



Environment and Social Due Diligence (ESDD) of Indore-Khalghat Road Section of NH-3

Oriental Infrastructure Engineers (OSE)

Final Report

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Oriental Infrastructure Engineers (OSE)

Environment and Social Due Diligence (ESDD) of Indore - Khalghat Road Section of NH-3

27 June 2019

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AIIB	Asian Infrastructure Investment Bank
AMC	Annual Maintenance Contract
BOT	Build, Operate and Transfer
CA	Concession Agreement
CEO	Chief Executive Officer
CGWA	Central Ground Water Authority
CPCB	Central Pollution Control Board
CTE	Consent to Establish
CTO	Consent to Operate
D.G.	Diesel Generators
DBMW	Delhi Brass & Metal Works
E&S	Environmental and Social
EC	Environmental Clearances
EHS	Environment, Health and Safety
EMP	Environment Management Plan
EPC	Engineering, Procurement, Construction
EPRP	Emergency Preparedness and Response Plan
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Framework
ESMP	environmental and social management plan
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standard
GHG	Greenhouse Gasses
GIIP	Good International Industry Practice
HIV	Human Immunodeficiency Virus
HR	Human Resource
IE	Independent Engineer
IFC	International Finance Corporation
IP	Indigenous Peoples
IRC	India Road Congress
LA	Land Acquisition
LARR	Land Acquisition Resettlement and Rehabilitation Bill
LHS	Left Hand Side
MoEF&CC	Ministry of Environment, Forest and Climate Change
MORTH	Ministry of Road Transport and Highway
MPPCB	Madhya Pradesh Pollution Control Board
MPR	Monthly Progress Report
NGO	non-governmental organisations
NH	National Highway
NHAI	National Highway Authority of India
NOC	No Objection Certificate
O&M	Operation and Maintenance
OHS	Occupational Health and Safety
OPIPL	Oriental Pathways (Indore) Private Limited

OSE	Oriental Infrastructure Engineers
PRO	Public Relation Officer
PS	Performance Standard
R&R	Rehabilitation and Resettlement
RFCT LARR	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement
RHS	Right Hand Side
RO	Reverse Osmosis
ROW	Right of Way
SIA	Social Impact Assessment
SPCB	State Pollution Control Board
SPV	Special Purpose Vehicle
ST	Scheduled Tribe

1 INTRODUCTION

1.1 OBJECTIVES OF THE STUDY

The overall objective of the present Environment and Social Due Diligence (ESDD) is to review the project road against the applicable reference framework, identify gaps and provide recommendations in the form of an Environment and Social Action Plan (ESAP) to close the gaps and meet the requirements of the applicable framework. The other key objectives include:

- Categorizing the Project as Category 1,2 or 3 as defined in the screening/ESDD criteria defined in the Terms of Reference and to determine the screening requirements applicable to the Project;
- Undertaking the ESDD in line with the applicable requirements detailed in screening /ESDD criteria, which includes, where applicable, reviewing the adequacy of:
 - The Environmental and Social Impact (ESIA) process and report including the Environmental and Social Management Program (ESMP) and the Social Impact Assessment (SIA) and Resettlement Action Plan (RAP), if applicable;
 - The Environmental and Social management systems of the Project/ SPV to manage E&S risks and impacts on an ongoing basis in accordance with the provisions of the reference framework. A part of this review will include assessing the adequacy of the capacity and management structures in place to manage environmental and social risks and impacts;
- Based on the assessment, providing a detailed evaluation on compliance with the reference framework; and
- Developing a detailed and time bound Action Plan with follow-up and implementation plan details, parameters and outcome indicators to judge compliance to IFC Performance Standards requirements.

1.2 SCOPE OF WORK

Scope of work for the assignment included the following:

- Undertaking a desk based review of all relevant documents related to the project within the scope of the assignment;
- Consultations with the SPV i.e. Oriental Pathways (Indore) Pvt. Ltd. to obtain an understanding of the Environmental and Social Management System in place to identify and manage E&S risks;
- Review of the 77.320 km road stretch along with all associated facilities, including both the toll booths, control rooms, staff accommodation, etc.;
- Status of Environmental Clearances (EC) and applicable permits, particularly conditions that apply during the operation phase of the project;
- Consultations with the stakeholders - local community, NHAI and workers;

- Evaluation of the site against the applicable reference framework requirement and identification of compliance gaps;
- Categorization of the Project as Category 1,2 or 3 using screening criteria as defined in **Section 1.3.1** below,
- Development of an Environmental and Social Action Plan (ESAP) with details such as mitigation measures, staff responsible, timeline for implementation and monitoring requirement in compliance with IFC Performance Standards and Equator Principles requirements.

1.3 REFERENCE FRAMEWORK FOR ESDD

The assessment of all material environmental, health & safety and social aspects with reference to the standards below:

- Revised IFC Performance Standards (2012);
- World Bank Group/IFC EHS Guidelines specifically, the following World Bank Group EHS Guidelines, published on April 30, 2007:
 - a. IFC EHS General Guidelines;
 - b. IFC EHS Guideline for Toll Roads;
- AIIB's requirements under its Environmental and Social Policy (ESP) and Environmental and Social Standards (ESSs)
- Applicable local and national environmental and social legislation.

1.3.1 Project Categorization And ESDD Scope

IFC Categorizes operating/brownfield road projects into the following three types:

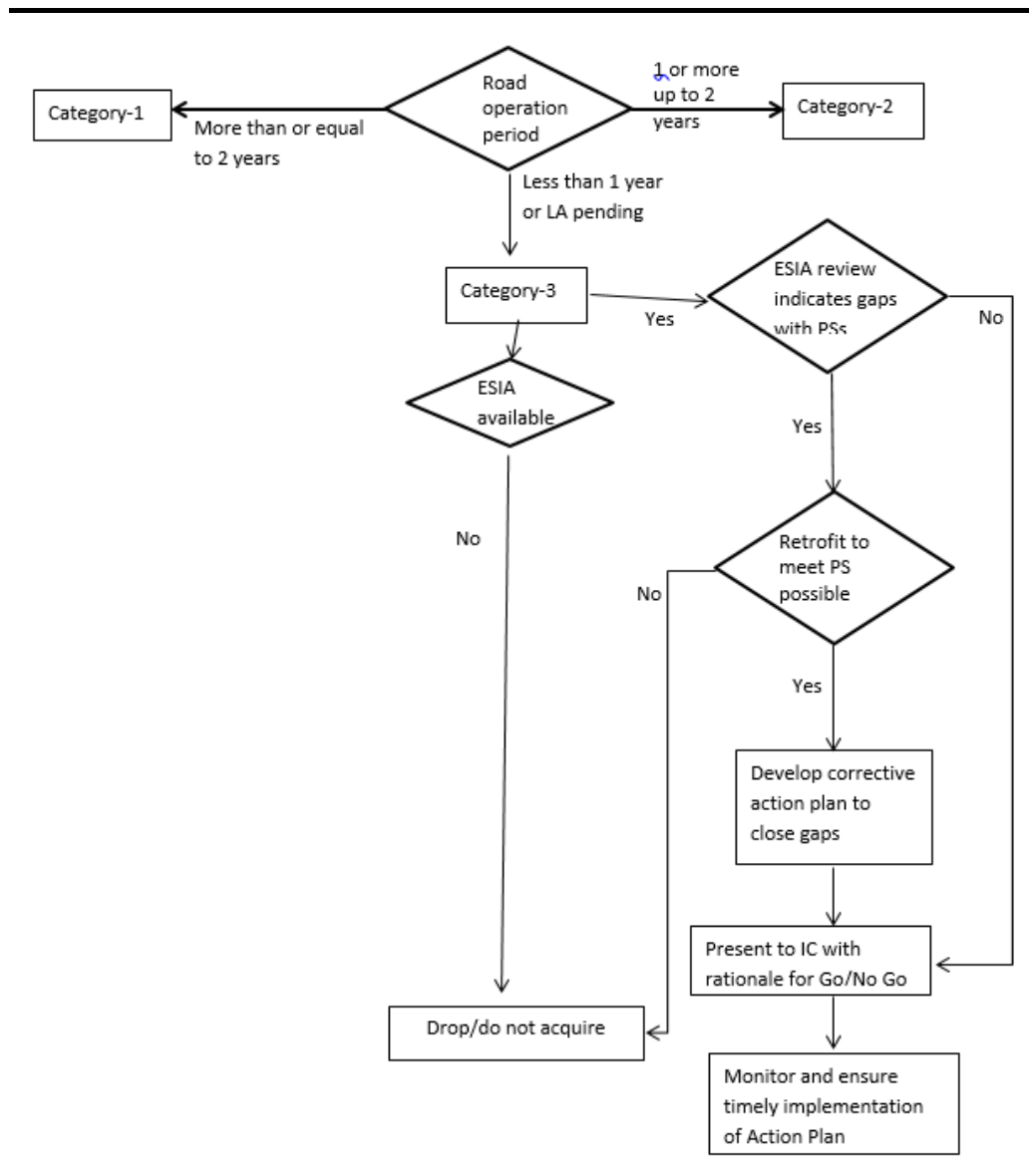
- Category 1: Operating roads (2 or more years);
- Category 2: Operating roads (1 or more years but less than 2 years); and
- Category 3: Just operational (less than 1 year) or where there is any pending Land Acquisition (LA).

The categorization of the roads is primarily decided based on number of years these roads are operational and pendency of any land acquisition process linked to the project road development.

Decision on Category-1 Roads:

The decision flow chart for the operational roads for Category-1 roads is provided in Figure-1.1 below. For Category-1 roads, the ESIA report is reviewed to identify the gaps vis-à-vis IFC PS requirements, a corrective action plan (ESAP) is prepared, and its implementation is monitored.

Figure 1.1 Decision Flow-chart for Category-1 Operating Roads



Decision on Category-2 Roads:

The decision for Category-2 roads follows the same path as that of Category-1 with following additional steps:

- a) If issues like litigation or other risks are high, the Company may like to review evidence of Informed Consultation and Participation (ICP) process to inform its decision. If significant gap with respect to IFC requirements established, then drop the asset/ do not acquire.
- b) If issues like litigation or other risks are high, the Company may like to undertake procedures akin to Broad Community Support (BCS) for the project to inform decision. If Company is unable to establish BCS, escalate to Board with rationale for go/ no go recommendation.
- c) Review status of implementation of the R&R Plan for all assets that have been in operation one or more years and upto two years.
- d) Resettlement Completion Audit may be requested on a case by case basis.

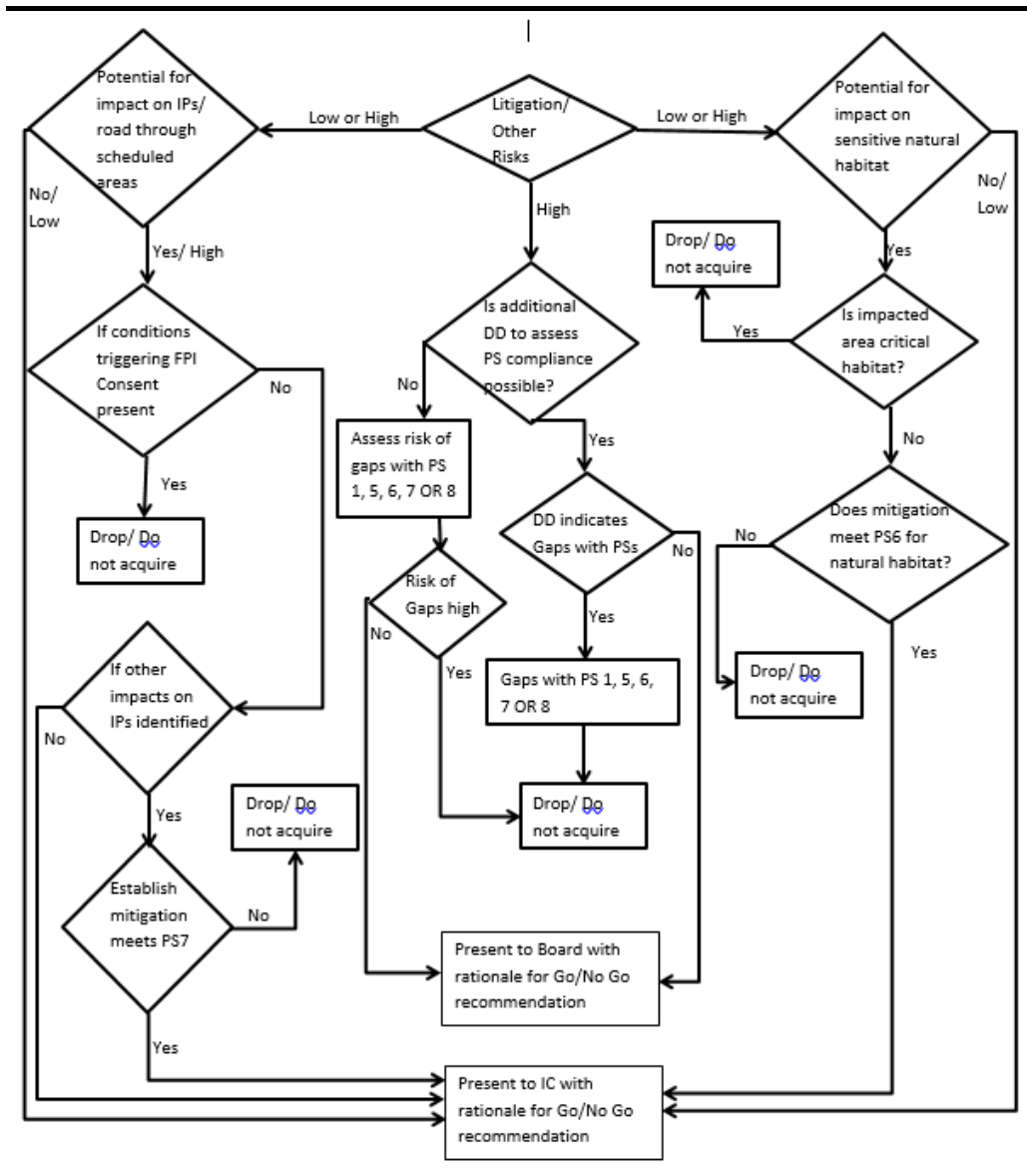
- e) If other adverse impact on IPs established, Company needs to ensure that consultation meets ICP requirements.
- f) The Company needs to review status of implementation of all mitigation measures for IPs.

Decision on Category-3 Roads:

The decision flow chart for the operational roads for Category-3 roads is provided in Figure1.2 below. For Category-3 roads, three key criteria are screened, i.e., (i) potential for impact on IPs, (ii) litigation/other risks, and (iii) potential for impact on sensitive natural habitat. If the project road was identified to have impacted a critical habitat or conditions triggering FPIC present, then the investment is dropped.

If the project road is identified to have high litigation and other risks, then the gaps with respect to IFC PS-1,5,6,7 and 8 are identified during ESDD and a suitable ESAP is prepared.

Figure 1.2 Decision Flow-chart for Category-3 Operating Roads



A range of Key Screening Criteria covering PS-1, PS-5, PS-6, PS-7, and PS-8 are used for undertaking ESDD for operating roads. These key E&S criteria spread across IFC PSs is provided in Table 1.1 below.

Table 1.1 *Key E&S Criteria screened under IFC PSs*

Sl. No	E&S Criteria	Relevant IFC PS
1	Litigation	PS-1
2	Protests	
3	Assessment and Management of Environment and Social Risks and Impacts	
4	Stakeholder/Community Engagement	
5	Grievance Mechanism	
6	HR/ Contractor Management	PS-2
7	Health and Safety	PS-2 and PS-4
8	Pollution Prevention	PS-3
9	Resettlement Action Plan (RAP)	PS-5
10	Natural Habitat	PS-6
11	Indigenous Peoples	PS-7
12	Cultural Heritage	PS-8

The scope of due-diligence of these E&S criteria for each category of operational road is presented in *Table 1.2* below for further clarity.

Table 1.2 Screening Criteria Categorization of Road Projects

S.No.	Screening Criteria	Category 1: Operating roads (2 or more years)	Category 2: Operating roads (1 or more years but less than 2 years)	Category 3: Just operational (less than 1 year) or where there is any pending Land Acquisition (LA)
1	Litigation	<ul style="list-style-type: none"> Seek full information on any outstanding litigation or notices from regulatory authorities related to environmental impacts, land/RoW acquisition, labour working conditions, occupational health and safety, community health and safety; Take a risk based view on whether to proceed or not. 	Same as Category 1.	Same as Category 1.
2	Other Risks	<ul style="list-style-type: none"> Seek full information on any stakeholder concerns (employees, local communities, NGOs, regulatory authorities, contractors, contract workers): expressed in the public domain; through grievance mechanisms; and instances of protests or civil action related to environmental impacts, land/RoW acquisition, labour working conditions, occupational health and safety, community health and safety; Take a risk based view on whether to proceed or not. 	Same as Category 1.	Same as Category 1.
3	Assessment and Management of Environment and Social Risks and Impacts	<ul style="list-style-type: none"> Ascertain that operational stage ESMP, compliant to PS, developed and implemented; An ESMS that meets the requirements of IFC PSs and applicable EHS Guidelines is in place. If not in place a time bound plan to develop and implement it; Review environment, health, safety, social, and labor working condition monitoring data to ensure that applicable provisions of IFC PSs and WBG EHS Guidelines are being met. 	Same as Category 1.	<ul style="list-style-type: none"> Obtain and review a copy of a comprehensive ESIA for the Project; Assess gaps with PSs; Assess whether retrofit measures to close gaps can be implemented; If retrofit possible, develop a time-bound action plan; Ensure implementation of the action plan; A time bound plan to develop and implement an ESMS.
4	Stakeholder/Community Engagement	<ul style="list-style-type: none"> Review operation stage Stakeholder Engagement Plan and its implementation for conformance to IFC PSs; If issues at (1) and/or (2) identified, may like to review evidence of Informed Consultation and Participation (ICP) process to inform decision at (1) and/or (2) as relevant. 	<p>In addition to requirements specified at Category 1 also the following:</p> <ul style="list-style-type: none"> If issues at (1) and/or (2) identified, may 	<ul style="list-style-type: none"> A stakeholder engagement plan in place and being implemented; Obtain evidence of Informed Consultation and Participation (ICP) process; Obtain evidence of Broad Community Support (BCS) for the project.

