

Full Title of Project: - Construction of Adi Badri Dam on Somb Nadi and its piped link to Sarasvati Nadi and Sarasvati Reservoir
File No: - FP/HP/IRRIG/155846/2022
Date of Proposal: - 26.05.2022

MUCK MANAGEMENT PLAN

1. INTRODUCTION

The project envisages construction of a concrete gravity dam of 101.06 m length and 37.5 m high from foundation level on Somb River in the territory of Himachal Pradesh. Large quantity of material would be excavated from the foundation, abutments and other appurtenant works. Muck generated from excavation of any project component is required to be disposed in a planned manner so that it takes a least possible space and is not hazardous to the environment.

2. MUCK GENERATION

In the proposed project, muck generation is envisaged during excavation of foundation and abutments. The muck generation and disposal are given in **Table-1**.

Name of the Project	Quantity of muck generated (in cum)	Quantity of muck with 25% swell factor (in cum)	Total quantity if muck/debris including swell factor (in cum)	Estimated quantity of muck/debris proposed to be utilized (in cum)	Estimated quantity of muck/debris proposed to be dumped (in cum)	Name of the dumping site	Capacity of Dumping site (in cum)
Adi Badri Dam	110000	27500	137500	33000	104500	Kathgarh (Haryana)	119320

3. DUMPING SITE

The following points were considered and followed as guidelines for finalization of the areas to be used as dumping sites:

- i) The dumping sites have been selected as close as possible to the project area to avoid long distance transport of muck.
- ii) The sites are free from active landslides or creep and care has been taken that the sites do not have a possibility of toe erosion and slope instability.
- iii) The dumping sites are either at higher level than the flood level or are away from the river course so that the possibility of muck falling into the river is

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avoided.

- iv) There is no active channel or stream flowing through the dumping sites.
- v) The sites are far away from human settlement areas.

The selection of muck disposal sites was done based upon site inspections and available best conditions of the land availability, land stability, accessibility, sloping

pattern, no vegetative and tree cover, away from any ecological sensitive area, river bed conditions and away from high flood levels of the Somb river and its tributaries. After surveys suitable site was identified and dumping site is located on the right bank of Somb River in the Panchayat land of village Kathgarh District Yamunanagar Haryana. The proposed location is spread over land area of **approx 1.8 ha**. All possible alternate sites were inspected and examined before rejecting or selecting any site. The dumping site:

- i) have no forest cover,
- ii) the settlement areas are far away from the identified dumping sites so as to have least impact on human life,
- iii) the proposed dumping sites are located at a distance varying from 60m to 70m away from the HFL at these sites as all the dumping sites are at a higher level than the flood level from the river course to provide protection from high flood, and
- iv) The identified muck sites are close to the sites from where muck is to be generated to avoid hazards related to transport of muck to long distances.

4. DUMPING PROCESS & REHABILITATION

The generated muck will be carried in dumper trucks covered with heavy duty tarpaulin properly tied to the vehicle. All precautionary measures will be followed during the dumping of muck. All dumpers will be well maintained to avoid any chances of loose soil from being falling during the transportation. Dumping would be avoided during the high speed wind, so that suspended particulate matters (SPM) level could be maintained. Further, the dumping will be avoided during heavy traffic. After the dumping the surface of dumps will be sprayed with water with the help of sprinklers and then compacted.

The muck brought by dumpers will be spread in layers and then compacted by rollers till the top level is achieved. The process shall be repeated up to 50 cm level below the desired height which shall be laid with good soil for providing grass cover. The muck disposal area will ultimately be covered with fertile soil and suitable plants

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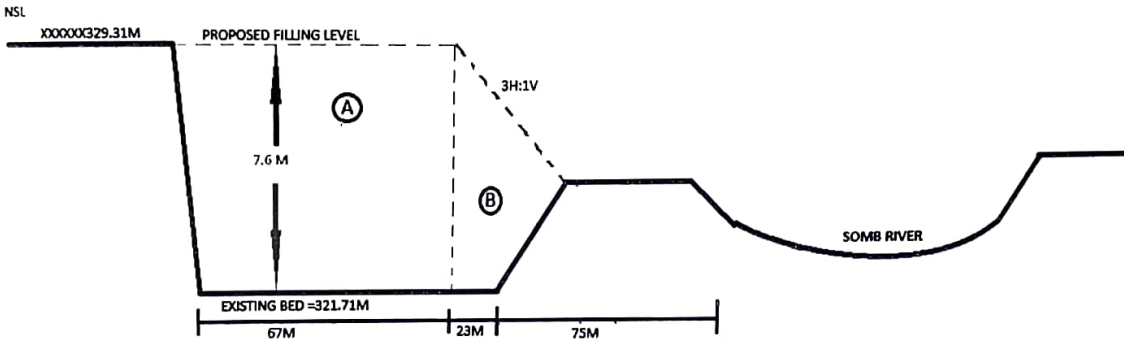
will be planted adopting suitable bio-technological measures. The project authorities would ensure that the dumping yards blend with the natural landscape by developing the site with gentle slope. These sites can also be developed later as recreational parks and tourist spots with sufficient greenery by planting trees.

All measures would be adopted to ensure that the dumping of muck does not cause injury or inconvenience to the people or the property around the area. The spillage of muck into the river at any site would be prevented by ensuring that dumping is carried out at a minimum distance of 50 m away from the active river bank. The top surface would be leveled and graded after the capacity of any dumping site is exhausted. The top surface will be covered with soil. Plantation at the dumping site will be done along with the participation of The State Forest department.

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SECTION OF PROPOSED DUMPING SITE



1. VOL OF (A) = $67 \times 7.6 \times 200 = 101840$ CUM
2. VOL OF (B) = $\frac{1}{2} \times 23 \times 7.6 \times 200 = 17480$ CUM
3. TOTAL VOL = 119320 CUM

LOCATION - VILLAGE KATHGARH, DISTT. YAMUNA NAGAR,
HARYANA

AREA OF LAND - 1.80 Ha.

DISTANCE FROM PROJECT SITE - Approx. 3.5 KM D/S

LAND OWNERSHIP - PANCHAYAT


Sub Divisional Officer
Sarasvati Heritage Sub Division No. 2
Jagadhri


Executive Engineer
Sarasvati Heritage Division No. 1
Jagadhri


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