(DL-20)                                  | 400                                                  | Indophenol Method, CPCB Guidelines (Vol. 1) |
| Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>                  |                              | ND<br>(DL-10.0)                                | 100                                                  | IS: 5182 (P-9): 1974, (RA – 2012)           |
| Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup> |                              | ND<br>(DL-1.8)                                 | 05                                                   | IS: 5182 (P-11): 2006                       |
| Benzo (a) Pyrene (BaP), ng/m <sup>3</sup>                   |                              | ND<br>(DL-0.9)                                 | 01                                                   | IS: 5182 (P-12): 2004                       |
| Carbon monoxide (CO), mg/m <sup>3</sup>                     |                              | ND<br>(DL-0.5)                                 | 4                                                    | IS: 5182 (Part-10): 1999, (RA – 2009)       |
| Lead (Pb), µg/m <sup>3</sup>                                |                              | ND<br>(DL-0.1)                                 | 1.0                                                  | IS: 5182 (Part-22): 2004                    |
| Nickel (Ni), ng/m <sup>3</sup>                              |                              | ND<br>(DL-5.0)                                 | 20                                                   | CPCB Guideline, Volume-1:2011               |
| Arsenic (As), ng/m <sup>3</sup>                             |                              | ND<br>(DL-0.7)                                 | 06                                                   | CPCB Guideline, Volume-1:2011               |

ND-Not Detected  
DL-Detection Limit

5074  
Chemist In-Charge  
Date: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)

Date: 29/04/2024

- 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\*\*\*

Page 1 of 1

# **DETAILS TO BE SUPPLIED FOR THE COLLECTION OF AMBIENT AIR SAMPLE BY THE LABORATORY**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : m/s. Shivalik Solid Waste management  
Ltd, Vill- magra, P.O. Dabhota, Teh - Nalagarh,  
Distt- Solan (HP)

Name of representative of the Industry present at the time of Sampling with designation. : Mrs. Suman Katar

## **GENERAL INFORMATION**

Product & by Product : waste management

Complete List of raw material used : N A

Manufacturing process involved : N A

Whether all processes were in working at the time of visit. : Yes

## **SAMPLING COLLECTION DATA**

Date & Time of Sample Collection : 25/04/2024 (9:30 AM)

Location of Sampling Station/Code : At mee plant (inside premises)

Type of Instrument Used (✓) : RDS (✓), HVS ( ), FPS (✓), Benzene Samples

Instrument code : 8 gaseous attachment

|                              |        |   |    |          |
|------------------------------|--------|---|----|----------|
| Time Totalizer Reading (RDS) | : From | 1 | To | (Minute) |
| Elapsed Time                 | : From |   | To | (Minute) |
| Time Totalizer Reading (FPS) | : From | } | To | (Minute) |
| Elapsed Time                 | : From |   | To | (Minute) |

1440 minutes



# 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)

REPORTING DATE: 04-05-2024

REPORT NO. CPTL/H.P/2024/04/10a(S)

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:   | 25-04-2024                    |
| Date of Sample Received:    | 25-04-2024                    |
| 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)/2024/04/10(S)      |
| Analysis Duration:          | 25-04-2024 to 04-05-2024      |
| Sample Collected By:        | Daljeet Singh & Team          |
| Visual Observation:         | Brown in color                |

### TEST RESULTS

| S. No. | Test Parameters   | Unit  | Results        | Test method                    |
|--------|-------------------|-------|----------------|--------------------------------|
| 1.     | pH                | --    | 7.51           | IS 2720 (P-26): 1987 (RA-2021) |
| 2.     | Conductivity      | mS/cm | 0.262          | IS 14767:2000                  |
| 3.     | Organic Matter    | %     | 1.39           | IS: 2720 (Part-22):2001        |
| 4.     | Arsenic (as As)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 5.     | Mercury (as Hg)   | mg/Kg | ND<br>(DL-0.2) | USEPA-3050B: 1996              |
| 6.     | Lead (as Pb)      | mg/Kg | 2.34           | USEPA-3050B: 1996              |
| 7.     | Chromium (as Cr)  | mg/Kg | 2.22           | USEPA-3050B: 1996              |
| 8.     | Copper (as Cu)    | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 9.     | Cadmium (as Cd)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 10.    | Zinc (as Zn)      | mg/Kg | 0.39           | USEPA-3050B: 1996              |
| 11.    | Nickel (as Ni)    | mg/Kg | 1.38           | USEPA-3050B: 1996              |
| 12.    | Manganese (as Mn) | mg/Kg | 1.36           | USEPA-3050B: 1996              |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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\*\*\*

Page 1 of 1



# 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

REPORT NO. CPTL/H.P/2024/04/10b(S)

Format No. CPTLF7.8-I(S)

REPORTING DATE: 04-05-2024

NAME OF INDUSTRY:

M/s. SHIVALIK SOLID WASTE MANAGEMENT LTD.,  
VILL-MAJRA, P.O.- DABHOTA, TEH.-NALAGARH,  
DIST.- SOLAN (H.P) 174101.

### SAMPLE PARTICULARS

|                             |                             |
|-----------------------------|-----------------------------|
| Date of Sample Collected:   | 25-04-2024                  |
| Date of Sample Received:    | 25-04-2024                  |
| 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)/2024/04/10(S)    |
| Analysis Duration:          | 25-04-2024 to 04-05-2024    |
| 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<br>(DL-0.5) | USEPA-3050B: 1996 |

ND-Not Detected  
DL-Detection Limit

*S. P. Singh*  
(Chemist In-Charge)  
Date: 4.5.2024

*Sital Singh*  
Sital Singh (CEO)  
Date: 04/05/2024

- 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\*\*\*

Page 1 of 1

**DETAILS TO BE SUPPLIED FOR THE COLLECTION OF SOIL SAMPLE BY  
THE LABORATORIES RECOGNIZED BY THE BOARD**

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : **M/s. Shivak Solid Waste Management Ltd,  
Vill. Nagra, P.O. Dabhota, Teh. Nalagarh, Distt.  
-Solon (HP)**

Name of representative of the Industry present:  
at the time of Sampling with designation. **Mrs. Suman Bata**