S.No.	Screening Criteria	Category 1: Operating roads (2 or more years)	Category 2: Operating roads (1 or more years but less than 2 years)	Category 3: Just operational (less than 1 year) or where there is any pending Land Acquisition (LA)
			like to undertake procedures akin to Broad Community Support (BCS) for the project to inform decision at (1) and/or (2) as relevant.	
5	Grievance Mechanism	<ul style="list-style-type: none"> Functional and effective Grievance Redress system in Place. 	Same as Category 1.	<ul style="list-style-type: none"> Functional and effective Grievance Redress system in Place.
6	Health & Safety	<ul style="list-style-type: none"> Operational stage health & safety management system in place/implemented (as a part of the ESMS). In case it is not in place a time bound plan to develop and implement an operational stage health & safety management system; Review monitoring data to assess efficacy. 	Same as Category 1.	<ul style="list-style-type: none"> Construction and operational stage health & safety management system in place and being implemented (as a part of the ESMS); Review monitoring data to assess efficacy.
7	HR/ Contractor Management	<ul style="list-style-type: none"> HR/Contractor management system/practices compliant to PS 2 requirements; Time bound action plan for closure of gaps (in HR/Contractor management system/practices with respect to PS 2 requirements) and implementation of the same; Labor and employee accommodation meets PS2 provisions. 	Same as Category 1.	<ul style="list-style-type: none"> HR/Contractor management system compliant with PS2 under implementation; Time bound action plan for closure of gaps (in HR/Contractor management system/practices with respect to PS 2 requirements) and implementation of the same; Labour Accommodation meets PS2 provisions.
8	Pollution Prevention	<ul style="list-style-type: none"> Mitigation measures implemented for impacts from air/noise/vibration in accordance with PS3 and WBG EHS Guidelines; Monitoring data indicates compliance with above. 	Same as Category 1.	<ul style="list-style-type: none"> A detailed assessment undertaken and management plan (in ESMP) for mitigation of air/noise/vibration related impacts in accordance with PS3 and WBG EHS Guidelines under implementation; Monitoring data indicates compliance.

S.No.	Screening Criteria	Category 1: Operating roads (2 or more years)	Category 2: Operating roads (1 or more years but less than 2 years)	Category 3: Just operational (less than 1 year) or where there is any pending Land Acquisition (LA)
9	Resettlement Action Plan (RAP)	<ul style="list-style-type: none"> Establish that no pending land and R&R related cases/disputes pending before courts/authority or reported; Establish that there are no issues of the type mentioned at (2) above; If issues of the type mentioned at (1) and/or (2) material, then consider seeking and reviewing SIA and RAP to inform decision at (1) and/or (2) as relevant. 	<p>In addition to requirements specified at Category 1 also the following:</p> <ul style="list-style-type: none"> Review also status of implementation of the R&R Plan; Resettlement Completion Audit may be requested in cases. 	<ul style="list-style-type: none"> Assess if a detailed SIA and RAP compliant to PS developed and being implemented for the project; Time bound action plan for completion of the LA and R&R activities (if pending); Resettlement Completion Audit to be undertaken.
10	Natural Habitats	<ul style="list-style-type: none"> Where forest land diversion or roads in the vicinity of coastal areas or near large wetland areas, undertake review of literature, contact forest department and collect anecdotal information from communities for presence or migration of any IUCN or nationally specified vulnerable, endangered or critically endangered species; If present, establish whether critical habitat or not. If critical habitat, establish that CR related measures in accordance with PS 6 in place; If not critical habitat, review impact on natural habitat and whether measures meeting natural habitat requirements of PS6 in place; Obtain evidence of offset and “no net loss’ and preferably a “net gain” of biodiversity, for road stretches passing through legally “Protected Area” (like national park, wildlife corridor, reserved forest, critical habitat, Scheduled V, Ramsar sites, IBAs etc.) or a Critical Habitat. 	Same as Category 1.	<ul style="list-style-type: none"> Where there is forest land diversion, or roads in the vicinity of coastal areas or near large wetland areas, review if detailed biodiversity assessment compliant to PS 6 included in the ESIA and; Detailed and comprehensive management plan developed and under implementation to achieve no net loss’ and preferably a “net gain” of biodiversity if material impacts on critical habitat identified.
11	Indigenous peoples, tribes and communities	<ul style="list-style-type: none"> If road passes through scheduled areas, review process of land take in detail to understand impact on IPs, if any and whether they have been mitigated in accordance with PS7; If significant tribal population in the vicinity of the road, or significant tribal land taken or potential for loss of access to lands/resources on which tribal population dependent, 	<p>In addition to requirements specified at Category 1 also the following:</p> <ul style="list-style-type: none"> If other adverse impact on IPs, demonstrate that 	<ul style="list-style-type: none"> Review if ESIA adequately identified IPs, impacts on IPs including mitigation measures in accordance with PS7; Indigenous Peoples Plan, or a broader community development plan with separate components for Indigenous Peoples in place and being implemented;

S.No.	Screening Criteria	Category 1: Operating roads (2 or more years)	Category 2: Operating roads (1 or more years but less than 2 years)	Category 3: Just operational (less than 1 year) or where there is any pending Land Acquisition (LA)
		<p>assess if mitigation measures developed and implemented in accordance with PS7;</p> <ul style="list-style-type: none"> Establish: no adverse impact (either historical or residual) on lands and resources under traditional or customary use of IPs (including access related impacts); no relocation of IPs from land and resources under traditional or customary use; and no adverse impact on critical cultural heritage of IPs. 	<p>consultation meets ICP;</p> <ul style="list-style-type: none"> Review status of implementation of all mitigation measures for IPs. 	<ul style="list-style-type: none"> Assess if Free prior and Informed Consent (FPIC) achieved/ demonstrated in case of impact on customary lands and resources, cultural heritage of IPs.
12	Cultural Heritage	<ul style="list-style-type: none"> If issues relating to cultural heritage identified at (1) and/or (2), review in detail to establish if measures implemented meet PS1 and PS8. 	Same as Category 1.	<ul style="list-style-type: none"> Ensure that the ESIA and ESMP have measures in place that meet PS8 provisions.

1.4 APPROACH AND METHODOLOGY

1.4.1 Project Inception

An inception teleconference with IFC and Oriental Infrastructure Engineers was undertaken in December 2017 in order to obtain an overview of the project status, to present ERM's scope of work and align the approach, information requirement, expectations on timeline.

1.4.2 Documentation Review

ERM commenced the assessment with desk-based review of the project related documents ahead of the on-site assessment. Simultaneously ERM undertook review of the available public information on Indore – Khalghat corridor of NH-3. ERM conducted a search of online and publicly available sources of information (relevant to the jurisdictions in which the Project corridor is located). The objective of this media review was for identifying and reporting E&S issues pertaining the interest and concern of key third party stakeholders such as major non-governmental organisations (NGOs), and other interested parties. *Annexure A* provides the list of documents that were available for review.

1.4.3 Site Assessment

ERM's team of Environmental and Social Experts undertook the site assessment of the project road corridor from Indore to Khalghat of NH-3 on 15th & 16th January 2018. The key aspects of the site assessment included:

- Site assessment of the entire project corridor from Indore to Khalghat, Toll Plaza offices at Sonway and Khalghat and discussion with the SPV (Oriental Pathways (Indore) Pvt. Ltd. at site;
- Environmental and Social sensitivity mapping along the entire project corridor conducted by a drive through along the entire road stretch and mapping features on both the left hand and right hand side of the project corridor;
- Visit to the area proposed for setting up of the batching plant to be used in operation and maintenance activity of the road;
- Assessment of the truck lay bye areas and the proposed rest areas, situated along the project corridor;
- Broad level discussion with NHAI official to understand the process of land acquisition, impact on indigenous people in the project area and pending litigations, if any
- Stakeholder consultation with local community, workers (direct and contract) and contractors.

The *Table 1.3* below illustrates the key site assessment activities and details of the stakeholder consultation undertaken.

Table 1.3 Site Visit Schedule and Activities

Date	Location	Activities
15 th January 2018	Sonway Toll Plaza Khalghat Toll Plaza	<ul style="list-style-type: none"> • Discussion with the project team at Sonway Toll Plaza and Khalghat Toll Plaza • Site visit of the project corridor and associated facilities including the Toll Plazas with site representatives • Environmental and Social screening of the sensitive receptors • Consultation with PRO's appointed for the Sonway Toll Plaza and Khalghat Toll Plaza • Consultation with toll booth operators, plaza managers; • Consultation with contract workers for median and RoW maintenance
16 th January 2018	Sonway Toll Plaza	<ul style="list-style-type: none"> • Review of project related environmental and social permits, policies and procedures in place, land acquisition process, etc. • Consultation with local community to understand land acquisition related impacts and presence and status of scheduled tribe community in the area • Discussion with NHAI official to understand land acquisition process and status of pending litigations.

1.4.4 Report Writing

This Due Diligence process involved project categorization, identifying gaps with respect to the reference framework and finally developing Environmental and Social Action Plan (ESAP). The gap assessment was done through a screening checklist / assessment protocol (Annexure B) based on the standards as in the reference framework.

The detailed assessment through this protocol helped in identifying gaps and considering risks (covering financial, reputational, operational, legal, etc.) associated with them. The issues that represent significant risks (potential for regulatory action; reputational implications; higher financial risks and potential to affect road operation and revenue) were identified as key issues. The action plan recommended takes into account what is under OPIPL's control as a concessionaire and what it can achieve through its sphere of influence with NHAI who is the owner of the road. The ESAP is structured to include (a) summary of recommendations; (b) resources and responsibilities (c) timeline for completion and (d) indicator of completion of the task.

1.5 LIMITATIONS

This due diligence exercise has been undertaken based on the documents made available by ERM's field survey and data collection, Oriental Infrastructure Engineers, Oriental Pathways (Indore) Pvt. Ltd., stakeholder consultations undertaken and discussion with the site representative at the time of site assessment and information available in public domain. Professional judgements expressed herein are based on documents and information provided. Wherever ERM is not able to make a judgement or assess any process, it has highlighted that as an information gap and suggested the way forward.

ERM had limited consultations with local community to discuss land acquisition related impacts. The land acquisition was carried out long back, hence it was difficult to get relevant details. Specific limitations on accessing and interpreting land acquisition information includes:

- The land acquisition information provided to ERM had minor deviations and they could not be explained as no person acquainted with the land acquisition process is available at present. This was addressed in a subsequent meeting with NHAI, Indore SPV Site Team and the Forest Department.
- The information on affected households was referred from IIFCL ESDD Report in 2007. However, it did not give village wise break-up or information on affected ST households.

ERM has provided its understanding of compliance to applicable EHS and labour laws, rules and regulation. However, the review should not be constructed as a legal review of BFHL and FRHL.

1.5.1 *Uses of the Report*

ERM is not engaged in social and environmental, health & safety consulting and reporting for the purposes of advertising, sales promotion, or endorsement of any client's interests, including raising investment capital or recommending investment decisions, or other publicity purposes. Client acknowledges that the report prepared by ERM are for exclusive use of Client and agrees that ERM's reports or correspondence will not be used or reproduced in full or in part for such promotional purposes, and may not be used or relied upon in any prospectus or offering circular. Client also agrees that none of its advertising, sales promotion, or other publicity matter containing any information obtained from these assessments or reports, either in parts or entirety, will make reference to ERM's trade name.

Nothing contained in this report shall be construed as a warranty or affirmation by ERM that the site and property described in the report are suitable collateral for any loan or that acquisition of such property by any lender through foreclosure proceedings or otherwise will not expose the lender to potential environmental or social liability.

2 **REFERENCE FRAMEWORK & REGULATORY FRAMEWORK FOR HIGHWAYS IN INDIA**

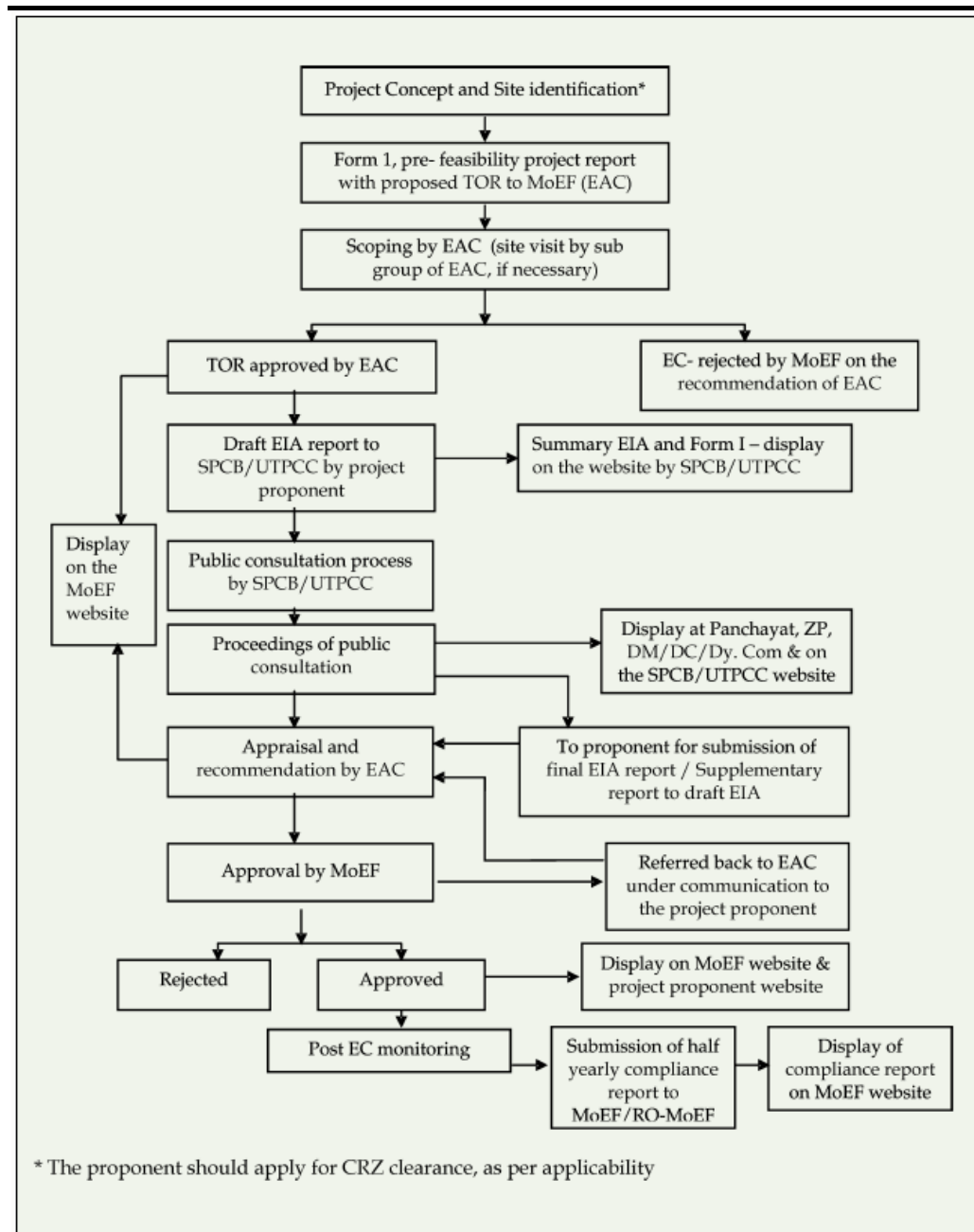
Environmental Impact Notification S.O.1533 (E), of 14th September 2006 as amended in 2009 has made it mandatory to obtain environmental clearance for scheduled development projects. The notification has classified these projects as Category A & B. Category A projects (including expansion and modernization of existing projects) require clearance from Ministry of Environment and Forests (MoEF), Govt. of India (GoI) and for category B, from State Environmental Impact Assessment Authority (SEIAA), constituted by the Govt. of India. The Category-A and B of the Highways projects that require prior environment clearance are defined as follows:

Table 2.1 *Categorisation of Highways Projects in Indian Regulation for Prior Environment Clearance*

Category-A	Category-B	General Conditions
New National Highways & expansion of NHs greater than 30km, involving additional right of way greater than 20m involving land acquisition and passing through more than one state.	All State highway projects/ State Highway expansion projects in hill terrain (above 1000m AMSL) and or ecologically sensitive areas.	Any project or activity specified in Category-B will be treated Category-A, if located in whole or in part within 10km from the boundary of: (i) Protected areas notified under the Wildlife (Protection) Act 1972; (ii) Critically polluted areas as identified by the Central Pollution Control Board (CPCB) from time to time; (iii) Eco-sensitive areas as notified under Section-3 of the Environment Protection Act 1986. Provided that the requirement regarding distance of 10km of the inter-state boundaries can be reduced or completely done away with by an agreement between the respective states or UTs sharing the common boundary in the case the activity does not fall within 10kms of the areas mentioned at item (i), (ii), and (iii) above.

The environment clearance process for Category-A Highways projects is provided in Figure below.

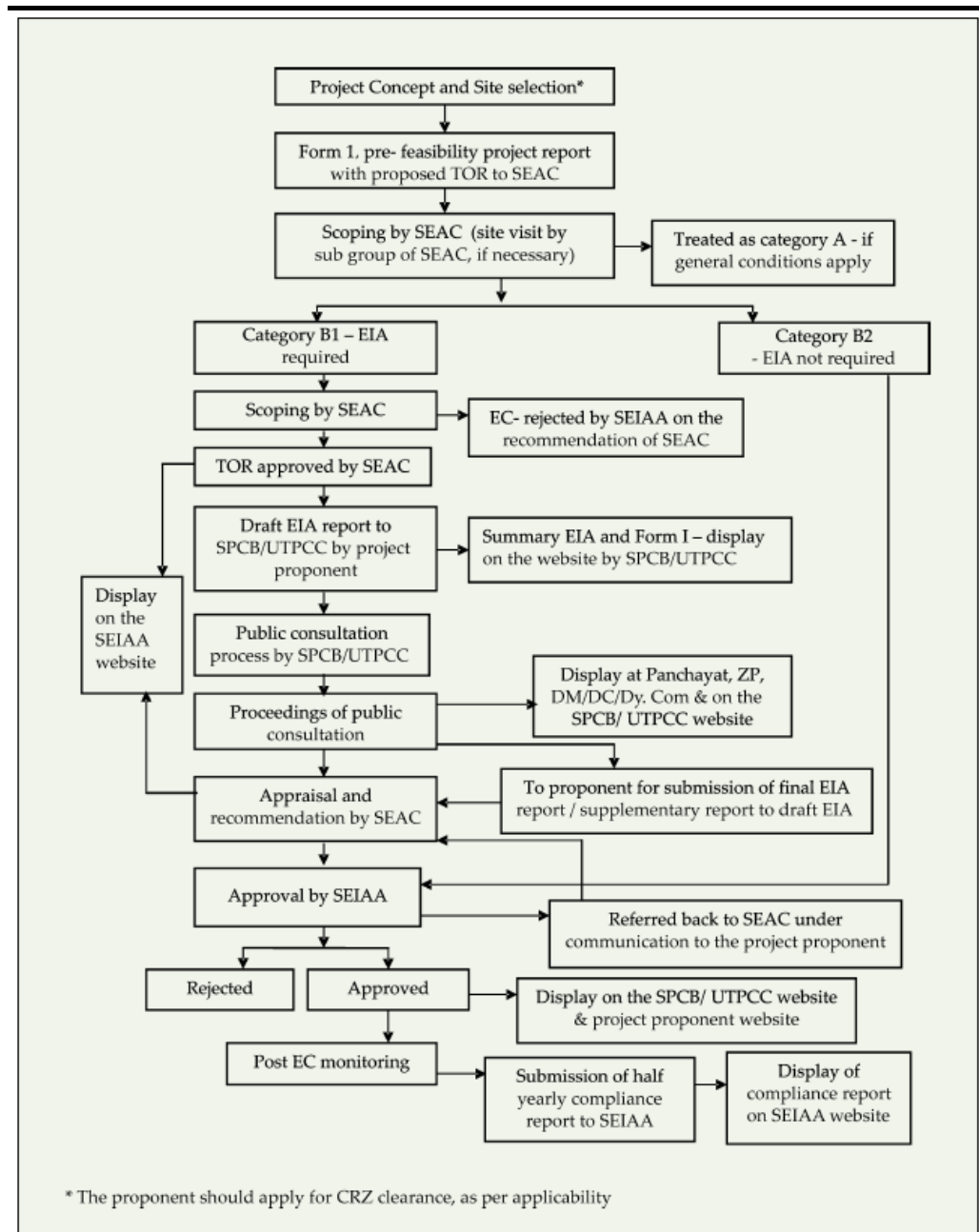
Figure 2.1 Environment Clearance Process for Category-A Highway Projects in India



Source: EIA Guidance Manual-Highways, MoEF, 2010.

