

# **OCCUPATIONAL HEALTH AND SAFETY PLAN**



**Project:** Construction of 50 m Intermediate lane steel truss bridge in Uttarkashi – Lambgaon-Ghansali-Tilwara Motor Road km 98- near Hanuman Temple, Block-Bhilangana, District Tehri, Uttarakhand

**Location:** Ghansali

**Executing Firm:** M/S Doon Infrastructure **Implementing**

**Agency:** U PREPARE, Uttarakhand

**Client:** Program Manager, U PREPARE, Dehradun, Uttarakhand

**FPIU:** Executive Engineer, TD, PWD, Ghansali

**Funding Agency:** The World Bank

## Site specific- Occupational Health & Safety (OHS) Management Plan

<b>Environmental component / Issues</b>	<b>Potential Impact</b>	<b>Mitigation Measures</b>
<b>LABOUR AND WORKING CONDITIONS</b>		
<b>OHS Plan and Emergency Response System</b>	<p>Higher risk of accidents and fatalities.</p> <p>Work stoppages and project delays.</p>	<ul style="list-style-type: none"> <li>Activity specific Hazard identification</li> <li>Identification of PPE requirements</li> <li>Work zone safety Plan including Safety during excavation, concreting, etc., operation of Heavy Plant &amp; Machinery; safety during Material handling, safety plan for lifting devices, fire, electrical and mechanical safety, vehicular safety</li> <li>Medical facilities including first aid in construction site as well as camp site</li> <li>fire extinguishers in construction site as well as camp site</li> <li>Institutional arrangement for implementation of safety measures including safety committee</li> <li>H&amp;S safety training programme including training schedule</li> <li>Safety Checklists</li> <li>Emergency response and preparedness plan (ERPP) (will be submitted)</li> <li>Awareness training on Emergency Response system for disaster including mock drills on Disaster Management Plan and Emergency Response System to deal with emergency situations, such as accidents, natural calamities, construction failure will be conducted</li> </ul>
<b>Occupational Health and Safety</b>	Occupational health hazards and accidents at working sites	<ul style="list-style-type: none"> <li>Adequate good quality Personal Protective Equipment (PPE) will be provided to all the workers working at construction zones and Plant sites and it will be ensured that PPEs are used by workers including those of sub-contractor's workforce at all time during works.</li> <li>The list of PPEs as under:</li> <li>Full body protection clothing, protective footwear, hand gloves and goggles to workers employed handling cement concrete,</li> <li>Construction workers will be provided high visibility vests, Ear plugs to workers exposed to high noise levels, Hard hat or helmets to workers, where there is danger of falling objects from height,</li> <li>Hand gloves, helmets, protective footwear/safety shoes, protective goggles, nose masks, high visibility vests etc. (as required) will be provided to the workers employed in construction works,</li> <li>Safety belts will be used by workers while working at height,</li> <li>Safety net will be provided around the girders/ under construction superstructure for protection against falling of objects</li> <li>Safe access and safe working conditions to the work site throughout the working period will be provided</li> <li>The medical camp will be arranged for all the workers, staff once before and then in each quarter during construction phase, and register will be maintained as per the given format.</li> <li>The emergency contact details of concern officer and medical officers/officers require to be made available at working sites.</li> <li>The hard barricading around the Work Zone will be provided</li> <li>All installations from unauthorized intrusion and accident risks will be secured</li> <li>Prohibition of entry in the abandon bridge by providing barriers especially for construction worker.</li> <li>Arrangement of potable drinking water at work site as well as at camps (Authorized connection).</li> <li>Clean eating areas where workers are not exposed to hazardous or noxious substances will be provided</li> <li>It will be ensured that visitor/s do not enter hazard areas unescorted.</li> <li>It will be ensured that moving equipment will be outfitted with audible back-up alarms</li> <li>Sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal will be marked. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</li> <li>Worker exposure to noise level greater than 85 dBA for duration of</li> </ul>

<b>Environmental component / Issues</b>	<b>Potential Impact</b>	<b>Mitigation Measures</b>
		<p>more than 8 hours per day without hearing protection will be disallow. The use of hearing protection shall be enforced actively.</p> <ul style="list-style-type: none"> <li>Bridge construction will be carried out only during lean period and no construction activity will be carried out during monsoon period.</li> <li>During the alert from the Metrological Department/ USDMA, the river side construction work should be suspended till the situation normalizes.</li> <li>All the construction material and machineries stacked near the river will be cleared during alert period to avoid any MIS happening.</li> </ul>
<b>OHS Awareness Trainings</b>	Occupational health hazards and accidents at working sites	<ul style="list-style-type: none"> <li>The awareness program on occupational health and safety aspects on periodic basis as per the training schedule will be organized</li> <li>C-EHS Expert will provide regular pep talks and toll box talk to the labourers on the type of risk specific to the planned activities for the day and safety requirements before start of work.</li> <li>Entry in the abandon bridge by providing barriers specially for construction worker will be prohibited</li> </ul>
	First Aid and Emergency Management	<ul style="list-style-type: none"> <li>Emergency numbers will be displayed at the camp and construction sites,</li> <li>Readily available First Aid boxes will be made available at the camp and construction sites. The Contractor will ensure at all time that all the basic items of the first aid are available in the first aid kits</li> <li>Ensure that qualified first-aider can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site</li> <li>First Aid Register will be maintained</li> <li>Nearby health centers will be tied up to provide immediate treatment in case of any incidence requiring advance treatment beyond first-aid</li> <li>Designated vehicles, which can be used as ambulance during emergency, will be available at construction sites as per requirement.</li> </ul>



#### **PROPER BARRICADING AT SITE**



**FIRST AID AT SITE**



**FIRE EXTINGUISHERS AT SITE**



**PPE KITS STOCKED FOR LABOUR**