**GENERAL INFORMATION**

Product & by Product : **Waste management**

Complete List of raw material used : **NA**

Manufacturing process involved : **NA**

Whether all processes were in working at the time of visit. : **Yes**

**SAMPLE COLLECTION DATA OF SOIL**

Date & Time of Sample Collection : **25/04/2024 (11:20 PM)**

Point of Collection : **Near Temporary Storage Shed**

Depth at which sample is taken : **32 cm**

Type & Nature of Sample (Soil/Waste) : **Soil**

Quantity/ Packing of Sample : **1000 gm in Plastic Sealed bag**

Ambient temperature (°C) : **34.1**

Parameter to be analyzed : **pH, Cond, DM, As, Hg, Pb, Cr, Cu, Cd,  
Zn, Ni, Mn, Colony, Gyowide**

**Remarks:**

**Signature of the Occupier/  
Representative of the industry  
with designation and seal**

**Signature of the officer  
collecting the sample**



# 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/2024/04/09a(S)

REPORTING DATE: 04-05-2024

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:   | 25-04-2024                             |
| Date of Sample Received:    | 25-04-2024                             |
| 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)/2024/04/09(S)               |
| Analysis Duration:          | 25-04-2024 to 04-05-2024               |
| Sample Collected By:        | Daljeet Singh & Team                   |
| Visual Observation:         | Brown in color                         |

### TEST RESULTS

| S. No. | Test Parameters   | Unit  | Results        | Test method                    |
|--------|-------------------|-------|----------------|--------------------------------|
| 1.     | pH                | --    | 7.56           | IS 2720 (P-26): 1987 (RA-2021) |
| 2.     | Conductivity      | mS/cm | 0.263          | IS 14767:2000                  |
| 3.     | Organic Matter    | %     | 1.58           | IS: 2720 (Part-22):2001        |
| 4.     | Arsenic (as As)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 5.     | Mercury (as Hg)   | mg/Kg | ND<br>(DL-0.2) | USEPA-3050B: 1996              |
| 6.     | Lead (as Pb)      | mg/Kg | 2.68           | USEPA-3050B: 1996              |
| 7.     | Chromium (as Cr)  | mg/Kg | 2.48           | USEPA-3050B: 1996              |
| 8.     | Copper (as Cu)    | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 9.     | Cadmium (as Cd)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996              |
| 10.    | Zinc (as Zn)      | mg/Kg | 0.59           | USEPA-3050B: 1996              |
| 11.    | Nickel (as Ni)    | mg/Kg | 1.52           | USEPA-3050B: 1996              |
| 12.    | Manganese (as Mn) | mg/Kg | 1.41           | USEPA-3050B: 1996              |

ND-Not Detected

DL-Detection Limit

(Chemist In-Charge)

Date: 4.5.2024

Sital Singh (CEO)

(Authorized Signatory)

Date:

04/05/2024

- 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

REPORT NO. CPTL/H.P/2024/04/09b(S)

Format No. CPTLF7.8-I(S)  
REPORTING DATE: 04-05-2024

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:   | 25-04-2024                             |
| Date of Sample Received:    | 25-04-2024                             |
| 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)/2024/04/09(S)               |
| Analysis Duration:          | 25-04-2024 to 04-05-2024               |
| 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<br>(DL-0.5) | USEPA-3050B: 1996 |

ND-Not Detected  
DL-Detection Limit

(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
Date: 04.05.2024

- 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\*\*\*

Page 1 of 1

## GENERAL INFORMATION

### SAMPLE COLLECTION DATA OF SOIL

Remarks:

Signature of the officer  
collecting the sample



# 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

REPORT NO. CPTL/H.P/2024/04/08a(S)

Format No. CPTLF7.8-I(S)

REPORTING DATE: 04-05-2024

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:   | 25-04-2024                            |
| Date of Sample Received:    | 25-04-2024                            |
| 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/2024/04/08(S)                |
| Analysis Duration:          | 25-04-2024 to 04-05-2024              |
| Sample Collected By:        | Daljeet Singh & Team                  |
| Visual Observation:         | Brown in color                        |

### TEST RESULTS

| S. No. | Test Parameters   | Unit  | Results        | Test method                     |
|--------|-------------------|-------|----------------|---------------------------------|
| 1.     | pH                | --    | 7.63           | IS 2720 (P-26): 1987) (RA-2021) |
| 2.     | Conductivity      | mS/cm | 0.269          | IS 14767:2000                   |
| 3.     | Organic Matter    | %     | 1.44           | IS: 2720 (Part-22):2001         |
| 4.     | Arsenic (as As)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996               |
| 5.     | Mercury (as Hg)   | mg/Kg | ND<br>(DL-0.2) | USEPA-3050B: 1996               |
| 6.     | Lead (as Pb)      | mg/Kg | 2.28           | USEPA-3050B: 1996               |
| 7.     | Chromium (as Cr)  | mg/Kg | 2.18           | USEPA-3050B: 1996               |
| 8.     | Copper (as Cu)    | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996               |
| 9.     | Cadmium (as Cd)   | mg/Kg | ND<br>(DL-0.5) | USEPA-3050B: 1996               |
| 10.    | Zinc (as Zn)      | mg/Kg | 0.44           | USEPA-3050B: 1996               |
| 11.    | Nickel (as Ni)    | mg/Kg | 1.42           | USEPA-3050B: 1996               |
| 12.    | Manganese (as Mn) | mg/Kg | 1.34           | USEPA-3050B: 1996               |

ND-Not Detected

DL-Detection Limit

SATY  
(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 04/05/2024

- 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

REPORT NO. CPTL/H.P/2024/04/08b(S)

Format No. CPTLF7.8-I(S)

REPORTING DATE: 04-05-2024

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:   | 25-04-2024                            |
| Date of Sample Received:    | 25-04-2024                            |
| 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)/2024/04/08(S)              |
| Analysis Duration:          | 25-04-2024 to 04-05-2024              |
| 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<br>(DL-0.5) | USEPA-3050B: 1996 |

ND-Not Detected  
DL-Detection Limit

(Chemist In-Charge)  
Date: 4.5.2024

Sital Singh (CEO)  
Date: 04/05/2024

- 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\*\*\*

Page 1 of 1

**Chandigarh Pollution Testing Laboratory**  
E-126, Industrial Area, Phase-VII, Mohali.

: M/s. Shivalek Solid Waste Management  
Ltd, Vill- magre, Po- Dabhota, Teh- Nalagarh,  
Distt- Solan (H.P)

mrs. Suman Pata

## Product & by Product

: waste management

: NA

: NA

$\therefore$  Yes

## Date &amp; Time of Sample Collection

: 25/04/2024 (11.45 AM)

: Composite Soil Sample Inside Premises.