Similarly, the environment clearance process for Category-B Highways projects is shown in Figure- below. The project proponent submits application for prior environment clearance in Form-1 to the concerned SEAC for determining whether or not the project requires an EIA. Form-1 gives information on the nature and location specificity of the project. On the basis of the information furnished in Form-1, SEAC categorises the project as B-1 (requiring EIA Report) or B-2 (not require EIA Report).

Figure 2.2 Environment Clearance Process for Category-B Highway Projects in India.



Source: EIA Guidance Manual-Highways, MoEF, 2010.

The Category-A and Category B-1 projects or activities (expansion and/or modernisation and/or change in product mix of existing projects or activities) require to apply for environment clearance to EAC/SEAC concerned. The EAC or SEAC determines the ToR based on information furnished in the prescribed application form.

All Category-A and Category B-1 projects or activities are required to undertake public consultation, except the following:

- Expansion of Roads and Highways which do not involve any further acquisition of land; and
- All projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.

After completion of the public consultation, the applicant address all the material environmental concerns expressed during this process, and make appropriate changes in the Draft EIA and EMP. The EAC/SEAC appraises the Final EIA Report, outcome of the public consultations including public hearing proceedings for the grant of Environment Clearance (EC).

The projects involving clearance under Coastal Regulation Zone Notification, 1991 shall submit with the application a CRZ map duly demarcated by one of the authorized agencies, showing the project activities, w.r.t. C.R.Z (at the stage of TOR) and the recommendations of the State Coastal Zone Management Authority (at the stage of EC). Simultaneous action shall also be take to obtain the requisite clearance under the provisions of the CRZ notification, 1991 for the activities to be located in the CRZ.). (S.O No. 3067 (E) dated 1st December 2009 of MoEF)

The projects to be located within 10km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory corridors of wild animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon (at the stage of EC). (S.O No. 3067 (E) dated 1st December 2009 of MoEF)

For the projects located in critically polluted areas as notified by CPCB, the project proponent shall make available a copy of their application for the TOR to the concerned SPCB. The SPCB should either send its representative at the time of consideration of the proposal by the EAC, at the stage of appraisal of the project for prescribing TOR or consideration of EC or provide their written comments with respect to pollution load in terms of ambient air quality, water quality or solid/hazardous waste management. (Circular dated 25th August 2009 of MoEF)

Fly Ash utilization notification No. S.O. 2804 (E) dated 3rd November 2009 requires that no agency, person or organization shall, within a radius of 100 kilometers of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments with top soil; the guidelines/ specifications issued by the Indian Road Congress (IRC) as contained in IRC specification No. SP: 58 of 2001.

The prior environmental clearance granted is valid for a period of five years. The regulatory authority concerned may extend this validity period by a maximum period of five years.

In respect of category A projects, it is mandatory for the project proponent to 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 where the project is located. In addition, EC is required to be displayed in the project proponent's website permanently.

In respect of category B projects, irrespective of its clearance by MoEF/SEIAA, the project proponent shall prominently advertise in the newspapers

indicating that the project has been accorded environmental clearance and the details of MoEF website where it is displayed.

The project management shall submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year. All such reports shall be public documents. The latest such compliance report shall be displayed on the web site of the concerned regulatory authority.

2.1 ENVIRONMENTAL REGULATIONS

Environmental regulations for highways in India are as presented in *Table 2.2* below:

Table 2.2 Environmental Regulations

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability
1.	The Environment (Protection) Act, 1986	MoEF&CC	Umbrella legislation to protect and improve overall Environment	OPIPL need to obtain Consent to Establish (CTE) and Consent to Operate (CTO) from Madhya Pradesh Pollution Control Board (MPPCB) and to comply with permissible limits for ambient air quality and noise levels for the Diesel Generators (D.G.) installed at site.
2.	The Forest Conservation Act, 1980	MOEFCC, State Forest Department	Protection and Conservation of Forests	NHAI to obtain Forest Clearance / permission of tree felling to clear the Right of Way (RoW)
3.	The Water (Prevention and Control of Pollution) Act, 1974	CPCB, MPPCB	Prevention and control of water pollution as well as restoration of water quality	CTE and CTO to be obtained from MPPCB
4.	Noise Pollution (Regulation and Control) Rules, 2000	CPCB, MPPCB	Noise pollution regulation and control	As per the Act, ambient noise levels are to be maintained as stipulated in the rules for different categories of areas such as residential, commercial, industrial and silence zones. Considering the context of the project, OPIPL will need to be abide by the limits prescribed in Consent obtained by MPPCB
5.	The Air (Prevention and Control of Pollution) Act, 1981	CPCB, MPPCB	To prevent, control and reduce air pollution including noise pollution	CTE and CTO to be obtained from MPPCB
6.	Environmental Impact Assessment Notification, 2006	MoEFCC	Impact Assessment	Environment Clearance to be obtained from Ministry of Environment and Forest prior to start of construction by NHAI
7.	Hazardous and Other Wastes (Management and	CPCB, MPPCB	Hazardous Waste Management	Authorization of hazardous waste generation and storage should be obtained from the

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability
	Transboundary Movement) Rules, 2016			State Pollution Control Board (SPCB) i.e. MPPCB. Hazardous waste e.g. used oil (diesel/ lube oil) need to be disposed in accordance to the guidelines stipulated by the Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.
8.	Tree Felling	State Forest Department	Regulation on felling of trees	Permission for felling of trees to be obtained from State Forest Department
9.	Guidelines/ Criteria for evaluation of proposals/request for ground water abstraction by Central Ground Water Authority (CGWA)	Madhya Pradesh Ground Water Authority	Regulation of abstraction of ground water	Source of water at Toll Plaza, Khalghat is open well; permission for abstraction is to be obtained by the authorized officers.
10.	The Water (Prevention and Control) Act, 1974 (Amended) in 1988			

2.2 LAND AND SOCIAL REGULATIONS

2.2.1 Labour and Working Conditions Regulations

Social regulations for highways in India are as presented in Table 2.3 below:

Table 2.3 Social Regulations

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability
	Shops and Establishment Act 1958	Labour Department	Regulation of conditions of work at shops, commercial establishments	The two tolls plazas are registered the Shops and Establishment Act
	Contract Labour Regulation Act, 1971;	Labour Department	Contract Labour Management	This act provides safeguards to contract workers for construction, and operations of projects
	Child Labour (Prohibition and Regulation) Act, 1986 as amended in 2016 Bonded Labour System (Abolition) Act 1976	Labour Department	Protection of Child (<15 years) workers Prohibition of forced labour system in any form	The Act prohibits engagement of children who have not completed their fourteenth year in occupations and processes listed in Schedule attached to it. Part-B (for processes) lists entry 11 mentions building and construction industry.
	Minimum Wages Act, 1948 and Rules 1980; Payment of Wages Act, 1936	Labour Department	Wage Payment	These acts ensure payment of wages to labours without discrimination and devoid of any unjust deductions.

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability
	Equal Remuneration Act, 1976			
	Workers Compensation Act, 1923 Maternity Benefits Act, 1961 Public Provident Fund Act, 1968 Employees State Insurance Act, 1948	Labour Department	Welfare	No women workers are engaged by OPIPL; hence, Maternity Benefits Act 1961 is not applicable. Remaining laws are applicable
	Madhya Pradesh Security Agencies (Regulation) Rules 2012 Private Securities Agencies (Regulation) Act, 2005	Department of Police	Security Agencies Regulation	Regulation and verification of antecedents of private security agencies
	The Welfare Cess Act 1987 and Rules 1988	Labour Department	Workers welfare	The Act makes provision to contribute to a welfare fund constituted by Government.

2.2.2 Land Acquisition and Rehabilitation Regulations for Roads

The land acquisition for road projects in India is carried out depending on the category of the road, location of the road and urgency of the requirement of the road. Various legal provisions for different categories of road is summarized below.

Category/ Context	Title of the Act	Applicability
National Highways	<ul style="list-style-type: none"> National Highways Act 1956, Section-3. 	Applicable only for NHs constructed or upgraded by Central Government. RFCT LARR Act 2013 became effective from 1 st Jan 2015 for NH Projects.
Other Roads (State Highways, Major District Roads, Rural Roads)	<ul style="list-style-type: none"> Land Acquisition Act 1894 (LA Act 1894) Right to Fair Compensation and Transparency in Land Acquisition Resettlement and Rehabilitation Act 2013 (RFCT LARR Act 2013) Guidelines/policies/rules/statutes for acquisition of land on consent basis by various State Governments (Kerala, Chhatisgarh, West Bengal, Uttar Pradesh, Telengana, Punjab, Rajasthan, Goa, Odisha, Bihar, Maharashtra, Himachal Pradesh, Karnataka, and Madhya Pradesh) 	LA Act was used till 31 st Dec 2013. RFCT LARR Act 2013 became effective from 1 st Jan 2014. Most of these guidelines were notified in 2016 and 2017 to promote direct negotiation with private landowners.
Expressways	<ul style="list-style-type: none"> Land Acquisition Act 1894 (LA Act 1894) Right to Fair Compensation and Transparency in Land Acquisition Resettlement and Rehabilitation Act 2013 (RFCT LARR Act 2013) 	LA Act was used till 31 st Dec 2013. RFCT LARR Act 2013 became effective from 1 st Jan 2014.

Additional Land Required due to Design Change or Missing Plots in LA Notifications	<ul style="list-style-type: none"> Guidelines/policies/rules/statutes for acquisition of land on consent basis by various State Governments (Kerala, Chhatisgarh, West Bengal, Uttar Pradesh, Telengana, Punjab, Rajasthan, Goa, Odisha, Bihar, Maharashtra, Himachal Pradesh, Karnataka, and Madhya Pradesh) 	Most of these Guidelines were notified in 2016 and 2017.
Government Land	<ul style="list-style-type: none"> Land Revenue Codes of different State Governments and Union Territories. 	These Codes deal with procedures for assigning government land for various public purposes.
Forest Land	<ul style="list-style-type: none"> Forest Conservation Act 1980 	The Act and Rules therein provides procedures for conversion of forestland for non-forest use.

Land Acquisition under NH Act 1956

Land required for a National Highway is usually acquired by NHAI through Section 3 of NH Act of 1956. Section 3A of the NH Act 1956 empowers the Central Government to acquire land for the building, maintenance, management or operation of a national highway or part thereof by notification in Official Gazette. The provision of the land acquisition and the process is illustrated in the figure below.

Section 3G (7) and its sub-sections from (a) to (d) prescribes the competent authority or the arbitrator to consider the following for determining compensation amount:

- (a) The market value of the land on the date of publication of notification under section 3A;
- (b) The damage, if any, sustained by the person interested at the time of taking possession of the land, by reason of **severing of such land from other land**;
- (c) The damage, if any sustained by the person interested at the time of taking possession of the land, by reason of the acquisition **injuriously affecting his other immovable property in any manner, or his earning**;
- (d) If, in consequences of the acquisition of the land, the person interested is **compelled to change his residence or place of business**, the reasonable expenses, if any, incidental to such change.

Section 3G (2) also has provision to pay an amount calculated at ten percent of the compensation amount where the right of user or any right in the nature of an easement to the owner and any other persons whose right of enjoyment in that land has been affected in any manner whatsoever. The arbitrator is empowered to award interest at nine percent on the excess amount (difference between compensation determined by competent authority and by arbitrator) from the date of taking possession u/s 3D till the date of actual deposit.

Figure 2.3 Land Acquisition Process- NH Act, 1956

3A. 1 & 2: Gazette Notification	<ul style="list-style-type: none"> • Declaration of intention to acquire land. • Provides brief description of the land
3A. (3) Publication in Local Newspaper	<ul style="list-style-type: none"> • Competent Authority publishes in two local news paper • One of them needs to be in a vernacular language
3 B. Power to Enter for Survey	<ul style="list-style-type: none"> • Persons authorised by Central Government to survey • Survey includes measurement, valuation, setting out boundaries etc.
3 C. Hearing of Objections	<ul style="list-style-type: none"> • Objections to be made to competent authority within 21 days from Gazette notification u/s 3A(1). • Order made by competent authority on the matters of objections will be final
3 D. Declaration of Acquisition	<ul style="list-style-type: none"> • Competent Authority to submit report to Central Government with recommendation to acquire the land • On publication of the 3D (1) in official gazette, the land shall vest absolutely in the Central Government free from all encumbrances. • The 3D (1) notification should be within a year from the 3A(1) notification.
3 E. Power to take Possession	<ul style="list-style-type: none"> • After 3D (2) gazette notification, Central Government Deposits the determined amount with Competent Authority. • CA gives written notice to owners to surrender possession of land to CA or persons authorised by it • CA may take help of Commissioner or District Collector to enforce surrender of land.
3 F. Right to Build, maintain and operate National Highway	<ul style="list-style-type: none"> • After 3D notification it is lawful to enter and do other act necessary for building, maintenance, management or operation of NH.
3 G. Determination of Compensation	<ul style="list-style-type: none"> • Competent Authority determines the compensation • Central Government appoints an Arbitrator if compensation determined by CA is not acceptable to either of the parties 3G(5).
3 H (4) Reference to Court	<ul style="list-style-type: none"> • Any dispute as to the apportionment of the amount is referred to the principal civil court of original jurisdiction

RFCT LARR Act 2013

The provisions of this Act covers procedures for land acquisition, determination of compensation, provisions for rehabilitation and resettlement in the event of private land acquired by Government using its sovereign

authority for its own use or for public purpose. The definition of public purpose (as in section 2 (1)(b)(i) for infrastructure projects) includes 'roads and bridges' as 'transport infrastructure'. Hence, this Act is applicable for acquisition of private land by competent Governments for roads and bridges. The Act is also applicable for land acquired for public private partnership projects, where the ownership of the land continues to vest with Government. When land is acquired through this Act by competent Government for private companies, the prior consent of at least 80% of those affected families and for PPP projects, prior consent of at least 75% of affected families shall be obtained along with the SIA study.

Chapter-II (Section-4 to 9) deal with determination of social impact and public purpose. Chapter-III (Section-10) deal with special provision to safeguard food security. Section 105 states that provisions of RFCT LARR Act will not be applicable to the land acquisition procedure specified in the list of enactments in Fourth Schedule, which mentions NH Act 1956. The Central Government brought an ordinance (No 9 of 2014 dated 31st Dec 2014) directing provisions relating to determination of compensation and provisions of resettlement and rehabilitations under RFCT LARR Act 2013 to be applicable to enactments in Fourth Schedule with effect from 1st Jan 2015. Provisions of Ordinance 9 of 2014 continued further vide Ordinance 4 of 2015 dated 3rd Apr 2015 and vide Second Ordinance (No 5 of 2015) dated 30th May 2015 which was valid upto 31st Aug 2015. Subsequently, DoLR issued The RFCT LARR (Removal of Difficulties) Order 2015 vide notification dated 28th Aug 2015 which came into force from the 1st Sep 2015.

RFCT LARR (Amendment Ordinance) 2014 exempted provisions of Chapter-II (Social Impact Assessment), Chapter-III (safeguarding food security) and prior consent processes for PPP/Private projects for 5 types of projects which included infrastructure and social infrastructure.

Application of Provisions of RFCT LARR Act 2013 for Land Acquisition of National Highways

Pursuant to the enactment of RFCT LARR Act of 2013, certain provisions of this Act became applicable with effect from 1st Jan 2015. Following provisions of the RFCT LARR Act 2013 is applicable for the land acquisition under NH Act 1956.

- Provisions relating the determination of compensation in accordance with the First Schedule of RFCT LARR Act 2013;
- Provisions of resettlement and rehabilitation in accordance with the second schedule and infrastructure amenities in accordance with the third schedule;
- All land acquisition where the Awards had not been announced under Section 3G of the NH Act till 31st Dec 2014, or where such awards had been announced but compensation had not been paid in respect of majority of the land holdings under acquisition as on 31st Dec 2014, the compensation would be payable in accordance with the first schedule of the RFCT LARR Act 2013;

- In cases, where the land acquisition process was initiated and the award of the compensation letter under Section 3G had also been announced before 1st Jan 2015 but the full amount of Award had not been deposited by the acquiring agency with the CALA, the compensation amount would be liable to be determined in accordance with the first schedule w.e.f 1st Jan 2015;
- In cases, where the process of acquisition of land stood completed (i.e. Award under Section 3G announced by CALA, amount deposited by the acquiring agency with the CALA, and compensation paid to the landowners in respect of majority of the land under acquisition as on or before 31st Dec 2014, the process would be deemed to have been completed and settled. Such cases would not be re-opened.
- An additional amount of 12% per annum (as prescribed in Section 30 (3) of the RFCT LARR Act 2013) would be payable on the market value of the land from the date of publication of 3A till the announcement of award under 3G or taking possession of land, whichever is earlier, is payable. It would be payable as a 'stand-alone component' and shall not count for the purpose of multiplication factor and the Solatium.

