Construction of M/S Indian Oil Corporation Limited Moradabad Retail Outlet Site Situated at Village Jyothi Khasra No 24 Along Nehtaurr-Haldaur Road (SH-12.) Km. 150 to 153 (RHS) Tehsil Dhampur District Bijnor (U.P.)

MUCK MANAGEMENT PLAN

1. INTRODUCTION

A large quantity of muck is expected to be generated as a result of construction activities of roads, in hilly and mountainous terrain etc. due to proposed cutting or excavation work. 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. The muck disposal sites cause increased sedimentation in the rivers (though insignificant compared to natural sedimentation) and totally spoils the visual aesthetics of the area. It is of prime importance that these sites will have to be rehabilitated as soon as the disposal sites are full.

2 MUCK GENERATIONS

Based on the geological nature of the rocks and engineering properties of the soil, a part of the muck generated can be used as construction material. The balance needs to be suitably disposed. Normally, muck is disposed in low-lying areas or depressions. Trees, if any, are cut before muck disposal, however, shrubs, grass or other types of undergrowth in the muck disposal at sites perish. The muck disposal sites will be suitably stabilized on completion of the muck disposal.

- Muck disposal can lead to impacts on various aspects of environment. Normally, the land is cleared before muck disposal. During clearing operation trees are cut, but undergrowth perishes as a result of muck disposal.
- In many of the sites, muck is stacked without adequate stabilization measures. In such a scenario, the muck moves along with runoff and creates landslide like situations. Many a times, boulders/large stone pieces enter the river/water body, affecting the benthic fauna, fisheries and other components of aquatic biota.
- The increased vehicular movement near muck disposal sites lead to adverse impacts on ambient air quality as well. However, increase in vehicular traffic is not significant to cause major impact on ambient air quality.
- Normally muck disposal is done at low lying areas, which gets filled up due to stacking of muck. This can sometimes affect the natural drainage pattern of the area leading to accumulation of water or partial flooding of some area which can provide ideal breeding habitat for mosquitoes.

Thus, it is necessary to develop a proper muck disposal plan for amelioration of above referred impacts

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3 MUCK DISPOSAL SITES:-

The proposed project is Construction of a Construction of Construction M/S Indian Oil Corporation Limited Moradabad Retail Outlet Site Situated at Village Jyothi Khasra No 24 Along Nehtaurr-Haldaur Road (SH-12.) Km. 150 to 153 (RHS) Tehsil Dhampur District Bijnor (U.P.) is on the plain terrain and no cutting is proposed.

In the proposed project no muck generation is expected and undertaking is given that no muck will be disposed off on forest land with Permission of competent authority. Hence no site for muck disposal is proposed for this project.

Earth Work	Item No.	Description	Qty. (cum)
9	1	Excavation in Ordinary Rock by Manual Means. Excavation in ordinary rock using manual means including loading in a truck and carrying of excavated material to embankment site with in all lifts and leads up to 1000 meters	0.00
EXCAVATION	2	Excavation in Soil with Dozer with lead up to100metres. Excavation for roadway in soil by mechanical means including cutting and pushing the earth to site of embankment up to a distance of 100metres (average lead 50 meters), including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections.	0.00
EMBANKMENT FILLING	3	Construction of embankment with approved material obtained from borrow pits with a lift sand leads, transporting to site, spreading, grading to required slope and compacting with vibratory roller8-10 ton net meet requirement of table300-2 including cost of compensation for earth taken from private land with lead up to 1 km as per Morath specification Clause No. 305.	0.00
	4	Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted with vibratory roller to meet requirement of table 300-2 as per Morath specification Clause No. 305.	0
	5	Embankment Construction with Fly ash/Pond ash available from coal or lignite burning Thermal Plants as waste material. Construction of embankment with Fly ash conforming to table1 of IRC:SP:58-2001 obtained from coal or lignite burning thermal power stations as waste material, spread and compacted in layer of 200mm thickness each at McCala's specified in IRC:SP: 58-2001 and as per approved plans.	0.00

From the table given above it is clear that the volume of filling is more than the generated debris hence no debris disposal plan is not required.

(Sanjay Kumar) Senior Manager Retail (Sales) Indian Oil Corporation Limited Moradabad

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संजय कुमार/Sanjay Kumar बरिष प्रवच्छ (रिवा रेक्स)Sanlor Manager (Retail Salos इंडियन ऑपल राजीरियन लिं० (एम.डी.) Indian Oil Corporation Limited (M.D.) मुख्यपाद मय्यत व्ययोगत/Moredabad Divisional Office कोळ स्रोरेज के चार्ग विस्ती गेज, एग० एव० 24 Opp. Cold Storage Delhi Road, N.H. - 24 पो० पालपडा, मुख्यपार/244102 (उ० प्र०) P.O. Pakbara Moradabad - 244402 (U.P.)