$\therefore 32 \text{ Ans}$

: Soil

: 100g in plastic sealed bag

: 33.6

: PH, Cand, Om, As, Hg, Pb, Cr, Cu, Cd,  
Zn, Ni, Mn, Co, Cr, Gy, etc.

**Signature of the Occupier/  
Representative of the industry  
with designation and seal**

Signature of the officer  
collecting the sample



# 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(N)

REPORTING DATE: 29-04-2024

REPORT No. CPTL/HP/2024/04/19(N)

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.:       | 25-04-2024             | Environmental Conditions: | Normal                 |
| Sample Identification No.: | CPTL/HP/2024/04/19(N)  | Sample Collected By:      | Daljeet Singh & Team   |
| Nature of Sample:          | Noise Level Monitoring |                           |                        |

### NOISE LEVEL

| S. No.              | Location          | Value in dB(A)<br>(Average)<br>Day Time | Value in dB(A)<br>(Average)<br>Night Time | Test Method            |
|---------------------|-------------------|-----------------------------------------|-------------------------------------------|------------------------|
| 01.                 | Near Main Gate    | 44.2                                    | 32.8                                      | IS 9989:1981(Rev.2002) |
| 02.                 | Near Utility Area | 43.4                                    | 33.6                                      | IS 9989:1981(Rev.2002) |
| 03.                 | Near Landfill     | 43.2                                    | 32.8                                      | IS 9989:1981(Rev.2002) |
| Prescribed Standard |                   | 75                                      | 70                                        | --                     |

Chemist In Charge

Date: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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\*\*\*

## DETAILS TO BE SUPPLIED FOR THE COLLECTION OF NOISE MONITORING BY THE LABORATORY

Name of the laboratory collecting the sample : **Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.**

Name & Address of the industry : m/s. Shivalik solid waste management Ltd,  
VH- magra, Po- Babhota, Teh- Nalagarh  
Distt- Solan (HP)

Name of representative of the Industry present at the time of Sampling with designation. : Mrs. Suman Katar

### GENERAL INFORMATION

Location

1. At different locations.
- 2.
- 3.
- 4.

| S.No | Sub-Location      | Results                            |                                      |
|------|-------------------|------------------------------------|--------------------------------------|
|      |                   | Day time<br>(06.00 AM to 10.00 PM) | Night time<br>(10.00 PM to 06.00 AM) |
| 1    | Near Main Gate    | 44.2                               | 32.8                                 |
| 2    | Near Utility Area | 43.4                               | 33.6                                 |
| 3    | Near Landfill     | 43.2                               | 32.8                                 |
|      |                   |                                    |                                      |
|      |                   |                                    |                                      |

### SAMPLING COLLECTION DATA

Date & Time of Noise Monitoring : 25/04/2024 (9:15 AM)

Instrument Used : NOISE METER



Signature of the Occupier/  
Representative of the industry  
with designation and seal



Signature of the officer  
collecting the sample



# 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

REPORT No. CPTL/HP/2024/04/25(A)

Format No. CPTLF7.8-I(A)  
REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 25-04-2024            | Analysis Duration:        | 25-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/25(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    | 34.4°C                                 |
| 9.  | Stack Air Temperature      | 66.3°C                                 |
| 10. | Velocity of Flue Gases     | 9.25 m/sec                             |
| 11. | *APCD                      | Wet Scrubber                           |
| 12. | CO <sub>2</sub> % (v/v)    | 5.2%                                   |

| PARAMETERS                                                                     | RESULTS        | PRESCRIBED STANDARD | TEST METHOD                   |
|--------------------------------------------------------------------------------|----------------|---------------------|-------------------------------|
| Particulate Matter (PM), at 3% O <sub>2</sub> , mg/Nm <sup>3</sup>             | 43.6           | 500                 | IS:11255 (P-1) 1985 (RA:2019) |
| Nitrogen Dioxide (NO <sub>2</sub> ), at 3% O <sub>2</sub> , mg/Nm <sup>3</sup> | 15.8           | 300                 | IS:11255 (P-7) 1988 (RA:2017) |
| Sulphur Dioxide (SO <sub>2</sub> ), at 3% O <sub>2</sub> , mg/Nm <sup>3</sup>  | ND<br>(DL-3.0) | 600                 | IS:11255 (P-2) 1985 (RA:2019) |
| Carbon Monoxide (CO), mg/Nm <sup>3</sup>                                       | 38.2           | --                  | IS:13720: 1992                |

\*represent the information provided by the customer.

ND- Not Detected

DL-Detection Limit

S. APS  
Chemist In-Charge  
Date: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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\*\*\*

# **DETAILS TO BE SUPPLIED FOR THE COLLECTION OF EMISSION (AIR) SAMPLE BY THE LABORATORY**

**Name of the laboratory collecting the sample** : Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

**Name & Address of the industry** : m/s. Shivalik Solid Waste Management  
Ltd, Vill - Magra, Po - Dabhot, Teh - Nalagarh,  
Distt Solan (HP)

**Name of representative of the Industry present at the time of Sampling with designation.** : Mrs. Suman Rata

## **GENERAL INFORMATION**

**Product & by Product** : Waste management

**Complete List of raw material used** : NA

**Manufacturing process involved** : NA

**Whether all processes were in working at the time of visit.** : Yes

**Type and capacity of boiler/furnace** : Boilers @ 750 Kg/hr

**FBC provided/not provided** : -

**Height of the stack from ground level** : 30 m from g/l

**Diameter of Stack**

|        |       |
|--------|-------|
| Top    | : 12" |
| Median | : 12" |
| Bottom | : 30" |

**Type of Fuel used with quantity** : Bro - Diesel @ 35 Ltr/hr

**Whether the port hole and platform is provided** : Yes



# 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

REPORT No. CPTL/HP/2024/04/24a(A)