The Section-24 of the RFCT LARR Act 2013 considered the LA process to be deemed to have lapsed if award is not made or award has been made 5 years or more prior to the commencement of the RFCT LARR Act 2013 (1st Jan 2014) but the physical possession of the land has not been taken or the compensation has not been paid. The provisions of this section is restricted only to the LA process under LA Act 1894 and not applicable to the LA process under the NH Act, 1956.

The multiplication factor by which the market value is to be multiplied in case of urban areas shall be 1.0 (one) as specified in the first schedule. The urban area shall mean the area situated within and up to the boundary of the Urban Local Body as notified by the concerned State Government (i.e. a Municipal Corporation/ Council/ Committee, by whatever name it may be called).

The multiplication factor by which the market value is to be multiplied in case of rural areas (from the end-point of the urban limit) shall be the one as notified by the concerned State Government, being the appropriate Government for each State. It may be noted that the multiplication factor notified by the State shall remain the same for the State Government and the Central Government projects including National Highways as clarified by the Department of Land Resources, Ministry of Rural Development vide its OM dated 8th May 2017.

As regards the multiplication factor in the case of rural areas in the Union Territories (other than Puducherry), the multiplication factor shall be 2 (two) in terms of the DoLR Notification No. s.O.425 € dated 9th Feb 2016 till the same is reviewed by the DoLR. The multiplication factor by which the market value is to be multiplied in case of rural areas situated in the Union Territory of Puducherry shall be the same as notified by the Government of Union Territory of Puducherry.

The nature/classification of land to be considered for determination of market value has to be taken as per the classification recorded in revenue records on the day of publication of 3A notification. If some land owner/interested person has raised a factory building or a commercial building upon the land under acquisition without obtaining the "Change in Land Use" from the competent authority prescribed by State Government, he/she can not take the benefit of the treatment of such land as "Industrial" or "Commercial".

Where the landowners/interested persons have undertaken certain improvements over the land notified under Section 3A after the publication of notification in order to enhance the quantum of compensation, the CALA is duty bound to ignore any improvement done over the notified land after the date of notification while determining the compensation amount and announcing the Award under Section 3G of the NH Act 1956.

It has been observed that the process of disbursement of compensation amount to the landowners or the persons interested therein goes on for a long period for a variety of reasons, which leads to delays in taking possession of the land acquired and required for construction of the highway. It is therefore, important that the CALAs adopt following procedure in order to ensure that the possession of the acquired land is not delayed for any reason.

- Apart from issue of notice to the landowner/person interested therein in terms of Section 3E(1), a public notice may also be published in the same set of two newspapers in which the notification of 3A (3) was published, calling upon them to collect the compensation amount from the office of the CALA within a period of 60 days.
- As soon as the period of 60 days is over, another public notice may be caused to be published in the same set of newspaper, calling upon such landowners to surrender or deliver possession thereof to the competent authority forthwith, failing which the possession shall be taken with assistance of the local police in accordance with the sub-section (2) of the Section 3E of the NH Act 1956.

Section 3G(5) of the NH Act 1956 makes provision of appointing Arbitrator by the Central Government if the amount determined by CALA under 3G(2) is not acceptable to either of the parties on an application of either of the parties. Further, under section 3H(4) of the NH Act 1956, any dispute as to the apportionment of the amount or any part thereof or to any person to whom the same or any part thereof is payable, CALA shall refer the dispute to the decision of the principal civil court of original jurisdiction within the limits of whose jurisdiction the land is situated. Thus, the jurisdiction of the 'Arbitrator' and 'Principal Civil Court or Original Jurisdiction' has been clearly demarcated. CALA while making a reference to the "Principal Civil Court of Original Jurisdiction" wherever required may also seek leave of such Court to deposit the undisbursed amount of the compensation in respect of such landowners/ interested persons with the Court so that the possession of such land is not held-up on this account, leading to delays in taking up the highway development works.

Acquisition of Left out Plots or Additional Land due to Change of Scope

MoRTH has issued detailed guidelines vide its letter dated 15th Mar 2016 for acquisition of land through consent of landowners, preferably limited to 10% of the total quantum of the land acquisition in a construction package in the cases of (i) missing plots which are inadvertently left out from the bulk acquisition, and/or (ii) additional land required due to alternation of alignment at implementation stage.

Various State Governments (Kerala, Chhatisgarh, West Bengal, Uttar Pradesh, Telengana, Punjab, Rajasthan, Goa, Odisha, Bihar, Maharashtra, Himachal Pradesh, Karnataka, and Madhya Pradesh) have come out with their respective guidelines/policies/rules/statutes from acquisition of land on consent basis after RFCT LARR Act 2013. As there is a specific central statute for acquisition of land for the NHs, the Central Government and its authorised project executing agencies are competent to acquire land for the construction/development of NHs under the NH Act 1956 and the States do not have a case to insist that the land for the NHs in their jurisdiction should be acquired under the statutes/policies framed by the State Governments/UT Administrations. However, considering the urgent need for minimizing litigation and ensuring early availability of land for completion of the NH projects, land for NH projects can be procured through direct purchase with the consent of the landowners in accordance with the existing Acts/Rules/Policies of the concerned State Governments subject to the condition that the total amount of the compensation so worked out will be no more than what is payable when the land is acquired under the NH Act 1956, which in any case is in conformity with the compensation payable in accordance with the provisions of RFCT LARR Act 2013. Further, MoRTH/NHAI/NHIDCL would also be agreeable to acquisition of land for the NH projects in accordance with such consent mechanism of the state subject to the condition that the concerned State Government/UT Administration agrees to bear the incremental cost, if any, from its own resources.

2.3 APPLICABLE PERFORMANCE STANDARDS AND WORLD BANK GROUP GUIDELINES

This section summarises applicable performance standards and World Bank Group (WBG) guidelines with respect to which this ESDD is undertaken. The reference framework of international standards includes the following:

- IFC Performance standards 2012 as interpreted and applied through screening criteria for road (see Section 1.3.1 above for details)
- World Bank Group/IFC EHS Guidelines, Specifically:
 - IFC EHS General Guidelines;
 - IFC EHS Guideline for Toll Roads;
- AIIB's requirements under its Environmental and Social Policy (ESP) and Environmental and Social Standards (ESSs)
 - ESS-1 (Environmental and Social Assessment and Management);
 - ESS-2 (Involuntary Resettlement);
 - ESS-3 (Indigenous Peoples);

2.3.1 IFC Performance Standards

IFC Performance Standards (2012) from PS-1 to PS-8 were screened and except PS-8, rest of the PS were found to be applicable to the project. Table 2.4 below provides brief justification on their applicability.

Table 2.4 Applicability of IFC Performance Standards, PS 1 to PS 8

SN.	IFC Performance Standards	Applicability to the Project
1.	PS 1: Assessment and Management of Environmental and Social Risks and Impacts	Applicable The existing social and environmental management systems of OPIPL is reviewed to identify the gaps with respect to the provisions for a defined EHS Policy, organization structure with defined roles and responsibilities, risk identification and management procedures as well as processes like stakeholder engagement and grievance management.
2.	PS 2: Labour and Working Conditions	Applicable This PS is on labour and workers' rights. Following aspects covered under PS-2 were reviewed for OPIL as well as it sub-contractors (first layer): human resource policy and its implementation, workers' organization, non-discrimination and equal opportunity, retrenchment, protecting the workforce and occupational health and safety.
3.	PS 3: Resource Efficiency and Pollution Prevention	Applicable Key themes covered under PS-3 are: pollution prevention, resource conservation and energy efficiency, wastes, hazardous materials, emergency preparedness and response, greenhouse emissions, pesticide use and management. How OPIPL addresses pollution related impacts, and what measures it has adopted to conserve and use natural resources more efficiently in operation of the Toll Road was reviewed.
4.	PS 4: Community Health, Safety and Security	Applicable Key areas of compliance by OPIL under PS-4 examined included hazardous material safety, exposure to disease, emergency preparedness and response, and potential violation of human rights due to deployment of security personnel. The safety of the road users was also looked into.
5.	IFC PS 5: Land Acquisition and Involuntary Resettlement	Applicable The development of Indore Khalghat Toll Road involved acquisition of 469.578 ha acres of private land. The responsibility of the land acquisition was with NHAI. Hence, OPIPL's responsibility in the context of government led land acquisition process was reviewed. The specific scope of the screening of the land acquisition process followed during the construction stage is described in Section 1.3.1 above.

SN.	IFC Performance Standards	Applicability to the Project
6.	IFC PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	<p>Applicable</p> <p>The key themes covered under PS-6 are: natural habitat, critical habitat, legally protected areas, international introduction of alien species, and living natural resources (natural and plantation forest, aquatic resources etc.) are sustainably managed. The project road is not crossing any national park, wild life sanctuary, tiger reserve, biosphere reserves, lakes and wet lands. Hence, triggers for impacts on Critical Habitat was not assessed.</p> <p>However, construction of the road involved diversion of 54.3 ha of forestland. Forest clearance for diversion of forestland has been obtained. As reported, road construction involved felling of 4500 trees and to compensate 13500 trees were planted. The maintenance of the avenue and median plantation was examined as part of the sustainable management of natural resources.</p>
7.	PS 7: Indigenous Peoples	<p>Applicable</p> <p>Indore-Khalghat toll road passes through three districts, i.e. Indore, Dhar and Khargone, out of which Dhar and Khargone fall in Schedule V area (areas with significant scheduled tribe population protected under the Constitution of India. The project also entailed physical and economic displacement of approx.150 ST households. Hence, provisions of this PS are applicable to the project. Key themes examined under PS-7 were consultation and informed participation, impacts on traditional or customary lands under use, relocation of IPs from traditional or customary lands, and cultural resources.</p>
8.	PS 8: Cultural Heritage	<p>Not Applicable</p> <p>For the purposes of PS-8, cultural heritage refers to (i) tangible forms of cultural heritage; (ii) unique natural features or tangible objects that embody cultural values; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes. The requirements of PS-8 apply to cultural heritage regardless of whether or not it has been legally protected or previously disturbed.</p> <p>Details on number of cultural sites impacted project were not available. However, no major cultural heritage sites or sites of archaeological importance have been impacted by the project</p>

Source: IFC Website and ERM site assessment

2.3.2 WB/IFC EHS Guidelines

The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in IFC's Performance Standard 2: Labour & working Conditions (Occupational Health and Safety), Performance Standard 3: Resource Efficiency and Pollution Prevention. Following EHS Guidelines were referred for this ESDD:

- General EHS Guidelines, 2007; and
- EHS Guidelines for Toll Roads, 2007.

Key requirements in the EHS guidelines for Indore-Khalghat as an operational road are described in **Table 2.5** below:

Table 2.5 *Key Requirements as per EHS Guidelines of IFC for an Operational Road*

S. No	Relevant Guidelines as stated in the EHS Guidelines
1	Right of Way Maintenance
a	Regular maintenance of vegetation within road rights-of-way is necessary to avoid interference with vehicle travel and road maintenance. Unchecked growth of trees and plants can cover signals and signs, restrict motorist visibility and fall onto the road and overhead power lines.
b	Implementation of integrated vegetation management <ul style="list-style-type: none"> • From the edge of the road area to the boundary of the right-of-way, vegetation is structured with smaller plants near the road and larger trees further away to provide habitats for a wide variety of plants and animals • Planting of native species and removal of invasive plant species • Use of biological, mechanical, and thermal vegetation control measures where practical, and avoiding use of chemical herbicides
2	Storm water Management
a	Use of storm water management practices that slow peak runoff flow, reduce sediment load, and increase infiltration, including vegetated swales (planted with salt-resistant vegetation); filter strips; terracing; check dams; detention ponds or basins; infiltration trenches; infiltration basins; and constructed wetlands.
b	Where significant oil and grease is expected, using oil /water separators in the treatment activities.
c	Regular inspection and maintenance of permanent erosion and runoff control features.
3	Wastes
a	Solid waste generation during operation and maintenance activities may include road resurfacing waste (e.g. removal of the old road surface material) road litter, illegally dumped waste, or general solid waste from rest areas; animal carcasses; vegetation waste from right-of-way maintenance; and sediment and sludge from storm water drainage system maintenance (including sediment traps and oil /water separation systems). Paint waste may also be generated from road and bridge maintenance (e.g. due to removal of old paint from road stripping and bridges prior to re-painting).
b	Provision of bottle and can recycling and trash disposal receptacles at parking lots to avoid littering along the road
c	Manage herbicide and paint inventories to avoid having to dispose of large quantities of unused product
d	Collecting animal carcasses in a timely manner and disposing through prompt burial or other environmentally safe methods;
e	Composting of vegetation waste for reuse as a landscaping fertilizer
f	Managing sediment and sludge removed from storm drainage systems maintenance activities as a hazardous or non- hazardous waste based on an assessment of its characteristics.
g	Management of all removed paint materials suspected or confirmed of containing lead as a hazardous waste
h	Use of a system to collect paint waste when removing old paint containing lead. For a simple scraping operation, ground- covering tarps may be sufficient. For a blasting operation, an enclosure with a negative pressure ventilation system may be necessary
i	Grinding of removed, old road surface material and re-use in paving, or stockpiling the reclaim for road bed or other uses. Old, removed asphalt may contain tar and polycyclic aromatic hydrocarbons and may require management as a hazardous waste

S. No	Relevant Guidelines as stated in the EHS Guidelines
4	Noise
a	Traffic noise is generated by vehicle engines, emission of exhaust, aerodynamic sources, and tire / pavement interaction.
b	Traffic noise is generally not perceived as a nuisance for people who live more than 150 meters from heavily travelled highways or more than 30 to 60 meters from lightly travelled roads
c	Noise barriers along the border of the right-of way
d	Use of road surfaces that generate less pavement / tire noise such as stone-matrix asphalt
e	Control measures should include the use of personal hearing protection by exposed personnel and implementation of work rotation programs to reduce cumulative exposure
5	Air Emissions
a	Dust suppression techniques should be implemented, such as applying water or non-toxic chemicals to minimize dust from vehicle movements
b	Controlling vehicle traffic through the use of traffic routes, establishment of speed limits, and on-site trained flag people wearing high-visibility vests or outer clothing covering to direct traffic
6	Occupational Health and Safety
a	Road operating and maintenance personnel, as well as landscaping workers maintaining vegetation in the rights of-way, can be exposed to a variety of physical hazards, principally from operating machinery and moving vehicles but also working at elevation on bridges and overpasses
b	<ul style="list-style-type: none"> • Development of a transportation management plan for road repairs that includes measures to ensure work zone safety for construction workers and the traveling public; • Establishment of work zones to separate workers on foot from traffic and equipment by: <ul style="list-style-type: none"> • Routing of traffic to alternative roads when possible • Closure of lanes and diversion of traffic to the remaining lanes if the road is wide enough (e.g. rerouting of all traffic to one side of a multi-lane highway) • Where worker exposure to traffic cannot be completely eliminated, use of protective barriers to shield workers from traffic vehicles, or installation of channeling devices (e.g. traffic cones and barrels) to delineate the work zone • Regulation of traffic flow by warning lights, avoiding the use of flaggers if possible • Design of the work space to eliminate or decrease blind spots • Reduction of maximum vehicle speeds in work zones; • Training of workers in safety issues related to their activities, such as the hazards of working on foot around equipment and vehicles; and safe practices for work at night and in other low-visibility conditions, including use of high-visibility safety apparel and proper illumination for the work space (while controlling glare so as not to blind workers and passing motorists)
	<ul style="list-style-type: none"> • Implementation of a fall protection program that includes training in climbing techniques and use of fall protection • Installation of fixtures on bridge components to facilitate the use of fall protection systems; • Safety belts should be not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident; • When operating power tools at height, workers should use a second (backup) safety strap.
c	<ul style="list-style-type: none"> • Use of millers and pavers with exhaust ventilation systems and proper maintenance of such systems to maintain worker exposure to crystalline silica (millers and grinders) and asphalt fumes (pavers) below applicable occupational exposure levels;

S. No	Relevant Guidelines as stated in the EHS Guidelines
	<ul style="list-style-type: none"> • Use of the correct asphalt product for each specific application, and ensuring application at the correct temperature to reduce the fuming of bitumen during normal handling; • Maintenance of work vehicles and machinery to minimize air emissions; • Reduction of engine idling time in construction sites; • Use of extenders or other means to direct diesel exhaust away from the operator; • Ventilation of indoor areas where vehicles or engines are operated, or use of exhaust extractor hose attachments to divert exhaust outside; • Provision of adequate ventilation in tunnels or other areas with limited natural air circulation; • Installation of tollbooth ventilation and air filtration systems; • Use of protective clothing when working with cutbacks (a mixture of asphalt and solvents for the repair of pavement), diesel fuel, or other solvents; • Use of dustless sanding and blasting equipment and special containment measures for paint removal activities. Avoiding the use of lead-containing paint and using appropriate respiratory protection when removing paints (including those containing lead in older installations) or when cutting galvanized steel.
7	Community Health and Safety
a	<ul style="list-style-type: none"> • Installation and maintenance of all signs, signals, markings, and other devices used to regulate traffic, including posted speed limits, warnings of sharp turns, or other special road conditions; • Setting of speed limits appropriate to the road and traffic conditions; • Maintenance of the road to prevent mechanical failure of vehicles due to road conditions
b	An emergency preparedness and response plan in coordination with the local community and local emergency responders to provide timely first aid response in the event of accidents and hazardous materials response in the event of spills

2.3.3 Asian Infrastructure Investment Bank (AIIB)'s Environmental and Social Framework

Environmental and Social Framework (ESF) is a system that supports the Bank and its clients in achieving environmentally and socially sustainable development outcomes. *The Framework lays out a vision, a policy and three supporting standards that are broadly similar in nature to those of the World Bank (WB), Asian Development Bank (ADB) and other established multilateral development banks.* The ESF integrates good international practice on E&S planning and management of risks and impacts into decision-making on, and preparation and implementation of, Bank supported Projects (AIIB, 2017).

