

## WASTE MANAGEMENT PLAN (WMP)

**Project Name:** Construction of 150 m span double lane bridge over Ratmau river in Daluwala-Lalwala-Dhanauri Motor Road in district Haridwar under EPC mode

**Project Location:** Daluwala

**Prepared By:** Shefali Juyal

**Date of start:** 04-10-2024

### 1. Introduction

**Objective:** To ensure efficient waste handling, environmental protection, and regulatory compliance (Solid Waste Management Rules, 2016, Hazardous Waste Management Rules, 2016, CPCB, and Uttarakhand Pollution Control Board guidelines).

### 2. Labor Details

Parameter	Details
Total Number of Laborers	28 nos
Skilled Laborers	18 nos
Unskilled Laborers	5 nos
Semi-Skilled Labour	5 nos
Labour Camp Location	Local Labours

### 3. Types & Estimated Quantity of Waste Generated (*which is not applicable kindly ignore*)

Waste Type	Examples	Estimated Quantity	Source of Generation
Excavated Soil & Rock	Earth, boulders, debris	2500cum/year	Foundation, excavation
Concrete Liquid Waste	Broken concrete, cement slurry	100 tonne/year	RCC works, piling
Steel & Metal Waste	Reinforcement bars, wires	1400kg/ year	reinforcement steel /Fabrication, cutting,
Wood Waste	Timber, plywood, pallets	Nil	Formwork, scaffolding
Hazardous Waste/liquid waste	Paints, lubricants, fuels, batteries/concrete wash	Nil	Machinery maintenance
Domestic Waste	Food waste, plastics, paper	3500 kg/year	Labour camps, site offices

Waste Type	Examples	Estimated Quantity	Source of Generation
Plastic Waste	Packaging materials, pipes	2000 kg/year	Material storage, construction
Any others			

#### 4. Waste Management Measures

##### 4.1 Waste Reduction & Segregation

- **Minimization:** Material procurement planning to avoid excess waste.
- **Reuse & Recycling:** Scrap materials (metal, wood, aggregates) reused for project work.
- **Segregation:** Separate collection points for **organic, plastic, metal, hazardous, and construction debris**.

##### 4.2 Waste Storage

- Storage areas for different waste types.
- Labelled bins for recyclable, hazardous, and general waste.
- Temporary hazardous waste storage in leak-proof containers.

#### 5. Waste Disposal Plan

Waste Type	Disposal Location	Disposal Method
Excavated Soil	Backfilling areas, low-lying land	Used for levelling or disposed at approved sites
Concrete Waste	Recycling plant, construction backfill	Crushed & reused for pavement base
Metal Scrap	Local scrap dealers, recycling units	Sold for recycling
Wood Waste	Reused at site, donated. NA for this site.	Reused in scaffolding, sold if excess
Hazardous Waste	Authorized disposal facility. NA for this site	
Domestic Waste	Municipal collection sites	Regular municipal disposal
Any other		

#### 6. Disposal Procedures

##### 1. Collection & Segregation:

- Waste is collected daily and segregated at source.
- Clearly marked bins for different waste categories.

**2. Storage & Transportation:**

- Temporary storage within designated waste yards.
- Hazardous waste stored in sealed containers.
- Waste transported in covered vehicles to prevent spillage.

**3. Final Disposal & Compliance:**

- Non-recyclable waste sent to authorized landfill or disposal sites.
- Hazardous waste disposed through authorized agencies.
- Compliance with Solid & Hazardous Waste Management Rules.

**7. Monitoring & Reporting**

- Maintenance of daily waste monitoring log book
- Monthly waste tracking reports submitted to project authorities.
- Corrective actions implemented for non-compliance.

**Name & Signature of  
Contractor/Environment Expert:**

**Date: 08.08.2025**