Format No. CPTLF7.8-I(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 25-04-2024            | Analysis Duration:        | 25-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/24(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    | 33.8°C                             |
| 9.  | Stack Air Temperature      | 166°C                              |
| 10. | Velocity of Flue Gases     | 9.25 m/sec                         |
| 11. | *APCD                      | -                                  |

| PARAMETERS                                             | RESULTS        | PRESCRIBED<br>STANDARD<br>BY CPCB | TEST METHOD                   |
|--------------------------------------------------------|----------------|-----------------------------------|-------------------------------|
| Particulate Matter (PM), g/kw-hr                       | 0.043          | ≤0.2                              | IS:11255 (P-1) 1985 (RA:2019) |
| Nitrogen Dioxide (NO <sub>2</sub> ) g/kw-hr            | 0.028          | ≤4.0                              | IS:11255 (P-7) 1988 (RA:2017) |
| Carbon Monoxide (CO) g/kw-hr                           | 0.81           | ≤3.5                              | IS:13720: 1992                |
| Sulphur Dioxide (SO <sub>2</sub> ), mg/Nm <sup>3</sup> | ND<br>(DL-3.0) | ----                              | IS:11255 (P-2) 1985 (RA:2019) |

\*represent the information provided by the customer

ND-Not Detected

DL-Detection Limit

Chemist In-Charge

Date: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)

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

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

REPORT No. CPTL/HP/2024/04/24b(A)

Format No. CPTLF7.8-I(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 25-04-2024            | Analysis Duration:        | 25-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/24(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    | 33.8°C                             |
| 9.  | Stack Air Temperature      | 166°C                              |
| 10. | Velocity of Flue Gases     | 9.25 m/sec                         |
| 11. | *APCD                      | -                                  |

| PARAMETERS                              | RESULTS | PRESCRIBED<br>STANDARD<br>BY CPCB | TEST METHOD                       |
|-----------------------------------------|---------|-----------------------------------|-----------------------------------|
| Hydrocarbon (as HC), mg/Nm <sup>3</sup> | 36.8    | -                                 | IS:11255 (Part-1) 1985 (RA: 2009) |

\*represent the information provided by the customer

Chemist In-Charge

Date: 29/4/2024

Sital Singh (CEO)

Date: 29/04/2024

- 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, CPTLF7.8-1(N)

REPORT No. CPTL/HP/2024/04/18(N)

REPORTING DATE: 29-04-2024

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.:       | 25-04-2024             | Environmental Conditions: | Normal                |
| Sample Identification No.: | CPTL/HP/2024/04/18(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                           |                                             |                        |
| <u>PARAMETERS</u>                               |                                    | <u>RESULTS</u><br><u>dB(A)</u> | <u>PRESCRIBED</u><br><u>STANDARD dB (A)</u> | <u>TEST METHOD</u>     |
| DG Set Off                                      |                                    | 48.6                           | --                                          | IS 9989:1981(Rev.2002) |
| DG Set On (At 1.0 meter from enclosure surface) |                                    | 69.4                           | Max. 75                                     | IS 9989:1981(Rev.2002) |

\* represent the information provided by the customer.

Chemist In-Charge

Date: 24-4-2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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\*\*\*

**DETAILS TO BE SUPPLIED FOR THE COLLECTION OF EMISSION (AIR) & NOISE LEVEL MONITORING OF D.G. SETS BY THE LABORATORY**

Name of the laboratory collecting the sample

: Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

Name & Address of the industry

: M/s. Shivalik Solid Waste Management  
Ltd, Vid - Moora, Post Dabhota, Teh - Nalagarh,  
Distt - Solan (H.P)

Name of representative of the Industry present at the time of Sampling with designation.

: Mrs. Suman Rata

**GENERAL INFORMATION**

Product & by Product

: Waste Management

Complete List of raw material used

: NA

Manufacturing process involved

: NA

Whether all processes were in working at the time of visit.

: Yes

Source of Air Emission/Noise Level

: Working of D.G set

Make of D.G. Set

: Cummins (Sudhrr)

Capacity of D.G. Set

: 100 kVA

S. No. of D.G. Set

: 62615938

Model No. of D.G. Set

: —

Manufacturing Date of D.G. Set

: Dec 2007

Installation date of D.G. Set

: 2008

Height of Stack

: 7.6 m from Canopy

Diameter of Stack

Top

: 0.1m

Bottom

: 0.1m

Type of Fuel used with quantity

: Diesel @ 12 Ltr/hr

Whether the port hole and platform is provided

: Yes



# 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/2024/04/26(A)

REPORTING DATE: 29-04-2024

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:       | 25-04-2024            | Environmental Conditions: | Normal                   |
| Date of Sample Received in Lab.: | 25-04-2024            | Analysis Duration:        | 25-04-2024 to 29-04-2024 |
| Sample Identification No.:       | CPTL/HP/2024/04/26(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    | 33.9°C                                     |
| 9.  | Stack Air Temperature      | 34.4°C                                     |
| 10. | Velocity of Flue Gases     | 14.4 m/sec                                 |
| 11. | *APCD                      | Wet Scrubber                               |

| PARAMETERS                                              | RESULTS        | PRESCRIBED STANDARD | TEST METHOD                   |
|---------------------------------------------------------|----------------|---------------------|-------------------------------|
| Particulate Matter (PM), mg/Nm <sup>3</sup>             | 28.4           | 150                 | IS:11255 (P-1) 1985 (RA:2019) |
| Nitrogen Dioxide (NO <sub>2</sub> ), mg/Nm <sup>3</sup> | 9.6            | -                   | IS:11255 (P-7) 1988 (RA:2017) |
| Sulphur Dioxide (SO <sub>2</sub> ), mg/Nm <sup>3</sup>  | ND<br>(DL-3.0) | -                   | IS:11255 (P-2) 1985 (RA:2019) |
| Carbon Monoxide (CO), %                                 | ND<br>(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: 29-4-2024

Sital Singh (CEO)  
(Authorized Signatory)  
Date: 29/04/2024

- 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.