Requirement	Brief Summary	Remark
Environmental and Social Policy	The Environmental and Social Policy (the "Policy") sets forth mandatory environmental and social requirements for each project. The Policy sets out the general processes and requirements for project screening and categorization, environmental and social due diligence, environmental and social assessment, environmental and social management plan, environmental and social assessment tools and	

Requirement	Brief Summary	Remark
	management plan framework, information disclosure, consultation, monitoring and reporting, as well as grievance redress. It also defines the roles and responsibilities for implementation of environmental and social management system.	
Environmental and Social Standard (ESS) 1 - Environmental and Social Assessment and Management	This standard requires undertaking environmental and social assessment of the project in accordance with the Policy, using appropriate studies proportional to the significance of potential risks and impacts. It requires the assessment process is supported by effective information disclosure and consultation with a grievance mechanism in place and the coverage of the assessment should include pollution prevention, biodiversity impact, resource efficiency, climate change, sustainable use of natural resources, vulnerable groups, access to resources, impact of livelihood, resettlement, cultural resources, working conditions and community health and safety etc.	Applicable It cover all the elements of IFC PS 1, PS 2, PS 3, PS 4, PS 6 and PS 8.
Environmental and Social Standard (ESS) 2 - Involuntary Resettlement	This standard aims to avoid Involuntary Resettlement wherever possible; to minimize Involuntary Resettlement by exploring Project alternatives; where avoidance of Involuntary Resettlement is not feasible, to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-Project levels; to improve the overall socioeconomic status of the displaced poor and other vulnerable groups; and to conceive and implement resettlement activities as sustainable development programs, providing sufficient resources to enable the persons displaced by the Project to share in Project benefits.	Applicable It covers elements of IFC PS 5
Environmental and Social Standard (ESS) 3 - Indigenous Peoples	This standard aims to design and implement projects in a way that fosters full respect for Indigenous Peoples' identity, dignity, human rights, economies and cultures, as defined by the Indigenous Peoples ("IP") themselves, so that they: (a) receive culturally appropriate social and economic benefits; (b) do not suffer adverse impacts as a result of projects; and (c) can participate actively in projects that affect them. This standard would be applicable in case the project reaches areas where IP (scheduled tribes) might be present.	Applicable It covers elements of IFC PS 7

This section includes a brief description of the Project Road operated by the concessionaire i.e. OPIPL. The description of the project provides the context within which environmental and social impacts are screened for this ESDD.

3.1 INTRODUCTION TO THE ASSET DEVELOPER AND OPERATOR

Oriental Pathways (Indore) Private Limited (OPIPL), a Special Purpose Vehicle (SPV) promoted by Oriental Structural Engineers Pvt Ltd (OSE) was incorporated in September 2005. The SPV was created for **operation and maintenance including strengthening and widening of the existing two-lane road to four-lane dual carriageway** from km 12.600 – km 84.700 of NH-3 (Indore - Khalghat section) in the state of Madhya Pradesh on a Build, Operate and Transfer (BOT) basis. Concession Agreement for the project was signed between National Highway Authority of India (NHAI) and OPIPL on 10th March 2006. Concession period for the project is 20 years (3 years for construction and 17 years for O&M). Date of commercial operation (COD) of the project was achieved on 21st August 2009.

3.1.1 Organisational structure and EHS Capability

The OPIL is led by a Project Director, who is responsible for all operations, administration, maintenance and construction of the road. The site office is located at toll plazas. The project has a dedicated O&M team, which is responsible for the management of toll plaza, toll collection, traffic management, emergency response and minor maintenance.

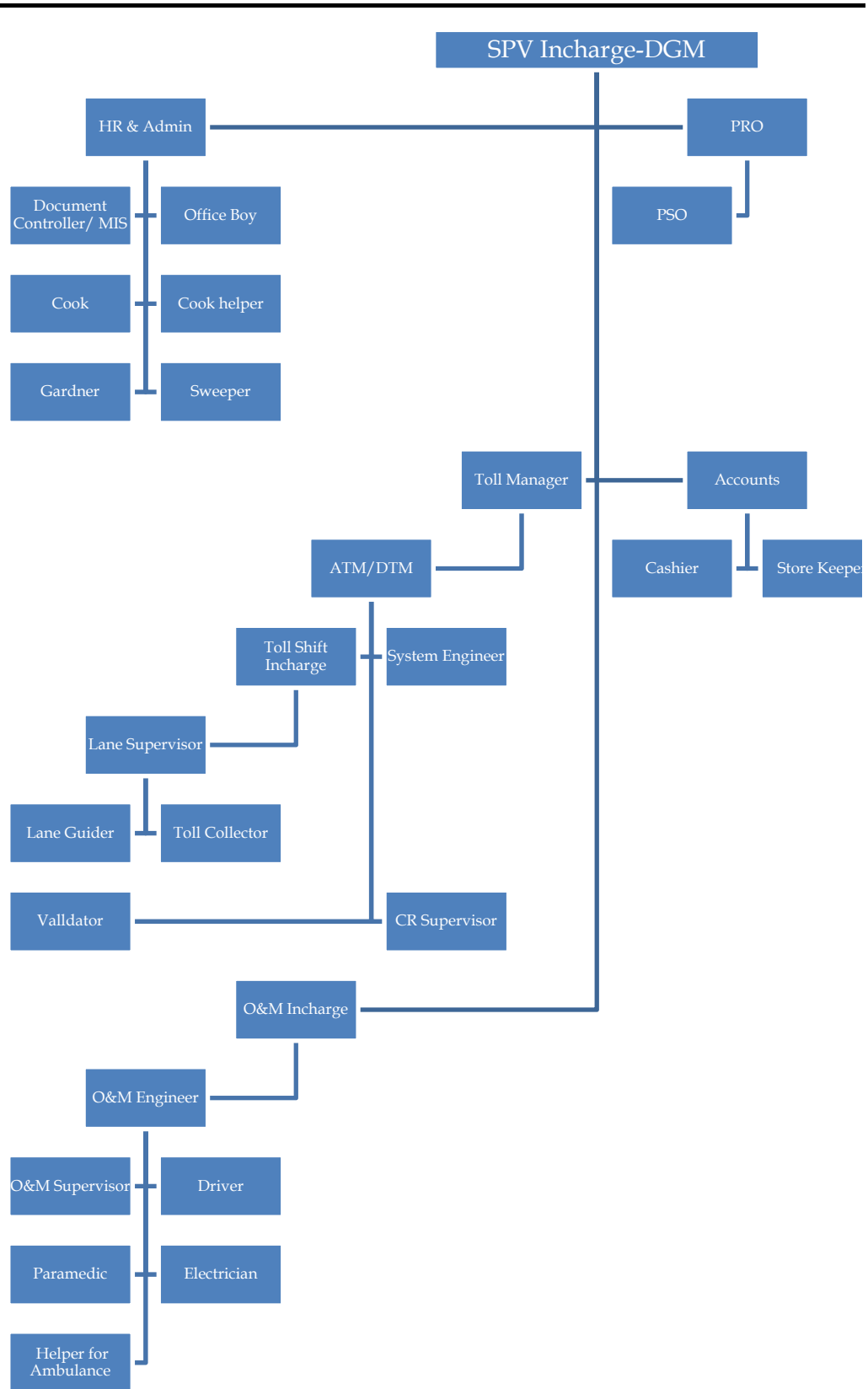
OPIPL has a dedicated human resources officer (HR). The HR officer oversees employee administration and welfare and reports to the project director. The project does not have a dedicated EHS personnel or division. The HR/Admin Officer and Road Safety Engineer handle most of these activities. It was reported that the project undertakes Corporate Social Responsibility (CSR) activities in limited manner. Organisation Chart for Toll Plaza is as presented in *Figure 3.1* below.

OPIPL has 216 direct employees (124 at Khalghat Toll Plaza and 92 at Sonway Toll Plaza). Each toll plaza has a similar staff profile, which includes: Toll Plaza Manager, Assistant Manager, Admin & HR, Assistant Manager, IT Systems, Assistant Manager, Finance & Account, toll collectors etc.

Apart from this, there are 45 security staff contracted through two security agencies. Falcon Guards Pvt Ltd for Khalghat plaza has 28 security guards and Locators Safety and Security Protections Ltd for Sonway Toll Plaza (17 security guards).

The Project road is divided into three 26km stretches for the purpose of median and RoW maintenance work. Each stretch engages approximately 10-15 labourers for the tasks associated with median and plantation maintenance.

Figure 3.1 Organisation Chart - OPIPL



Source: OPIPL

3.1.2 *Environment and Social Management Systems*

OSE has an overarching Environmental, Health and Safety (EHS) Policy signed by Director, which is also applicable to OPIL. Objectives outlined under the policy include obligation of the company with respect to the following:

- Comply with all applicable environmental laws, regulations and permit.
- Investigate environmental incidents, identify root causes and implement corrective actions.
- Undertake regular reviews of the environmental aspects and impact registers.
- Ensure safe working conditions and health environment for employees.

OSE has also developed a Standard Operating Procedures (SOP), which covers all its human resource policy including health & safety at work. OSE maintains records pertaining to accidents and incidents related to road safety through call logs, and records of responses by its team. OSE has an Environmental Management Manual which is applicable to all SPV subsidiaries and covers following topics:

- Environment, Health & Safety Policy
- Roles and Responsibility for implementation of Environmental Policy
- Environmental Management System
- Planning
- Environmental Aspects
- Legal and Other Requirements
- Implementation and Operation
- Competence, Training and Awareness
- Documentation
- Emergency Response Plan (ERP)
- Public Communication, Complaints & Grievance Handling Procedure
- Land Acquisition, Resettlement of People, Natural Habitats, Cultural Heritages Policy
- Waste Management Policy
- Public Grievance Handling Policy

On review of the Environment Management Manual, it was found to be very generic and include procedures largely for the construction phase.

Schedule L of CA outlines preparation of O&M manual to be finalised in consultation with the Independent Consultant. The manual includes but not limited to following aspects:

- Organization structure with responsibilities of key personnel;
- Traffic Management Plan including the Corridor Control Plan;
- Safety Management Programme including the Emergency Response Protocol;
- Inspection Procedures;
- Maintenance of Intervention Levels;
- Asset Management Project Deliverables and Tolerance Criteria;
- Environment Management Plan;
- Maintenance Programme; and

- Management information system.

As part of the assessment, observations with respect to EHS management system, Project Level Procedures, and gaps evaluated during site visit is presented in Annexure B. Based on our assessment OSE is recommended to update the existing O&M Manual with adequate details through a competent Third Party. OPIPL is recommended to prepare specific plans on the following:

- Carriageway waste management plan;
- Oil/ chemical spill contingency plan for the road stretch;
- Storm water management Plan;
- Avenue and Median Plantation and Management plan.

OPIPL at the corporate level is required to establish monitoring and review procedures for effective supervision of EHS implementation by OSE staff and its subcontractors. These shall be the responsibilities of EHS Manager and the EHS Supervisor. The procedure shall include the minimum following requirements:

- Establishing parameters for supervision on all aspects outlined in the SOPs or Environment Management Manual;
- Establish an audit schedule for bi-annual internal audits to be conducted at each of its SPVs including OSE;
- Establish reporting formats for providing corrective actions for gaps identified during the audit;
- Procedures for review of closure for implementation of corrective actions.

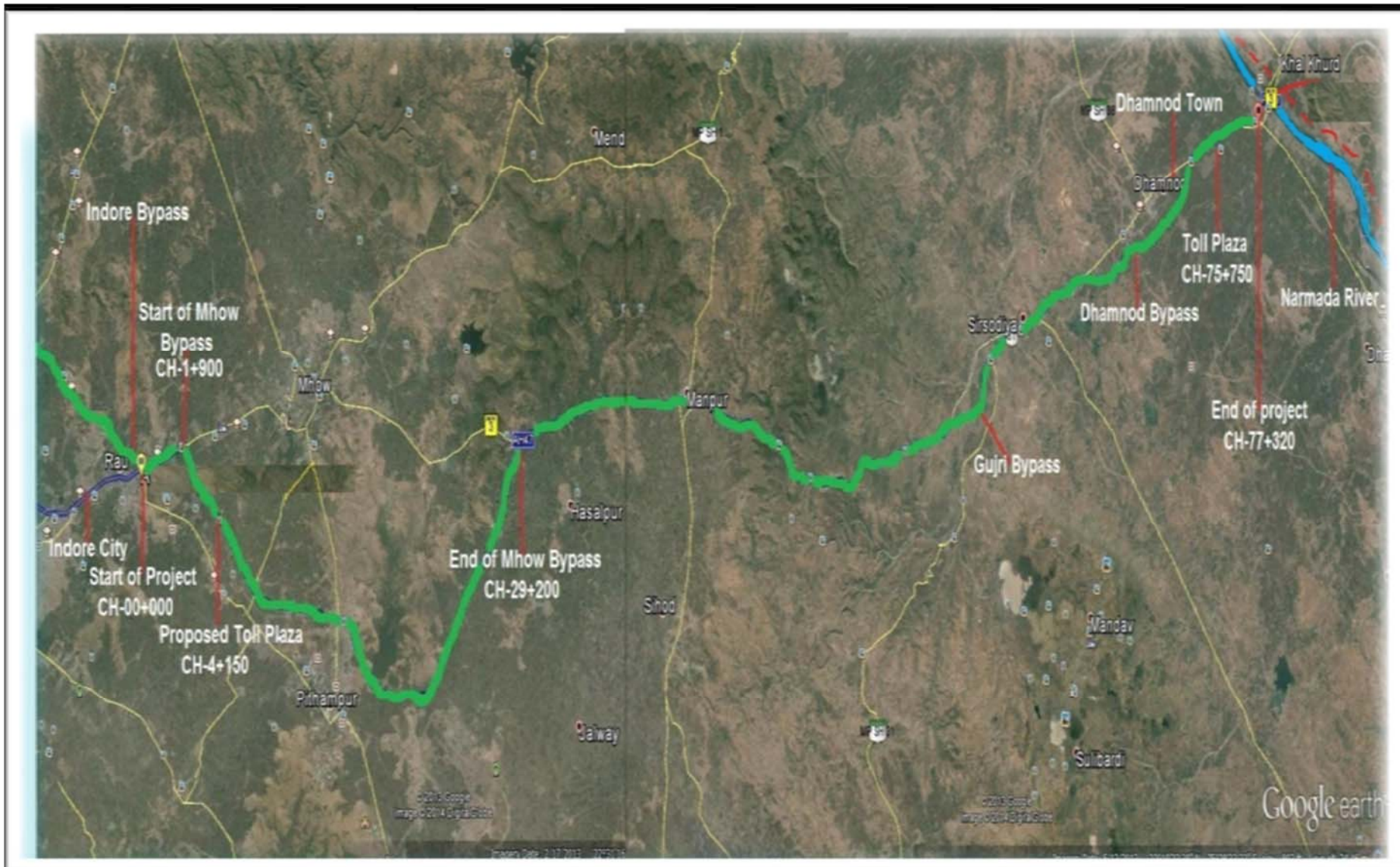
3.2 ASSET DESCRIPTION

The project road is a part of the Mumbai-Agra Road, one of the arterial routes connecting north India to Mumbai. The Project road starts from km. 12.600 near Rau, Indore and ends at km 84.700 on north side of the Narmada Bridge covering a total length of 77.320 km. The road passes through 53 villages out of which 28 villages are in Indore District, 22 in Dhar District and 3 villages are in Khargone District of the State of Madhya Pradesh. Location of the project road in map is provided in *Figure 3.2*.

The road passes through plain terrain except at two stretches where the road has steep gradient and sharp curves, these are Bheru Ghat (km 47+90 to km 51+50 on NH-3) and Bakaner Ghat (km 55+00 to km 58+50 on NH-3). Important towns along the road are Mhow, Manpur, Gujri, Dhamond and Khalghat.

There are two toll plazas on the project road at km 4.100 (Sonway Toll Plaza) and at Km 75.300 (Khalghat Toll Plaza).

Figure 3.2 Location of Indore Khalgat Road (NH-3)



Source: Google Earth

3.2.1 Project Salient Features

The salient features of the project are mentioned in *Table* below.

Table 3.1 Project snapshot

S. No	Project Feature	Details
1	Name of the Project	Improvement, Operation and maintenance including strengthening & widening of existing 2 lane road to 4 lane dual carriageway from Km 12.600 to 84.700 section of NH-3 (Indore Khalghat) in the State of Madhya Pradesh, India on Build, Operate & Transfer (BOT) basis.
2	Concessioneing Authority	National Highway Authority of India (PIU Indore)
3	Concessionaire	M/s Oriental Pathways (Indore) Pvt. Ltd.
4	EPC	OSE - Leighton (JV)
5	Project Kilometer	Km 12.600 to 84.700 section of NH-3 (Indore Khalghat)
6	Total length of the road	77.320 km
7	Project Cost	540 Crores
8	Location of Toll Plaza	Km. 4+000 km Km. 75+700 km.
9	Length of Toll Plaza	0.500 km
10	Length of service roads	12.033
11	Total land acquired for the project	469.578 hectares of private land 54.1 hectares of forest land diverted for the project Total land- 523.678 hectares
12	Details of Structure	
a	Bridges	
(i)	No of Rail Over Bridges	1
(ii)	No. of Overpasses	2
(iii)	No. of Grade Separators	1
(iv)	No. of Vehicular underpasses	13
(v)	No. of Major Bridges	4
(vi)	No. of Minor bridges	23
b	Culverts	
(i)	No. of Pipe Culverts	72
(ii)	No. of Box Culverts	83
c	Other Details	
(i)	3 Armed Junction	4
(ii)	Round About	1
(iii)	By Pass	3 (Mhow, Gujri and Dhamond)
(iv)	Bus Lay Bay	20
(v)	Truck Lay Bay	2
(vi)	Rest Area	2
(vii)	Toilet Blocks	2
(viii)	Highway Lighting (high mast)	19
(ix)	Ghat Area	2

Source: OPIPL

3.2.2 Project Milestones/ Commercial Operation Date

Important dates of the project are presented in Table 3.2 below.

Table 3.2 Important Dates for the Project

1	Date of Concession Agreement	10 th March 2006
2	Date of Commencement	6 th September 2006
3	Project Completion Date	5 th September 2009
4	Concession Period	20 years (3 years for construction and 17 years for O&M)
5	Date of Commercial Operations	21 st August 2009
6	Toll started date	21 st August 2009 - Khalghat 6 th October 2016 - Sonway
7	End Date of Concession	5 th September 2026

Source: OPIPL

3.2.3 Operation & Maintenance (O&M) Activity

The project is currently under Operation and Maintenance (O&M) stage. Schedule L of the CA deals with the O&M activities to be undertaken by the concessionaire which includes the following:

Operations:

- Toll collection operations;
- Permitting smooth and uninterrupted flow of traffic;
- Functioning of patrolling system, functioning of rescue and medical and aid services, etc.;
- Incident management System - road patrols and surveillance, first aid, basic ambulance assistance, tow away cranes, wireless/mobile facility and road safety works;
- Adhering to the safety standards.

Maintenance

- Undertaking routine maintenance work including prompt repairs of potholes, cracks, concrete joints, drains, line marking, lighting and signages;
- Undertaking major maintenance such as resurfacing of pavement, repair to structures, repair and refurbishment of tolling system and hardware and other equipment;
- Undertaking periodic preventive maintenance of project highway including tolling system.

Some of the routine O&M activities undertaken by OPIPL include:

- Hoeing, weeding and basin making of median / avenue plantation;
- Trimming and pruning (median shrubs);
- Manuring of median/ avenue plantation;
- Watering of median/ avenue plantation
- Cleaning of grass/ unwanted vegetation from median;
- Replacement of damaged plants (avenue/median);
- Carriageway sweeping;
- Cleaning of road side line/ unlined drains;
- Removal of dead animals;
- Washing of delineators & sign boards;
- Housekeeping including cleaning and washing of toll plaza;

- Cleaning of block culverts;
- Chainage marking;
- Milestone writing;
- Filling of potholes;
- Construction of rumble strips;
- Laying of Bituminous Concrete;
- Fixing of cautionary flexes;
- Cleaning of Bus Lay Bye/Truck Lay Bye;
- Accident reporting and analysis;
- Providing cautionary sign boards at Black-spot Locations;
- Removal of encroachments; etc.

3.3 *ENVIRONMENTAL AND SOCIAL CONTEXT OF THE ROAD*

3.3.1 *Environmental Context*

The road passes through mostly agricultural land and residential area, though a small length of the road pass through forest area. The project involved diversion of 54.3 ha of forestland for 4-laning. Forest clearance for diversion of forestland was obtained in 3rd September 2008.

There are no ecologically sensitive areas including national parks, wildlife sanctuaries, biosphere reserves, and conservation reserves, wetlands of conservation importance or key biodiversity areas in a 5 km corridor of the road project. The stretch is not on migratory route of animals. Nearest wildlife sanctuary is Ralamandal present at a distance of ~ 11 km from the starting point.

Project road crosses two major rivers, namely River Ajnar and River Karam, both are non-perennial, have no flow for most part of the year. The project ends just short of crossing of River Narmada.

Before construction of the project ~ 4500 revenue trees were felled from the existing ROW. As compensatory afforestation, at least three times i.e. 13500 trees were to be planted. Total numbers of avenue plantation for the project as on the date of site visit is 25,261.

3.3.2 *Pollution Prevention*

Air Emissions

The project is in operational phase and has installed D.G. sets at both the toll plazas. Consent to Establish and Consent to Operate from MPPCB is obtained. D.G sets are present in acoustic enclosure, with stack height of more than 2m.

Wastewater Management

Both the Toll Plazas have septic tank for treatment of sewage generation.

Waste Management

Waste generated in O&M stage include road litter, illegal dumped waste, municipal solid waste from the Toll Plazas, animal carcasses, vegetation waste from ROW maintenance, and sediment and sludge from storm water drainage system maintenance.

As a part of waste management, four different coloured drums (Blue, Yellow, Red and Black) were seen placed at both the plazas for collection of segregated waste. However, its implementation required improvement.

Burning of dry waste is carried out at site. Solid waste and litter was observed to be scattered on the ROW edge as well as the median in some chainages.

Hazardous waste during operation phase includes generation of waste/ used oil from D.G sets installed at Toll Plazas. Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained from MPPCB. OPIPL has done Annual Maintenance Contract (AMC) for D.G. maintenance and waste/ used oil generated is disposed of through authorized vendor. Used/waste oil was seen at toll plaza without any secondary containment, also oil spill was observed at site.

Annual environment monitoring is carried out at site which includes monitoring of ambient air quality, wastewater quality and noise quality.

3.3.3

Social Context

Working Conditions and Occupational Health and Safety

The terms and conditions of employment and various benefits /allowances are governed by the HR policy in place and the statutory requirements. The awareness pertaining to some of these policies/rules was varying across various staff members. All of these aspects are covered as part of the in-house induction and training sessions.

The wages for daily wage workers were observed to as per the Minimum Wage requirements as laid down by Madhya Pradesh government for the year 2017-18 and Chief Labour Commissioner in for Road/highway sector significantly w.e.f. April 2017. The notice boards across all the facilities highlight key rules, rights of workers; labour licenses and registration, abstract of Minimum Wages, 1948 and Contract Labour Act 1971. Applicability of ESIC is as per Indian regulations (for any employee earning a monthly salary less than INR 18,000). This is applicable for all including contract workers.

An attendance register for employees and muster roll for contract workers is maintained at toll plaza offices for tracking attendance and in-time and out-time of employees. The general working shift is from 08:30 hrs to 18:00 hrs. The toll plaza operations run in three shifts:

- Shift A- 00:00 hrs to 08:00 hrs
- Shift B- 08:00 hrs to 16:00 hrs
- Shift C- 16:00 hrs to 00:00 hrs

The security workers have two shifts of 12 hours each. OPIPL has a system of relievers and hence, instances of overtime payments do not occur regularly. However, if any worker working overtime (more than 9 hours a day) is paid the due overtime payment of double of the hourly rate calculated at gross levels.

Drinking Water is provided through local mineral water vendors at both Toll Plaza. There are adequate toilet facilities at each toll booth location. Additional toilets and washrooms were added in month of January 2018.

Dedicated safety officer is not deployed for the project. First aid and firefighting arrangement is available at both the Toll Plazas. It was observed that training on EHS aspects, safety sign awareness and road safety, personal protective equipment were conducted on site. It was noted that Safety Jackets, Helmets and Gloves are issued to the labour engaged for O&M activities and records are maintained on site.

It was noted that incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work. Flow chart depicting emergency response plan for booth/ tunnel was displayed at Control Room, however staff was not aware of the presence of any kind of emergency response plan. The copy of the plan was not made available for review.

Land Requirement and Land Acquisition Process

A total of 520.032 ha land was acquired for the project which includes 54.3 ha of forest land. The remaining land of 469.578 was acquired under land acquisition provisions under NH Act 1956 between 2006 and 2009 from three districts of Madhya Pradesh namely, Indore, Dhar and Khargone. The chainage details of the administrative boundaries are provided below:

Table 3.3 *District, village and chainage details*

Chainage	District	Taluk
0.000 km to 14.132 km; 20.032 km to 46.479 km	Indore	Indore Mhow
14.132 km to 20.032 km; 46.479 km to 51.060 km; 55.758 km to 56.966 km; 58.392 km to 77.610 km.	Dhar	Dhar Dharamपुरi
51.060 km to 55.758 km; 56.966 km to 58.392 km	Khargone	Maheshwar

Source: 3D Notification details provided by OPIPL

The 3D Notification details of 465.325 ha were available for review. However, (3H details for the toll road were made available for 469.578 ha of land. The available information is summarized below:

Table 3.4 3D Notification Details

S. No	Chainage	3D Notification No.	3D Notification Date	District	Tehsil	Village	Area (in ha)
1.	14.132 to 20.032 and 46.479 to 51.060	1353	13-11-2006	Dhar	Dhar	Bodiya	38.395
2.						Khandwa	14.633
3.						Kaliyankhedi	7.099
4.						Pitampur	12.178
5.						Dhal	3.765
6.						Palasmal	0.952
Total							77.022
7.	51.080 to 55.758 and 56.966 to 58.392	1355	13-11-2006	Khargone	Maheshwar	Bakaner	12.059
8.						Kushumbiya	0.607
9.						Kakada	6.544
Total							19.21
10.	55.758 to 56.966 and 58.392 to 77.610	151	13-02-2007	Dhar	Dharampuri	Chiktiyawad	8.466
11.						Dhariya	3
12.						Dhudhi	12.821
13.						Dogani	5.942
14.						Eklerakhurd	7.08
15.						Gujari	10.234
16.						Khalbujurag	7.439
17.						Khalkhurd	0.43
18.						Morgadi	0.02
19.						Sirsodiya	9.935
20.						Dhamnood	4.56
21.						Lodhipura	4.085
22.						Bundiyaal	4.02
23.	Bikron	15.934					
Total							110.207
24.	0.000 to 14.132 and 20.032 to 46.479	157	13-02-2007	Indore	Indore	Rau	0.427
25.						Mhow	9.423
26.					Umariya	1.431	
27.					Bhaislay	8.432	
28.					Sonway	22.232	
29.					Tihi	21.227	
30.					Bhatkhedi	17.664	
31.					Banjari	6.895	
32.					Panjariya	6.895	
33.					Jamniya	3.796	

S. No	Chainage	3D Notification No.	3D Notification Date	District	Tehsil	Village	Area (in ha)
34.						Aawlay	13.652
35.						Thawliya	15.582
36.						Naded	10.425
37.						Ahilyapur	10.476
38.						Bicholi	16.139
39.						Kuwali	4.842
40.						Rajpura	4
41.						Badkuwa	1.502
42.						Yashwant Nagar	6.197
43.						Kakriya	5.76
44.						Udwa	0.796
45.						Manpur	4.308
46.						Rampuriya Khurd	2.09
47.						Awalipura	1.496
48.						Pottalaw	5.767
49.						Awaliya	2.571
50.						Gadaghat	0.932
51.						Kalikiray	4.27
Total							207.29
52.	14.132 to 20.032 and 46.479 to 51.060	1506	05-12-2007	Dhar	Dhar	Bodiya	0.827
53.						Khandwa	0.78
54.						Kaliyankhedi	0.719
55.						Pitampur	0.052
56.						Dhal	0.133
57.						Palasmal	0.099
Total							2.61
58.	0.000 to 14.132 and 20.032 to 46.479	1398	03-10-2008	Indore	Mhow	Pigdamber	1.486
59.						Bhaislay	1.658
60.						Sonway	1.987
61.						Tihi	5.79
62.						Bhatkhedi	3.161
63.						Banjari	3.629
64.						Panjariya	1.853
65.						Aawlay	0.338
66.						Thawliya	2.315
67.						Naded	2.128
68.						Ahilyapur	0.048
69.						Bicholi	0.357
70.						Kuwali	0.04
71.						Awaliya	0.771

S. No	Chainage	3D Notification No.	3D Notification Date	District	Tehsil	Village	Area (in ha)
72.						Rajpura	0.614
73.						Backkuwa	0.986
74.						Yashwant Nagar	0.352
75.						Rampuriya Khurd	0.242
76.						Pottalaw	1.342
77.						Kalikiray	0.48
Total							29.577
78.	55.758 to 56.966 and 58.392 to 77.610	1983	30-11-2009	Dhar	Dharampuri	Dogani	0.429
79.						Gujari	0.08
80.						Sirsodiya	1.292
81.						Chiktiyawad	0.14
82.						Lodhipura	2.284
83.						Bundiya	2.085
84.						Dhudhi	2.511
85.						Eklerakhurd	0.804
86.						Guljhari	1.902
87.						Bikron	3.816
88.						Dhamnood	1.12
89.						Khal Bujurg	1.746
90.						Morgadi	0.03
Total							18.239
91.	55.758 to 56.966 and 58.392 to 77.610	1798	21-09-2011	Dhar	Dharampuri	Khal Bujurg	1.17
Grand Total							465.325

Source: 3D Notification Details provided by OSE

Note: 1.17 ha of land was additionally acquired in the year 2011 (please see row 91 of the table above). This land reportedly was acquired for the access road to Narmada Bridge located at Khalghat.

Table 3.5 *Summary of Land Compensation Disbursement Details*

Year	Land Acquired (Ha)	Compensation Disbursement in the Year (in INR)	No. of Title Holders
2006	96.232		271
2007	324.36		1485
2008	29.577	61,24,95,997	203
2009	18.239		206
2010			
2011	1.17		6
Total	469.578		2171

Source: OPIPL

Thus, the distribution of the land compensation was completed by 2009 for the original land area acquired. The compensation disbursement for the additional land acquired was completed in 2011.

Resettlement and Rehabilitation

While the records for total number of physically and economically displaced households was not available with the concessionaire or with NHAI, it was confirmed during the discussions with NHAI that approx. 639 households were physically displaced for the project. A due diligence report on Environment Issues and Safeguards on project funded by IIFCL dated 01-12-2007 also concurs on this. As per the IIFCL report, the total numbers of displaced households were:

Table 3.6 *Displaced Households as per IIFCL Report, 2007*

District	Taluka	Number of Displaced Households
Indore	Mhow	355
Dhar	Dhar	60
Dhar	Dharpuri	164
Khargone	Maheshwar	60
Total		639

Source: Environment Issues and Safeguards Due Diligence Report IIFCL dated 01-12-2007

Data on village wise break up of physically displaced households or that of STs is not available in this report or with NHAI. No Resettlement Action Plan or Indigenous Peoples Development Plan was prepared for the project. However, as per regulatory requirements this is not required. Therefore, only compensation for land parcels and structures impacted by the project was provided by NHAI.

Out of the three districts through which the Project road passes, two (Dhar and Khargone) are Schedule V areas ⁽¹⁾. Based on review of the land acquisition records, the two main tribal communities in the area are Bhils and Bhilalas. Both communities are categorised as Scheduled Tribes. The villages of Dhal, Palasmal, Bakaner, Janavav Kutti, Jhamanjhiri, Dugani were found to

(1) The Fifth Schedule of the Constitution of India deals with administration and control of scheduled areas and scheduled tribes in these areas. The Fifth Schedule covers Tribal areas in 9 states of India namely Andhra Pradesh, Jharkhand, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Chhattisgarh, Orissa and Rajasthan.

be completely ST villages with more than 90% tribal population. Apart from these villages in Dhar and Khargone (Please see Table 4.2) some of the villages in Indore District were also found to have significant ST population. Further details on the presence of ST population and impacts on the collectively owned or government land on which local ST community has a recognized usufruct right is discussed in Section 4.2 of this report which examines the triggers for Free Prior Informed Consent for the Project road.

Status of Litigations on Land Acquisition

Review of available information indicated that there are currently 15 cases/ litigations pending out of which nine (9) are related to land acquisition or compensation. Discussions with NHAI Project Director, Indore PIU indicated that these litigations are between NHAI and the appellant and these cases are related to reassessment of compensation. OPIPL is not involved/ party to any litigation. Details of these pending cases are provided below:

Table 3.7 Pending Court Cases

S. No	W.P./O.P./Case no.	Date of Filing	Name of the Court	Name of the Petitioner	Name of Respondents	Place where cause of action has arisen	State, if interim stay order granted by the Court, if so furnish details	Description Nature of Case in Brief	First date/last date/next date of hearing be indicated	State if counter reply has been filed by NHAI	Whether the case is pending or/decided in favour of NHAI or against NHAI
1	W.P. 2198/2000	This W.P. transferred from MP PWD to NHAI	High Court of MP, Indore Bench	Mr. Bhattulal Jain, Sendhwa	Chief Secretary, MP, Secretary, Govt of India MoRTH & Others	Indore-MP/Mah. Border (NH-3)	No	Regarding Condition of existing NH-3 from Indore to MP/Mh. Border	Last date of hearing 16.12.2011 Next date of hearing not fixed	Affidavit is being filed regularly	Pending
2	WP No. 5226	August, 2009	High Court of MP, Indore Bench	Sh. Denesh Chandra Pal	Union of India and NHAI	Undwa village	-	Regarding Land Acquisition	Last date of hearing dated 02.09.09/ Next date not fixed.	Reply filed	Pending
3	W.P. No. 9320/2009(S)	14.12.09	High Court of MP, Indore Bench	M/s Oriental Pathways (I) Pvt. Ltd. & Others	Assessment Officer (Labour Commissioner) & NHAI	Indore	-	Reg. Quashing the order of the Cess Assessment Officer about payment of 1% Cess by the Petitioner.	Not yet listed for final hearing	Pending	Pending
4	W.P. No. 7185/10	22.06.10	High Court of MP, Indore Bench	Mr. Prahlad Singh S/o Bag Singh	Union of India & others	Toll plaza of Indore-Khalghat Section of NH-3	No	Regarding Toll Rates	Not yet listed for final hearing	Pending	Pending

S. No	W.P./O.P./Case no.	Date of Filing	Name of the Court	Name of the Petitioner	Name of Respondents	Place where cause of action has arisen	State, if interim stay order granted by the Court, if so furnish details	Description Nature of Case in Brief	First date/last date/next date of hearing be indicated	State if counter reply has been filed by NHAI	Whether the case is pending or/decided in favour of NHAI or against NHAI
5	W.P. No. 3636/11	21.04.11	High Court of MP, Indore Bench	Sh. Rajendra Kumar S/o Sh. Trilokchand Jain		Village Manpur, Tehsil Mhow, Distt. Indore		Regarding Compensation	Not yet listed for final hearing	Pending	Pending
6	W.P. No. 3477/10	21.04.10	High Court of MP, Indore Bench	Mr. Gulab Chand		Khalbuzurg, Dhar District	-	Regarding Compensation	Last date of hearing 21.04.2010 next date not fixed	Reply is being filed.	Pending
7	Appeal to Arbitration Award for Dharampuri Tehsil (LA cases)	November, 2009	District Court, Indore	NHAI	Affected land owners (total no. 28)	Indore	-	Arbitral Award has been challenged by NHAI.	Last date of hearing 26.08.2013	Appeal U/s. 34 Arbitration Act	Pending
8	W.P. No. 07/10	24.07.10	District Court Mandleshwar	Sh. Pal Singh S/o Bisan Singh	State of MP & Others	Maheswar	No	Regarding Compensation	Last date of hearing 12.08.2010 next date not fixed	Reply filed	Pending
9	W.P. No. 22/10	24.01.11	District Court Mandleshwar	Sh. Pal Singh S/o Bisan Singh	State of MP & Others	Maheswar	No	Regarding Compensation	First Date of hearing 15.03.2011 Next date of hearing not fixed.	Reply to be filed	Pending

S. No	W.P./O.P./Case no.	Date of Filing	Name of the Court	Name of the Petitioner	Name of Respondents	Place where cause of action has arisen	State, if interim stay order granted by the Court, if so furnish details	Description Nature of Case in Brief	First date/last date/next date of hearing be indicated	State if counter reply has been filed by NHAI	Whether the case is pending or/decided in favour of NHAI or against NHAI
10	Arbitration for Manpur, Undwa & Kankariya Villages	October, 2008	Additional Commissioner, Indore (Arbitrator)	NHAI	Affected land owners (total no. 95)	Indore	-	Award of the Competent Authority has been challenged	Last date of hearing 30.08.2013	Petition U/s.3G(5)national Highways Act 1956	Pending
11	WP no. 473/2013	07.01.2013	High Court of MP, Jabalpur	Satyanarayan Agarwal & ors.	State of MP & Ors.	Indore	No	Regarding Compensation	Not yet listed for final hearing	Pending	Pending
12	Execution No. 10/2012	05.02.2013	2nd A.D.J. Indore	Smt. Ragini Jaiswal	Union of India & others	Indore	No	PAYMENT OF COMPENSATION execution	Last date of hearing 13.09.2013	compensation amount to be paid	Pending
13	W.P. 78	09.04.09	Session Court Mhow	Sh. Yashwant Singh	State of MP	Pigdamber Village	-	Regarding Location of toll plaza	Last date of hearing 30.07.2010 next date not fixed.	Reply filed	Pending
14	W.P. No. 10A/09	08.03.10	Session Court Mhow	Mr. Abdul Sayed.	NHAI	Mhow	-	Regarding Land Acquisition	Last date of hearing dated 22.03.10	Reply to be filed	Pending
15	W.P. No. 22/2009-10 Misc.	19.06.12	Session Court Mhow	SDO (Revenue), Dharamपुरi, Distt. Dhar	Union of India & NHAI	Indore	No	Regarding Compensation	To be fixed	Reply to be filed	Pending

Source- OPIPL

Status of RoW and Encroachment

During the site visit, it was observed most of the ROW which is in possession of OPIPL is free from encroachment, although there were few locations where opportunistic temporary vendors were seen. These locations include Rau circle to Sonway toll plaza; Manpur; after Khalghat toll plaza etc. However most of them were away from main carriage way and does not affect the road operations. As per the Monthly Progress Report for October 2017, four temporary encroachments (44 advertisement boards) were removed by the concessionaire in October 2017.