FORMAT NO. - CPTL F 7.3-III

**DETAILS TO BE SUPPLIED FOR THE COLLECTION OF EMISSION  
(AIR) SAMPLE BY THE LABORATORY**

*Name of the laboratory collecting  
the sample*

: Chandigarh Pollution Testing Laboratory  
E-126, Industrial Area, Phase-VII, Mohali.

*Name & Address of the industry*

: M/s. Shivalik Solid Waste management  
Ltd, Vill-majra, Po-Dabhota, Teh-Nalagarh,  
Distt- Solan (H.P)

*Name of representative of the  
Industry present at the time of  
Sampling with designation.*

: Mrs. Suman Lata

**GENERAL INFORMATION**

*Product & by Product*

: Waste management

*Complete List of raw material used*

: NA

*Manufacturing process involved*

: NA

*Whether all processes were in working  
at the time of visit.*

: Yes

*Type and capacity of boiler/furnace*

: Process Emission

*FBC provided/not provided*

: -

*Height of the stack from ground level*

: 7.0 m from G/L

*Diameter of Stack*

*Top*

: 0.2 m

*Bottom*

: 0.2 m

*Type of Fuel used with quantity*

: NA

*Whether the port hole and platform  
is provided*

: Yes



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village 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/April,(24-25)/EM/TLC/01 | Dated: | 09.04.2024 | Pages | 1/1 |
|-------------|-----------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |                          |           |               |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|---------------|-------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                          |           |               |                   |
| Customer Reference                | ----                                                                                                              |                          |           |               |                   |
| Date & Mode of Receipt of Sample: | 05.04.2024, Sampled by SSWML Team                                                                                 |                          |           |               |                   |
| Sample Marking/ Identity:         | 5 Ltr., Received in plastic bottle, Waste Water [Condensate Water from MEE]                                       |                          |           |               |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                          |           |               |                   |
| Sampling Date:                    | 05.04.2024                                                                                                        | Environmental Conditions | Clear Sky | Sampling Team | Mr. Satnam & Team |
| Period of Analysis:               | 05.04.2024 – 09.04.2024                                                                                           |                          |           |               |                   |

| S. No. | Test Parameters                                         | Units | Results     | Standard Limits<br>[Environment(Protection) Rules,1986 Sch-VI] | Test Method                                          |
|--------|---------------------------------------------------------|-------|-------------|----------------------------------------------------------------|------------------------------------------------------|
| 1      | pH                                                      | ---   | 7.68        | 5.5 to 9.0                                                     | APHA <sup>24th</sup> Ed.2023 4500H+-B                |
| 2      | Total Suspended Solids                                  | mg/l  | ND(DL=2)    | 100                                                            | APHA <sup>23rd</sup> Ed.2017 2540-D                  |
| 3      | Total Dissolved Solids                                  | mg/l  | 102         | ----                                                           | APHA <sup>23rd</sup> Ed.2017 2540-C                  |
| 4      | Chemical Oxygen Demand                                  | mg/l  | 118         | 250                                                            | APHA <sup>23rd</sup> Ed.2017 5220 B                  |
| 5      | Biochemical Oxygen Demand at 27°C for 3 Days            | mg/l  | 17          | 30                                                             | IS:3025 (Part-44)1993                                |
| 6      | Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH) | mg/l  | ND(DL=0.05) | 1.0                                                            | IS:3025(Part-43)1992                                 |
| 7      | Sulphate                                                | mg/l  | 32.5        | ----                                                           | IS:3025 (Part-24):1986                               |
| 8      | Chloride as Cl <sup>-1</sup>                            | mg/l  | 43          | ----                                                           | APHA <sup>23rd</sup> Ed.2017 4500Cl-B                |
| 9      | Hexavalent Chromium as Cr <sup>+6</sup>                 | mg/l  | ND(DL=0.1)  | 0.1                                                            | APHA <sup>23rd</sup> Ed.2017 3500Cr B                |
| 10     | Ammonical Nitrogen (as NH <sub>3</sub> -N)              | mg/l  | 4.0         | 50                                                             | APHA <sup>23rd</sup> Ed.2017 4500NH <sub>3</sub> B&C |
| 11     | Fluoride                                                | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed.2017 4500-F- D               |
| 12     | Iron as Fe                                              | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 13     | Chromium as Cr                                          | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 14     | Copper as Cu                                            | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 15     | Lead as Pb                                              | mg/l  | ND(DL=0.05) | 0.1                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 16     | Cadmium as Cd                                           | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 17     | Arsenic as As                                           | mg/l  | ND(DL=0.05) | 0.2                                                            | APHA <sup>23rd</sup> Ed.2017 3113 B                  |
| 18     | Mercury as Hg                                           | mg/l  | ND(DL=0.01) | 0.01                                                           | APHA <sup>23rd</sup> Ed.2017 3112 B                  |
| 19     | Nickel as Ni                                            | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed.2017 3111 B                  |
| 20     | Zinc as Zn                                              | mg/l  | ND(DL=0.1)  | 5.0                                                            | APHA <sup>23rd</sup> 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](mailto:rajeev.thakur@beil.co.in), Website : [www.sswml.com](http://www.sswml.com)  
GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

### TEST REPORT

F/7.8-01  
Rev 01

|                                   |                                                                                                                   |                          |            |               |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------|------------|---------------|-------------------|
| Report No.:                       | SSWML/TNH/April,(24-25)/EM/TLC/01                                                                                 | Dated                    | 09.04.2024 | Pages         | 1/1               |
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                          |            |               |                   |
| Customer Reference                | ----                                                                                                              |                          |            |               |                   |
| Date & Mode of Receipt of Sample: | 05.04.2024, Sampled by SSWML Team                                                                                 |                          |            |               |                   |
| Sample Marking/ Identity:         | 5 Ltr., Received in plastic bottle, Waste Water [Condensate Water from MEE]                                       |                          |            |               |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                          |            |               |                   |
| Sampling Date:                    | 05.04.2024                                                                                                        | Environmental Conditions | Clear Sky  | Sampling Team | Mr. Satnam & Team |
| Period of Analysis:               | 05.04.2024 – 09.04.2024                                                                                           |                          |            |               |                   |

| S. No. | Test Parameters                     | Units | Results | Standard Limits | Test Method                          |
|--------|-------------------------------------|-------|---------|-----------------|--------------------------------------|
| 1      | Total Hardness as CaCO <sub>3</sub> | mg/l  | 45      | ----            | APHA <sup>23rd Ed. 2017</sup> 2340-C |
| 2      | Total Alkalinity                    | mg/l  | 60      | ----            | APHA <sup>23rd Ed. 2017</sup> 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 : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101