Figure 3.3 Encroachment Removal



Source: Encroachment Removal Report, MPR October 2017

3.4 ASSET STATUS

All construction activities are complete and the completion certificate for the road was obtained on 18th December 2009. Toll collection was started at Khalghat toll plaza on 21st August 2009 after receiving provisional completion certificate. Toll collection at Sonway toll plaza started on 6th October 2016. Hence, the road is operational for more than 2 years.

4 COMPLIANCE STATUS AGAINST THE REFERENCE FRAMEWORK

4.1 OVERVIEW OF ASSET COMPLIANCE WITH APPLICABLE REGULATORY REQUIREMENTS

Based on our understanding, the table below (*Table 4.1*) provides a list of applicable EHS regulations along with its applicability to the Project, status of the compliance, remarks and recommendations.

Error! Reference source not found. provides compliance status of the project with respect to IFC Performance Standards with recommendations to close the gaps, if any.

Table 4.1 Compliance Status as per EHS and Social Regulations

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability	Status of Permits and Licenses	Remarks & Recommendations
1.	The Environment (Protection) Act, 1986	MoEF&CC	Umbrella legislation to protect and improve overall Environment	OPIPL need to obtain Consent to Establish (CTE) and Consent to Operate (CTO) from Madhya Pradesh Pollution Control Board (MPPCB) and to comply with permissible limits for ambient air quality and noise levels for the Diesel Generators (D.G.) installed at site.	<ul style="list-style-type: none"> Consent to Operate via consent no. AH-30792 dated 06-05-2015 issued by M.P. Pollution Control Board for operation of D.G. sets at Toll Plaza Khalghat, NH_3, A.B. Road, Tehsil Dharampuri, District - Dhar (MP), valid till 04-10-2019 Consent to Establish via Consent No: CTE-50587 under the Water (Prevention & Control of Pollution) Act, 1974 and under the Air (Prevention & Control of Pollution) Act, 1981, for project office at Sonway Toll Plaza, Sonway, A.B. Road, District Indore (MP), valid till 21-12-2018 Management has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules 	
2.	The Forest Conservation Act, 1980	MOEFCC, State Forest Department	Protection and Conservation of Forests	NHAI to obtain Forest Clearance / permission of tree felling to clear the Right of Way (RoW)	<ul style="list-style-type: none"> Forest Clearance was obtained from MoEF (F.C Division) via F.No. 8-98/2006 -FC dated 3rd September 2008 	Forest Clearance for diversion of 54.707 ha of land was obtained dated 8 th January 2007. Subsequently due to realignment in Dhar Forest Division, there was a change in forest area. Forest area was reduced from 19.556 ha to 19.195 ha. Thereafter forest area was amended in the Clearance via letter dated 3 rd September 2008.
3.	The Water (Prevention and Control of Pollution) Act, 1974	CPCB, MPPCB	Prevention and control of water pollution as well as restoration of water quality	CTE and CTO to be obtained from MPPCB	<ul style="list-style-type: none"> Refer Sr. No. 1 of this table 	

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability	Status of Permits and Licenses	Remarks & Recommendations
4.	Noise Pollution (Regulation and Control) Rules, 2000	CPCB, MPPCB	Noise pollution regulation and control	As per the Act, ambient noise levels are to be maintained as stipulated in the rules for different categories of areas such as residential, commercial, industrial and silence zones. Considering the context of the project, OPIPL will need to be abide by the limits prescribed in Consent obtained by MPPCB	<ul style="list-style-type: none"> As per Noise Rules, 2000; noise levels of 55 dBA and 45 dBA during daytime and night time respectively for residential area and 50 dBA and 40 dBA during day time and night time respectively for silence zones would be adhered to. OPIPL has applied for Consent to Operate D.G. sets at Sonway Toll Plaza and the screenshot of the same was shared. 	<ul style="list-style-type: none"> Conditions as per the Consent to Operate D.G. sets at Toll Plaza Khalghat obtained from MPPCB to be complied with.
5.	The Air (Prevention and Control of Pollution) Act, 1981	CPCB, MPPCB	To prevent, control and reduce air pollution including noise pollution	CTE and CTO to be obtained from MPPCB	<ul style="list-style-type: none"> Refer Sr. No. 1 of this table 	
6.	Environmental Impact Assessment Notification, 2006	MoEFCC	Impact Assessment	Environment Clearance to be obtained from Ministry of Environment and Forest prior to start of construction by NHAI	<ul style="list-style-type: none"> Environment Clearance (EC) has been obtained for the four laning of Indore Khalghat section from km 12.600 to km 84.700 of NH-3 in the state of Madhya Pradesh from the Ministry of Environment and Forest via letter No. 5-26/2006-IA-III dated 17th November 2006 	
7.	Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016	CPCB, MPPCB	Hazardous Waste Management	Authorization of hazardous waste generation and storage should be obtained from the State Pollution Control Board (SPCB) i.e. MPPCB. Hazardous waste e.g. used oil (diesel/ lube oil) need to be disposed accordance to the guidelines stipulated by the Hazardous and Other Waste (Management and	<ul style="list-style-type: none"> Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained for Toll Plaza, Khalghat via letter no. 1061/RO-Dhar/MPPCB/Dhar-88/15 dated 01-06-2015, valid till 04-10-2019. Management has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules. 	

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability	Status of Permits and Licenses	Remarks & Recommendations
				Transboundary Movement) Rules, 2016.		
8.	Tree Felling	State Forest Department	Regulation on felling of trees	Permission for felling of trees to be obtained from State Forest Department	<ul style="list-style-type: none"> • Permission to cut 1122 trees falling within RoW in Dhar District has been obtained from Additional Collector Dhar dated 2nd May 2007 • Permission to cut 526 falling within ROW in Maheshwar Tehsil has been obtained from Additional Collector Khargaon dated 27th July 2007 • Permission to cut 2896 trees falling with the ROW in Indore District has been obtained from Additional Collector Indore dated 1st December 2006 	
9.	Guidelines/ Criteria for evaluation of proposals/ request for ground water abstraction by Central Ground Water Authority (CGWA)	Madhya Pradesh Ground Water Authority	Regulation of abstraction of ground water	Source of water at Toll Plaza, Khalghat is open well; permission for abstraction is to be obtained by the authorized officers.	NOC has been obtained from Gram Panchayat, Khal Bujurg, Khalghat dated 19 th January 2018 for use of water. OPIPL has also applied for approval for a borewell at Sonway Toll Plaza on 8 th Jan 2018. This is intended to substitute the use of the water from the existing (old) open well in its premise.	
10.	The Water (Prevention and Control) Act, 1974 (Amended) in 1988					
11.	Shops and Establishment Act 1958	Labour Department	Regulation of conditions of work at shops, commercial establishments	The two tolls plazas are registered the Shops and Establishment Act	The two tolls plazas are registered under the Shops and Establishment Act	-
12.	Contract Labour Regulation Act, 1971;	Labour Department	Contract Labour Management	This act provides safeguards to contract workers for construction, and operations of projects	OPIPL has obtained required licenses for engagement of contract labour. Currently, contract labour is engaged for security purposes-(45 security guards) and 40-45 workers engaged in maintenance of median	-

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability	Status of Permits and Licenses	Remarks & Recommendations
					and right of way. All contract workers are being paid applicable minimum wages.	
13.	Child Labour (Prohibition and Regulation) Act, 1986 as amended in 2016 Bonded Labour System (Abolition) Act 1976	Labour Department	Protection of Child (<15 years) workers Prohibition of forced labour system in any form	The Act prohibits engagement of children who have not completed their fourteenth year in occupations and processes listed in Schedule attached to it. Part-B (for processes) lists entry 11 mentions building and construction industry.	No child labour or bonded labour was reported at any of the work sites, and at the toll plazas visited.	-
14.	Minimum Wages Act, 1948 and Rules 1980; Payment of Wages Act, 1936 Equal Remuneration Act, 1976	Labour Department	Wage Payment	These acts ensure payment of wages to labours without discrimination and devoid of any unjust deductions.	OPIPL has obtained required labour licenses for engagement of contract labour. Currently, contract labour is engaged for security purposes-(45 security guards) and 40-45 workers engaged in maintenance of median and right of way. All contract workers are being paid applicable minimum wages.	-
15.	Workers Compensation Act, 1923 Maternity Benefits Act, 1961 Public Provident Fund Act, 1968 Employees State Insurance Act, 1948	Labour Department	Welfare	No women workers are engaged by OPIPL; hence, Maternity Benefits Act 1961 is not applicable. Remaining laws are applicable	Applicability of ESIC is as per Indian regulations (for any employee earning a monthly salary less than INR 18,000). This is applicable for all workers and contract workers. PF deduction is done as mandated by law. There were no reported cases of worker compensation.	-
16.	Madhya Pradesh Security Agencies (Regulation) Rules 2012 Private Securities Agencies (Regulation) Act, 2005	Department of Police	Security Agencies Regulation	Regulation and verification of antecedents of private security agencies	OPIPL employs two Private Security Agencies for its 2 Toll Plaza operations. The Falcon Guard Pvt Ltd which is contracted for Khalghat Toll Plaza is registered in Delhi and Uttar Pradesh The Locators Safety and Security Protections which is deployed at Sonway Toll Plaza is registered in MP and their licence is valid till 27 th Jan 2019.	The Falcon Guard Pvt Ltd to obtain a registration under PSARA for Madhya Pradesh.

SN.	Applicable Policies and Regulations	Institution Responsible	Objective	Applicability	Status of Permits and Licenses	Remarks & Recommendations
17.	The Welfare Cess Act 1987 and Rules 1988	Labour Department	Workers welfare	The Act makes provision to contribute to a welfare fund constituted by Government.	OPIPL has provided documentary evidence of payment of cess as applicable	

4.2 *IFC PS-1: ENVIRONMENT AND SOCIAL MANAGEMENT SYSTEM*

4.2.1 *Environment and Social Assessment*

Environmental and Social Impact Assessment (ESIA) study was carried out for the project and Environment Clearance (EC) was obtained from Ministry of Environment and Forest (MoEF) via letter No. 5-26/2006-IA-III dated 17th November 2006.

EIA report has section on environmental impacts and mitigation measures along with environmental management and monitoring plan. Schedule L of CA outlines preparation of O&M manual to be finalised in consultation with the Independent Consultant. The manual to include but not limited to the following aspects:

- Traffic management plan including the corridor control plan;
- Safety management programme including the emergency response protocol;
- Environment Management Plan (EMP);

O&M manual prepared for the project provides guidelines, procedures and system for implementation of operation & maintenance of the project. It has section on Health and Safety, Traffic Management and EMP. However, EMP is limited to pollution control measures, environmental pollution monitoring during construction period, redevelopment of borrow areas, planting and maintenance of trees. Specific Environment and Social Management plans to be implemented at site during operation and maintenance phase have not been prepared.

4.2.2 *EHS Management Program including Monitoring and Reporting*

There is no dedicated EHS officer at site; HR and administration manager look into permitting and legal compliance at site. It was reported that CEO visits project site on a monthly basis to monitor and review the implementation of management at site. Management programme incorporated in CA are regularly monitored and progress on the same is presented in the form of Monthly Progress Report (MPR) to the Independent Engineer for further review and comments

As per requirement of CA, OSE has been preparing and submitting the Monthly Progress Report (MPR). OPIPL has been preparing and submitting MPRs covering details such as monthly fee collection at the Toll Plazas; road user's complaint compliance report; weather report; list of hindrances; route operations covering accident/ incident report, report on damage, encroachment removal, dead animal removal, emergency services, etc. and maintenance report including preventive / periodic maintenance details, material modification report, tests conducted during the month, etc. This

though covers the technical aspects, the complete range of EHS performance or issues are not covered.

4.2.3 *Organizational Capacity and Training*

There is no dedicated EHS officer at site. HR and administration manager look into permitting and legal compliance at site. O&M In charge along with his team is responsible for undertaking routine and periodic maintenance including repair activities, cleaning, regular water and maintenance of avenue and median plants. Hence, there was a visible gap in the knowledge skill and experience of the personnel handling EHS responsibilities.

4.2.4 *Community Engagement and Grievance Management*

OPIPL does not have a formal stakeholder engagement policy or plan in place. OPIPL has undertaken very few community awareness campaigns on road safety. There are few charity-based activities undertaken by OPIPL.

There is a complaint and suggestion feedback procedure for road users. Each Toll Plaza office, as mandated by the requirement of NHAI, is required to maintain a complaint register for registering complaints and suggestion from road users. Emergency contact details are displayed at toll booth locations. Review of the complaints register indicated that most of the complaints were related to road safety, toll fee, toilet facilities etc. There is no grievance mechanism for concerns apart from road users' complaints with relation to access restriction, encroachment issues, public concerns on accidents, construction, maintenance etc.

4.2.5 *PS-1 Compliance Gaps and Recommendations*

Gap Area	Recommendation
ESMS	<p>OSE is recommended to update the existing Manual with adequate details through a competent Third Party.</p> <p>Specific management plans to be prepared include the following:</p> <ul style="list-style-type: none"> • Carriageway solid waste management plan including construction waste; • Oil/ chemical spill contingency plan; • Storm water management Plan; <p>Avenue and Median Plantation and management plan.</p>
EMP	<p>EMP lacks the following sub-plans, which are necessary for O&M phase</p> <ul style="list-style-type: none"> • Carriageway Waste Management Plan; • Oil/Chemical Spill Contingency Plan; • Storm Water Management Plan; • Solid and hazardous waste management plan • Avenue/Median Plantation & Maintenance Plan
Monitoring and Review Procedure	<p>OPIPL at the corporate level is required to establish monitoring and review procedures for effective supervision of EHS implementation by OSE staff and its subcontractors. These shall be the responsibilities of EHS Manager and the EHS Supervisor.</p> <p>The procedure shall include the minimum following requirements:</p>

	<ul style="list-style-type: none"> - Establishing parameters for supervision on all aspects outlined in the SOPs or Environment Management Manual; - Establish an audit schedule for bi-annual internal audits to be conducted at each of its SPVs including OSE; - Establish reporting formats for providing corrective actions for gaps identified during the audit; - Procedures for review of closure for implementation of corrective actions.
EHS Reporting	We recommend an Annual EHS Performance Report should be prepared to supplement the existing Annual Report.
EHS Staff and Skills	<p>Qualified and experienced personnel to be engaged for implementation monitoring and review meet following Criteria:</p> <p>Corporate level, EHS Manager: A graduate in occupational health and safety or related field with a minimum of 8 to 10 years working experience in road and infrastructure projects. The incumbent shall be well versed with good industrial H&S practices and all applicable Environmental related laws.</p> <p>Project level, Supervisor - EHS: graduate / diploma in occupational health and safety or related field with a minimum of 3 to 5 years working experience in road and infrastructure projects.</p>
Stakeholder Engagement and Grievance Management	<p>OPIPL should formulate a Stakeholder Engagement Plan and carry out stakeholder engagement systematically.</p> <p>OPIPL should formulate an external grievance mechanism</p>
Differential Impact on Disadvantaged and Vulnerable Communities	<p>OPIPL is recommended to prepare and implement targeted and differentiated measures in sharing development benefits and opportunities.</p> <p>Considering STs as a vulnerable group, OPIPL is recommended to further assess if adverse impacts of the project had any disproportionate impact on them and if they are disadvantaged in availing development benefits and opportunities. The assessment, undertaken through the SPV and InvIT's E&S staff, will be used to design and implement the differentiated development measures for targeting vulnerable population including priority for villages with predominant ST population.</p> <p>Suggested List of CSR activities mentioned under Companies Act 2013, may be used as starting point for finalizing these welfare & development activities. OPIPL will choose contextual and localized options for undertaking such welfare and development activities.</p>

4.3 *PS-2: LABOUR AND WORKING CONDITIONS*

4.3.1 *Working Relationships*

Direct Workers

OPIPL has a total of 216 direct employees (124 at Khalghat and 92 at Sonwai toll plazas) which are stationed at the project office / toll plaza offices. There is a dedicated HR/Admin officer who oversees the implementation of Indian statutory requirements pertaining to labour, labour welfare and disputes. The details of the organization structure is discussed in Section 3.1.1 above. OPIPL has a corporate level Human Resources Policy which is applicable to all its employees. The HR Policy includes the following:

- Recruitment and Selection Policy
- Leave and Attendance Policy
- Rewards and Recognition Policy
- Mobile Telephone Policy
- Prevention of Sexual Harassment Policy
- Canteen at Project Policy
- Accommodation at Project Site Policy
- Guidelines for Mentoring
- Internal Transfer Policy
- Travel and Procedure
- Welfare and Benefits

Indirect Workers

As reported by the site management, the company recruits security workers and median and RoW maintenance workers on a contractual basis. There are approximately 45 contracted workers engaged across three stretches of the road for maintenance activities. The workers are engaged by OPIP. Wages register for these workers were made available for review. It was reviewed that that workers are paid wages on a monthly basis. Each worker is provided with a wage card where details of wages are recorded.