Telefax : 01795-260427, E-mail : [rajeev.thakur@beil.co.in](mailto:rajeev.thakur@beil.co.in), Website : [www.sswml.com](http://www.sswml.com)

GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806



### TEST REPORT

F/7.8-01  
Rev 01

|             |                                 |        |            |       |     |
|-------------|---------------------------------|--------|------------|-------|-----|
| Report No.: | SSWML/INH/May,(24-25)/EM/TLC/01 | Dated: | 07.05.2024 | Pages | 1/1 |
|-------------|---------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |                          |           |               |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|---------------|-------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                          |           |               |                   |
| Customer Reference                | ----                                                                                                              |                          |           |               |                   |
| Date & Mode of Receipt of Sample: | 03.05.2024, Sampled by SSWML Team                                                                                 |                          |           |               |                   |
| Sample Marking/ Identity:         | 5 Ltr., Received in plastic bottle, Waste Water [Condensate Water from MEE]                                       |                          |           |               |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                          |           |               |                   |
| Sampling Date:                    | 03.05.2024                                                                                                        | Environmental Conditions | Clear Sky | Sampling Team | Mr. Gurpal & Team |
| Period of Analysis:               | 03.05.2024 – 07.05.2024                                                                                           |                          |           |               |                   |

| S. No. | Test Parameters                                         | Units | Results     | Standard Limits<br>[Environment(Protection) Rules,1986 Sch-VI] | Test Method                                          |
|--------|---------------------------------------------------------|-------|-------------|----------------------------------------------------------------|------------------------------------------------------|
| 1      | pH                                                      | ---   | 8.13        | 5.5 to 9.0                                                     | APHA <sup>24th</sup> Ed 2023 4500H+-B                |
| 2      | Total Suspended Solids                                  | mg/l  | 2.0         | 100                                                            | APHA <sup>23rd</sup> Ed 2017 2540-D                  |
| 3      | Total Dissolved Solids                                  | mg/l  | 108         | ----                                                           | APHA <sup>23rd</sup> Ed 2017 2540-C                  |
| 4      | Chemical Oxygen Demand                                  | mg/l  | 113         | 250                                                            | APHA <sup>23rd</sup> Ed 2017 5220 B                  |
| 5      | Biochemical Oxygen Demand at 27°C for 3 Days            | mg/l  | 12          | 30                                                             | IS:3025 (Part-44)1993                                |
| 6      | Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH) | mg/l  | ND(DL=0.05) | 1.0                                                            | IS:3025(Part-43)1992                                 |
| 7      | Sulphate                                                | mg/l  | 29          | ----                                                           | IS:3025 (Part-24):1986                               |
| 8      | Chloride as Cl <sup>-1</sup>                            | mg/l  | 44.5        | ----                                                           | APHA <sup>23rd</sup> Ed 2017 4500Cl-B                |
| 9      | Hexavalent Chromium as Cr <sup>+6</sup>                 | mg/l  | ND(DL=0.1)  | 0.1                                                            | APHA <sup>23rd</sup> Ed 2017 3500Cr B                |
| 10     | Ammonical Nitrogen (as NH <sub>3</sub> -N)              | mg/l  | ND(DL=0.5)  | 50                                                             | APHA <sup>23rd</sup> Ed 2017 4500NH <sub>3</sub> B&C |
| 11     | Fluoride                                                | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed 2017 4500-F- D               |
| 12     | Iron as Fe                                              | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 13     | Chromium as Cr                                          | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 14     | Copper as Cu                                            | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 15     | Lead as Pb                                              | mg/l  | ND(DL=0.05) | 0.1                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 16     | Cadmium as Cd                                           | mg/l  | ND(DL=0.1)  | 2.0                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 17     | Arsenic as As                                           | mg/l  | ND(DL=0.05) | 0.2                                                            | APHA <sup>23rd</sup> Ed 2017 3113 B                  |
| 18     | Mercury as Hg                                           | mg/l  | ND(DL=0.01) | 0.01                                                           | APHA <sup>23rd</sup> Ed 2017 3112 B                  |
| 19     | Nickel as Ni                                            | mg/l  | ND(DL=0.1)  | 3.0                                                            | APHA <sup>23rd</sup> Ed 2017 3111 B                  |
| 20     | Zinc as Zn                                              | mg/l  | ND(DL=0.1)  | 5.0                                                            | APHA <sup>23rd</sup> 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

Authorized Signatory

SUMAN LATA

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

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101

Telefax : 01795-260427, E-mail : [rajeev.thakur@beil.co.in](mailto:rajeev.thakur@beil.co.in), Website : [www.sswml.com](http://www.sswml.com)

GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

### TEST REPORT

F/7.8-01

Rev 01

|             |                                 |       |            |       |     |
|-------------|---------------------------------|-------|------------|-------|-----|
| Report No.: | SSWML/INH/May,(24-25)/EM/TLC/01 | Dated | 07.05.2024 | Pages | 1/1 |
|-------------|---------------------------------|-------|------------|-------|-----|

|                                   |                                                                                                                   |                          |           |               |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|---------------|-------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                          |           |               |                   |
| Customer Reference                | ----                                                                                                              |                          |           |               |                   |
| Date & Mode of Receipt of Sample: | 03.05.2024, Sampled by SSWML Team                                                                                 |                          |           |               |                   |
| Sample Marking/ Identity:         | 5 Ltr., Received in plastic bottle, Waste Water [Condensate Water from MEE]                                       |                          |           |               |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                          |           |               |                   |
| Sampling Date:                    | 03.05.2024                                                                                                        | Environmental Conditions | Clear Sky | Sampling Team | Mr. Gurpal & Team |
| Period of Analysis:               | 03.05.2024 – 07.05.2024                                                                                           |                          |           |               |                   |

| S. No. | Test Parameters                     | Units | Results | Standard Limits | Test Method                         |
|--------|-------------------------------------|-------|---------|-----------------|-------------------------------------|
| 1      | Total Hardness as CaCO <sub>3</sub> | mg/l  | 51      | ----            | APHA <sup>23rd</sup> Ed.2017 2340-C |
| 2      | Total Alkalinity                    | mg/l  | 67.6    | ----            | APHA <sup>23rd</sup> 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 : Village 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/APRIL (24-25)/EM/ULC/01 | Dated: | 09.04.2024 | Pages | 1/1 |
|-------------|-----------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |                |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|-------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                |                   |
| Customer Reference                | ----                                                                                                              |                |                   |
| Date & Mode of Receipt of Sample: | 05.04.2024, Sampled by SSWML                                                                                      |                |                   |
| Sample Marking/ Identity:         | 5Ltr., Received in plastic bottle, Wastewater [Untreated Leachate Composite]                                      |                |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                |                   |
| Sampling Date:                    | 05.04.2024                                                                                                        | Sampling Team: | Mr. Satnam & Team |
| Period of Analysis:               | 05.04.2024 – 09.04.2024                                                                                           |                |                   |

| S. No. | Test Parameters                                         | Units | Results     | Standard Limits | Test Method                            |
|--------|---------------------------------------------------------|-------|-------------|-----------------|----------------------------------------|
| 1      | pH                                                      | ---   | 7.78        | ----            | APHA <sup>24th Ed.2023</sup> 4500H+-B  |
| 2      | Total Suspended Solids                                  | mg/L  | 132         | ----            | APHA <sup>24th Ed.2023</sup> 2540-D    |
| 3      | Total Dissolved Solids                                  | mg/L  | 9488        | ----            | APHA <sup>24th Ed.2023</sup> 2540-C    |
| 4      | Chemical Oxygen Demand                                  | mg/L  | 1589        | ----            | APHA <sup>24th Ed.2023</sup> 5220 B    |
| 5      | Biochemical Oxygen Demand at 27°C for 3 Days            | mg/L  | 452         | ----            | IS:3025 (Part-44)1993                  |
| 6      | Phenolic Compound as (C <sub>6</sub> H <sub>5</sub> OH) | mg/L  | 0.94        | ----            | IS:3025(Part-43)1992                   |
| 7      | Sulphate                                                | mg/L  | 1204        | ----            | IS:3025 (Part-24):1986                 |
| 8      | Chloride as Cl <sup>-1</sup>                            | mg/L  | 6412        | ----            | APHA <sup>24th Ed.2023</sup> 4500Cl-B  |
| 9      | Hexavalent Chromium as Cr <sup>+6</sup>                 | mg/L  | ND(DL=0.1)  | ----            | APHA <sup>24th Ed.2023</sup> 3500Cr B  |
| 10     | Fluoride                                                | mg/L  | 5.52        | ----            | APHA <sup>24th Ed.2023</sup> 4500-F- D |
| 11     | Iron as Fe                                              | mg/L  | 1.88        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 12     | Chromium as Cr                                          | mg/L  | 0.23        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 13     | Copper as Cu                                            | mg/L  | 0.16        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 14     | Lead as Pb                                              | mg/L  | 0.12        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 15     | Cadmium as Cd                                           | mg/L  | ND(DL=0.1)  | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 16     | Arsenic as As                                           | mg/L  | ND(DL=0.05) | ----            | APHA <sup>24th Ed.2023</sup> 3113 B    |
| 17     | Mercury as Hg                                           | mg/L  | ND(DL=0.01) | ----            | APHA <sup>24th Ed.2023</sup> 3112 B    |
| 18     | Nickel as Ni                                            | mg/L  | 0.45        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |
| 19     | Zinc as Zn                                              | mg/L  | 0.15        | ----            | APHA <sup>24th Ed.2023</sup> 3111 B    |

Remarks: Where ND is Not detected & DL is detection limit

Reviewed By

DR. DEEP KUMAR

Authorized Signatory

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 : Village 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/APRIL (24-25)/EM/ULC/01 | Dated: | 09.04.2024 | Pages | 1/1 |
|-------------|-----------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |                |                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|-------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.<br>Vill. Majra ,P.O. Dabhota , Tehsil Nalagarh, Distt. Solan H.P.-174101 |                |                   |
| Customer Reference                | ----                                                                                                              |                |                   |
| Date & Mode of Receipt of Sample: | 05.04.2024, Sampled by SSWML                                                                                      |                |                   |
| Sample Marking/ Identity:         | 5Ltr., Received in plastic bottle, Wastewater [Untreated Leachate Composite]                                      |                |                   |
| Sampling / Testing Protocol:      | Lab SOP                                                                                                           |                |                   |
| Sampling Date:                    | 05.04.2024                                                                                                        | Sampling Team: | Mr. Satnam & Team |
| Period of Analysis:               | 05.04.2024 – 09.04.2024                                                                                           |                |                   |

| S. No. | Test Parameters                     | Units | Results | Standard Limits | Test Method                         |
|--------|-------------------------------------|-------|---------|-----------------|-------------------------------------|
| 1      | Total hardness as CaCO <sub>3</sub> | mg/L  | 1102    | ----            | APHA <sup>24th Ed 2023</sup> 2340-C |
| 2      | Total Alkalinity                    | mg/L  | 2204    | ----            | APHA <sup>24th Ed 2023</sup> 2320-B |

Reviewed By

DR. DEEP KUMAR

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 : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101

Telefax : 01795-260427, E-mail : [rajeev.thakur@beil.co.in](mailto:rajeev.thakur@beil.co.in), Website : [www.sswml.com](http://www.sswml.com)

GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

### TEST REPORT

F/7.8-01.A  
Rev 01

|             |                                   |        |            |       |     |
|-------------|-----------------------------------|--------|------------|-------|-----|
| Report No.: | SSWML/LAB/APRIL,(24-25)/INH/VS/01 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|-----------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 11:00 AM - 11:31 AM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 – 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|    |                                       |      |    |                                        |           |
|----|---------------------------------------|------|----|----------------------------------------|-----------|
| 1. | Ambient air Temperature (°C) avg.     | 30   | 5. | Stack height from the ground level;(m) | 4         |
| 2. | Stack Gas Temperature (°C) avg.       | 29   | 6. | Stack Diameter (m)                     | 0.15      |
| 3. | Stack Gas Velocity avg. (m/Sec)       | 7.63 | 7. | General Environmental Conditions       | Clear Sky |
| 4. | Actual duration of sampling (Minutes) | 31   | 8. | Flow Rate (Nm <sup>3</sup> /hr)        | 446       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg/m <sup>3</sup>  | 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 \*\*\*\*\*

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101

Telefax : 01795-260427, E-mail : rajeev.thakur@bell.co.in, Website : www.sswml.com

GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

### TEST REPORT

F/7.8-01.A  
Rev 01

|             |                                   |        |            |       |     |
|-------------|-----------------------------------|--------|------------|-------|-----|
| Report No.: | SSWML/LAB/APRIL,(24-25)/INH/VS/02 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|-----------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 12:00 PM - 12:32 PM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 – 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|                                          |      |                                           |           |
|------------------------------------------|------|-------------------------------------------|-----------|
| 1. Ambient air Temperature (°C) avg.     | 33   | 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)       | 7.53 | 7. General Environmental Conditions       | Clear Sky |
| 4. Actual duration of sampling (Minutes) | 32   | 8. Flow Rate (Nm <sup>3</sup> /hr)        | 439       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg /m <sup>3</sup> | 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 \*\*\*\*\*

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village 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/APRIL, (24-25)/INH/VS/03 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|------------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 12:35 PM - 01:06 PM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 – 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|                                          |      |                                           |           |
|------------------------------------------|------|-------------------------------------------|-----------|
| 1. Ambient air Temperature (°C) avg.     | 34   | 5. Stack height from the ground level;(m) | 4         |
| 2. Stack Gas Temperature (°C) avg.       | 131  | 6. Stack Diameter (m)                     | 0.15      |
| 3. Stack Gas Velocity avg. (m/Sec)       | 7.66 | 7. General Environmental Conditions       | Clear Sky |
| 4. Actual duration of sampling (Minutes) | 31   | 8. Flow Rate (Nm <sup>3</sup> /hr)        | 444       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg /m <sup>3</sup> | 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 \*\*\*\*\*

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village 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/APRIL, (24-25)/INH/VS/04 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|------------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 01:15 PM - 01:46 PM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 – 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|    |                                       |      |    |                                        |           |
|----|---------------------------------------|------|----|----------------------------------------|-----------|
| 1. | Ambient air Temperature (°C) avg.     | 35   | 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)       | 7.80 | 7. | General Environmental Conditions       | Clear Sky |
| 4. | Actual duration of sampling (Minutes) | 31   | 8. | Flow Rate (Nm <sup>3</sup> /hr)        | 454       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg /m <sup>3</sup> | 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 \*\*\*\*\*

#### 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 : Village 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/APRIL, (24-25)/INH/VS/05 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|------------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 02:30 PM - 03:02 PM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 - 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|    |                                       |      |    |                                        |           |
|----|---------------------------------------|------|----|----------------------------------------|-----------|
| 1. | Ambient air Temperature (°C) avg.     | 34   | 5. | Stack height from the ground level;(m) | 4         |
| 2. | Stack Gas Temperature (°C) avg.       | 29   | 6. | Stack Diameter (m)                     | 0.15      |
| 3. | Stack Gas Velocity avg. (m/Sec)       | 7.49 | 7. | General Environmental Conditions       | Clear Sky |
| 4. | Actual duration of sampling (Minutes) | 32   | 8. | Flow Rate (Nm <sup>3</sup> /hr)        | 441       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg /m <sup>3</sup> | 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 \*\*\*\*\*

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.



# Shivalik Solid Waste Management Limited

## (LABORATORY DIVISION)

Regd. Office : Village Majra, P.O. Dabhota, Teh. Nalagarh, Distt. Solan Himachal Pradesh-174 101

Telefax : 01795-260427, E-mail : [rajeev.thakur@beil.co.in](mailto:rajeev.thakur@beil.co.in), Website : [www.sswml.com](http://www.sswml.com)

GSTIN : 02AAJCS7647D1ZE CIN:U33130HP2005PLC028806

### TEST REPORT

F/7.8-01.A  
Rev 01

|             |                                    |        |            |       |     |
|-------------|------------------------------------|--------|------------|-------|-----|
| Report No.: | SSWML/LAB/APRIL, (24-25)/INH/VS/06 | Dated: | 26.04.2024 | Pages | 1/1 |
|-------------|------------------------------------|--------|------------|-------|-----|

|                                   |                                                                                                                   |               |                     |               |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------|
| To                                | M/s Shivalik Solid Waste Management Ltd.,<br>Vill. Majra, P.O. Dhabota, Tehsil Nalagrah, Distt. Solan H.P.-174101 |               |                     |               |                    |
| Customer Reference                | ----                                                                                                              |               |                     |               |                    |
| Date & Mode of Receipt of Sample: | 24.04.2024, 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                     | 24.04.2024                                                                                                        | Sampling Time | 03:20 PM - 03:58 PM | Sampling Team | Mr. Gurdeep & Team |
| Period of Analysis                | 24.04.2024 – 26.04.2024                                                                                           |               |                     |               |                    |

#### Sampling Details:

|                                          |      |                                           |           |
|------------------------------------------|------|-------------------------------------------|-----------|
| 1. Ambient air Temperature (°C) avg.     | 36   | 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)       | 6.29 | 7. General Environmental Conditions       | Clear Sky |
| 4. Actual duration of sampling (Minutes) | 38   | 8. Flow Rate (Nm <sup>3</sup> /hr)        | 379       |

| S. No. | Test Parameters                       | Units              | Results    | Standard Limits | Test Method            |
|--------|---------------------------------------|--------------------|------------|-----------------|------------------------|
| 1      | Ammonia (NH <sub>3</sub> )            | mg/Nm <sup>3</sup> | ND(DL=1)   | ---             | IS:11255(P-6):1999     |
| 2      | Hydrogen Sulphide as H <sub>2</sub> S | µg /m <sup>3</sup> | 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 \*\*\*\*\*

#### Terms and conditions governing the test report issued

- 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.
- The results relate only to the items tested.