Workers Organization

The company has a proper policy for freedom of association. It has also established various forums for expressing their views and complaints through the grievance redressal mechanism

4.3.2 *Working Conditions and Terms of Employment*

As part of the recruitment process, the employees receive joining/appointment letters which highlights the terms and conditions of employment, working hours, compensation and benefits and salary break-up etc. Based on a review of sample documentation, the employees were found to be provided with an appointment letter which contains the following:

- Appointment and conditions of employment
- Duties and obligations of the employee

- Compensation and Benefits
- Term, termination and consequences of termination

Employees are provided with salary slips which include details on salary, applicable Provident Fund and tax deductions etc. Thus, the terms and conditions of employment and various benefits /allowances are governed by the HR policy in place and they meet statutory requirements. The awareness pertaining to some of these policies/rules was varying across various staff members. All of these aspects are covered as part of the in-house induction and training sessions. The notice boards across all the facilities highlight key rules, rights of workers; labour licenses and registration, abstract of Minimum Wages, 1948 and Contract Labour Act 1971;

The wages for daily wage workers were observed to as per the Minimum Wage requirements as laid down by Madhya Pradesh government for the year 2017-18 and Chief Labour Commissioner in for Road/highway sector significantly w.e.f. April 2017. Applicability of ESIC is as per Indian regulations (for any employee earning a monthly salary less than INR 18,000). This is applicable for all workers and contract workers. Review of HR Policy and worker consultations (post site visit by client) related to probation indicated that there are instances of prolonged probation periods (typically a probation period is first 6 months).

The general working shift is from 08:30 hrs to 18:00 hrs. The toll plaza operations are run in three shifts:

- Shift A- 00:00 hrs to 08:00 hrs
- Shift B- 08:00 hrs to 16:00 hrs
- Shift C- 16:00 hrs to 00:00 hrs

The working hours for median and RoW maintenance workers are from 8:00 hrs to 18:00 hrs which includes one-and-a-half hours of break. The security workers have two shifts of 12 hours each.

Workers reported that there are very few instances of overtime work. OPIPL has a system of relievers and hence, instances of overtime payments do not occur regularly. However, if any worker working overtime (more than 9 hours a day) is paid the due overtime payment of double of the hourly rate calculated at gross levels. An attendance register for employees and muster roll for contract workers is maintained at toll plaza offices for tracking attendance and in-time and out-time of employees.

There are adequate toilet facilities at each toll booth location. Drinking water is provided through local mineral water vendors at each of the toll booths.

A formal Grievance Redressal Mechanism for employees is present as part of the HR Manual. It was reported that site senior management is directly approachable and any person can directly contact his/her own supervisor, site in charge or approach the project head directly. If not resolved informally, there is a three-stage escalation process. However, contract workers are not covered as part of the mechanism.

4.3.3 *Protecting the Workforce*

No child labour or bonded labour was reported at any of the work sites, and at the toll plazas visited. It was reported that no migrant workers are currently engaged and no workers accommodation is maintained.

Employees of OPIPL who are from outside are provided guest house facilities at Khalghat toll plaza or HRA provisions. The guesthouse block near Khalghat plaza was observed to be having adequate facilities including rooms, beddings, drinking water, kitchen and mess facilities, toilets, common rooms etc.

4.3.4 *Occupational Health & Safety*

Dedicated safety officer is not deployed for the project. It was observed that training on EHS aspects, safety sign awareness and road safety, personal protective equipment were conducted on site. It was noted that Safety Jackets, Helmets and Gloves are issued to the labour engaged for O&M activities and records are maintained on site. First aid and firefighting arrangement is available at both the Toll Plazas.

Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room, however staff was not aware of the presence of any kind of emergency response plan. Documented copy of the plan was not made available for review. It was noted that incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work.

4.3.5 *Supply Chain*

OPIPL sources its raw materials from various suppliers located in the area. Main items procured are water tankers; maintenance works materials like cement, soil, sand etc. As supplier agreement was not made available for review but it was reported that the agreement covers aspects such as delivery schedule, rate, and product description and there is no process by which OPIPL ensures that these vendors comply with at least the legal requirements pertaining to environment, health & safety and labour rules and regulations.

4.3.6 *PS-2 Compliance Gaps and Recommendations*

Gap Area	Recommendation
Grievance Redress Mechanism	OPIPL/OSE should extend the Grievance Redressal Mechanism to all workers at site. A grievance register for workers should be maintained at site and workers should be informed about it.
Safety and Emergency Preparedness	It is recommended to deploy dedicated safety officer at site. Accident/ incident register to be maintained at both the Toll Plazas. Emergency preparedness and response plan to be prepared, communicated to the staff. Staff to be trained on handling of emergencies.

Compliance of Suppliers and Subcontractors	Develop a supplier/contractor management plan as part of the ESMS to manage key labour compliance aspects chain pertaining to child and forced labour and key EHS aspects in the supply chain/among vendors.
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4.4 **PS 3: POLLUTION AND RESOURCE EFFICIENCY**

Environment Clearance (EC) has been obtained for the four laning of Indore Khalghat section via letter No. 5-26/2006-IA-III dated 17th November 2006 prior to start of construction. Project also required diversion of forest land, for which Forest Clearance was obtained via F.No. 8-98/2006 - FC dated 8th January 2007. The project is currently under Operation and Maintenance (O&M) stage and toll collection is carried out in two Toll Plazas. Both Toll Plazas has 2 DG sets each (2 DG sets of capacity 100 kVA each at Sonway and DG set of capacity 125 kVA and 82.5 kVA at Khalghat Toll Plaza). Following are the legal permits obtained by the project:

- Consent to Operate via consent no. AH-30792 dated 06-05-2015 issued by M.P. Pollution Control Board (MPPCB) for operation of D.G. sets at Toll Plaza Khalghat, Tehsil Dharampuri, District - Dhar (MP), valid till 04-10-2019
- Consent to Establish via Consent No: CTE-50587 under the Water (Prevention & Control of Pollution) Act, 1974 and under the Air (Prevention & Control of Pollution) Act, 1981, for project office at Sonway Toll Plaza, District Indore (MP), valid till 21-12-2018
- Management has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules.
- Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained for Toll Plaza, Khalghat via letter no. 1061/RO-Dhar/MPPCB/Dhar-88/15 dated 01-06-2015, valid till 04-10-2019.
- Main source of water at Khalghat Toll Plaza is open well; permission to abstract water from well has been obtained from gram panchayat. However registration of well was not available for review at the time of site assessment.
- OPIPL has also applied for approval for a bore-well at Sonway Toll Plaza on 8th Jan 2018. This is intended to substitute the use of the water from the existing (old) open well in its premise.

4.4.1 **Pollution Prevention, Resource Conservation, Energy Efficiency (ii)**

Water and Waste Water

Procedure to measure utilization of water resource for the project is not in place and water consumption records are not maintained at site. Tanker water is the source of water used for watering of avenue and median plants along the project corridor. OPIPL has entered into agreement with the 3 different contractors for supply of tanker water for the entire road stretch and the same was verified during site assessment.

Source of domestic water required at Sonway Toll Plaza is also tanker water and OPIPL has signed agreement with the contractor for supply of water, work order and agreement was verified at the time of site assessment. For drinking propose RO water is purchased from a local vendor.

Source of water at Khalghat plaza is open well. Permission for abstraction of water has been obtained from Gram Panchayat. In terms of stage of ground water development, Dharmapuri block, where Khalghat Toll Plaza is located, is categorized as over exploited.¹ Hence, as per requirement OPIPL has applied for permission to dig a bore well to meet requirements of drinking and domestic use (not to be used for irrigation or industrial purpose). RO plant of capacity 50 l/hour has been installed for treatment of water for drinking purpose.

Both the Toll Plazas have septic tank for treatment of sewage generation.

Air Pollution

DG sets installed at both the Toll Plazas are the main source of gaseous pollutions. CTE and CTO has been obtained by MPPCB. DG sets were observed to be in acoustic enclosure, with stack height of more than 2 m.

As reported no measures are taken to account GHG emissions from the project. Also no measures are adopted to reduce GHG emissions.

Energy Conservation

It was reported that energy efficient LED and CLF are fitted at both the Toll Plazas.

Annual environment monitoring is carried out at site which includes monitoring of ambient air quality, wastewater quality and noise.

4.4.2 Waste Management

Waste generated in O&M stage include road litter, illegal dumped waste, municipal solid waste from the Toll Plazas, animal carcasses, vegetation waste from ROW maintenance, and sediment and sludge from storm water drainage system maintenance. As a part of waste management, four different coloured drums (Blue, Yellow, Red and Black) were seen placed at both the plazas for collection of segregated waste. However its implementation required improvement. Waste generation records are not maintained at site.

It was noted that metal scrap generated at both the plazas is sold to authorised vendor, however dry waste is burned in open behind the Toll Plazas. Solid waste and litter was observed to be scattered on the ROW edge as well as the

¹ District Ground Water Information Booklet - Dhar, MP by Ministry of Water Resources, Central Ground Water Board, Bhopal

median in some chainages. It was reported that manual labours are deployed for collection of waste and as a practice they collect waste from median and dump it out of the RoW.

4.4.3 Hazardous Materials

Hazardous waste during operation phase includes generation of waste/ used oil from D.G sets installed at Toll Plazas. Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained for Toll Plaza, Khalghat via letter no. 1061/RO-Dhar/MPPCB/Dhar-88/15 dated 01-06-2015, valid till 04-10-2019.

It was noted that OPIPL has done Annual Maintenance Contract (AMC) for D.G. maintenance and waste/ used oil generated is disposed of through authorized vendor. However, records of hazardous waste are not maintained in Form 3 and annual return in Form 4 is not submitted as per the Rules. ~ 40 to 50 liters of waste/ used oil was seen stored on land without any secondary containment for more than 90 days at site. The waste was seen stored in the D.G. set area without any signboard of "Hazardous Waste Storage Area" and "Danger". Oil spills was also observed in the area.

OPIPL has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules. Used paint containers categorized under hazardous waste under Hazardous Waste Rules, were also observed to be stored at Toll Plazas and is being disposed along with the other scrap stored at site.

4.4.4 Pesticide Use and Management

As reported during site visit, pesticide is not being used for the project. Organic manure is used for avenue and median plantation.

4.4.5 PS-3 Compliance Gaps and Recommendations

Gap Area	Recommendation
Legal and Regulatory Compliance Monitoring	Develop an environmental and social legal register for the project to ensure a comprehensive list is available and compliance to all applicable permits conditions are systematically tracked.
Management of Solid Waste	OPIPL should ensure required training and awareness of staff on the waste management plan to ensure its effective implementation. Should stop burning of dry waste in open. OPIPL should ensure cleaning of the road side and median regularly to avoid dumping and maximizing of road side waste. Waste from median and ROW to be removed and ensure disposal as per the norms.
Management of Hazardous Waste	OPIPL should keep records of hazardous waste generation in Form 3 and should submit Annual Return in Form 4. Hazardous waste to be not stored on site for more than 90 days. Storage of hazardous waste should be as per CPCB guidelines. Oil/ Chemical spill Contingency Plan should be prepared. In case of spillage of oil, measures to be taken as per the plan.

Gap Area	Recommendation
GHG Monitoring	OPIPL should estimate the total GHG emissions in terms of CO2 equivalent that are released from the total number of motorized vehicles that ply on the project road on monthly basis.
Water Consumption and Conservation	OPIPL should install a meter to the bore-well, keep records of water consumption, and try taking initiatives to reduce water consumption.

4.5 *PS 4: COMMUNITY HEALTH SAFETY AND SECURITY*

4.5.1 *General Community/Road Users Health and Safety*

The project is designed considering relevant standards/ guidelines of India Road Congress (IRC) related to safety (IRC: SP-84), road geometrics, bridges, culverts, road signs (IRC: SP-67), pavement marking (IRC: 35), road delineator (IRC: 79), etc. Safety measures taken at site include pedestrian guard railing, crash barrier, signboards, rumble strips, speed breakers, speed limit boards, median plantation, etc. as required by NHAI as per CA.

During site assessment, following observations were made which might act as potential risk for road accidents;

- Vehicles were seen parked in the corridor and in ROW at many places
- Vehicles were observed driving in opposite direction

Though there are a few news articles on road accidents, particularly at Ghat section near Khalghat, no public protest on land acquisition and resettlement issues was found in public domain. The accident spot is identified as a black spot and OPIPL has worked out a design change and waiting for NHAI approval.

Project road traverse through modified habitats, agricultural field and residential area. Also storm water drainage system is proposed along the road to mitigate the impacts on natural drainage pattern. The maintenance of these storm water drains is crucial for ensuring environmental sanitation and avoid creating breeding grounds for vectors responsible for communicable diseases.

Currently a significant number of trucks ply on the road. ~ 50 % of the road users are trucks including three axel, multi axel and over size vehicle. Presently 02 truck lay byes are constructed along the road. However, rest areas are yet to be developed. Stopover of truckers at major junctions on the road may play a role in the spread of communicable diseases (HIV/ AIDS) in the area.

There are 45 security workers which are contracted through Om Sai for Sonwai plaza and Falcon Securities for Khalghat. There are 4-5 armed guards in total. At least one armed guard is deployed at each Toll Plaza round the clock. The security agency was reportedly not received any training on human rights and other 'good conduct' and best practices.

4.5.2 Community Emergency and Preparedness Response

Quantity of hazardous material and substances stored at site can not be a potential public hazard. Also, both the Toll Plazas are away from human habitation areas. However, there is a potential for accidental spillage of hazardous materials on road due to road accidents of vehicles transporting such hazardous material. Emergency action plan in case of accidental spillage of hazardous material on road is not in place.

Management of road side emergency like road accident is assigned to the two plazas. For emergency preparedness ambulance, patrol vehicle and crane are available at both the Toll Plazas. In addition camp has been established in Bakaner Ghat (danger prone zone) with one ambulance having para medical staff, one crane and one patrolling vehicle. 2 high masts are also installed at Bakaner Ghat area. Emergency helpline number is displayed at various locations along the entire road stretch. Emergency contact numbers including number of police, ambulance, nearest hospital, fire station, etc. was seen displayed at Control Centre.

Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room. It was reported that on an average response time is 20 minutes. However, it was noted that response time is not noted in the log book maintained with ambulance at Bakaner Ghat area. First aid kits are present at both the Toll Plazas. Sonway Toll Plaza has a dedicated first aid room with 24x7 available staff.

Fire extinguishers, sand buckets, smoke detectors, fire alarm system is present at both the Toll Plazas. Khalghat Toll Plaza also has fire hydrant. There is no dedicated fire water tank but the hydrant is connected to the domestic water tank. Both the Toll Plazas also have obtained fire NOC.

4.5.3 Community Engagement and Development

OPIPL has undertaken very few community awareness campaigns on road safety. There are few charity-based activities undertaken by OPIPL.

4.5.4 PS-4 Compliance Gaps and Recommendations

Gap Area	Recommendation
Threats from Security Staff	Falcon Guard Pvt Ltd should obtain registration under MP Private Security Agencies (Regulation) Rules 2012. The Grievance Redress Mechanism for the project should cover special provisions for investigations of unlawful or abusive acts of security personnel.
Road Safety	OPIPL to undertake awareness program for community and to ensure vehicles are not parked within the corridor or in ROW and people should not drive in opposite direction.
Disease Prevention	OPIPL should conduct awareness campaign among the truck drivers to prevent HIV/ AIDS.
Emergency Response	Emergency Action Plan to address accidental spillage of hazardous material to be prepared

4.6 PS 5: LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

4.6.1 Land Acquisition Process

As per the Concession Agreement, the responsibility of land acquisition was on NHAI who is obliged to provide encumbrance free land to OPIPL for construction and operation of the road. As reported by OPIPL, it was not involved in this process. The responsibility to compensate landowners for their loss of land and livelihood was on NHAI.

Land required for the Project was acquired by NHAI using land acquisition provisions in NH Act 1956. Total land requirement for converting the road from two to four lane was 520.032 ha including 54 ha of forestland. Land acquisition process took place between 2007 and 2009, and a small area (1.07ha) of additional land acquired in 2011.

The project caused both physical and economic displacement. The project affected 639 households through acquisition of private land with structures which were under mixed use (residential as well as commercial). The loss of agricultural land and families' dependent on these agricultural land (as wage labors or sharecroppers) caused economic displacement. It is also not clear as to how many encroachers (non-titleholders) were evicted during construction stage. The project is also reported to have evicted a number of encroachers in RoW for construction of the six-lane carriage way or other road facilities such as service roads, junctions, cart tracts etc.

4.6.2 Economic or Physical Displacement and Forced Eviction

The road planning was undertaken more than 15 years ago. Hence, details on project designing and avoidance of social impacts were not available for review. The road includes three by-passes, at Mhow, Gujri and Dhamond. It is assumed that these by-passes helped reduction in physical displacement or forced eviction of encroachers in the earlier alignment through these urban areas.

It was learnt during the discussions with NHAI that 639 households were displaced for the project. The break-up of these affected households were available in a Due Diligence report on Environment Issues and Safeguards on project funded by IIFCL dated 01-12-2007.

Table 4.2 Affected Households

District	Taluka	No. of Affected Households
Indore	Mhow	355
Dhar	Dhar	60
Dhar	Dharmपुरi	164
Khargone	Maheshwar	60
Total		639

Source: Environment Issues and Safeguards Due Diligence Report IIFCL dated 01-12-2007

Data on village wise break up of affected households or that of STs is not available. The acquisition of private land with structures which were under mixed use (residential as well as commercial) and eviction of encroachers (non-titleholders) has impact on livelihood. NHAI has paid compensation for the land and structures (including affected encroachments). The livelihood loss of families dependent on agricultural land other than landowners such as (agricultural wage labours or share croppers was not identified or compensated. However, no socio-economic survey was conducted to understand the adverse impacts on their livelihood and income levels. As RAP/LRP was not required for the project, adverse impacts on project affected families/persons was addressed through cash compensation for land and structures.

4.6.3 Compensation and Benefits

NHAI has paid cash compensation for the land it acquired under NH Act 1956. The compensation amount paid included market value assessed on the basis of prevailing basic guidance value along with value of other fixed assets on the land such as structures, trees etc. As per discussions with PAPs and NHAI, compensation ranged between 2 lakh to 5 lakhs per acre. As per usual practice, NHAI pays compensation as fixed by the competent authority (CALA).

As land acquisition process was completed long time back, the details (3G Notification) were not available for review. However, ERM team confirmed from consultation with NHAI-PD that no land acquisition related matter pending. However, a few litigation on compensation disbursement is pending now.

4.6.4 Consultation and Grievance Mechanism

The project land was acquired as per NH Act, 1956. The provisions of community consultation in NH Act is limited. The NH Act provides opportunity to file objections and access to arbitration process for contesting the compensation offered. Details on community engagement carried out for the project are not available for review.

4.6.5 Post-Resettlement Legacy

Review of available information indicated that there are currently 15 cases/ litigations pending out of which nine (9) are related to land acquisition or compensation. Discussions with NHAI Project Director, Indore PIU indicated that these litigations are between NHAI and the appellant and these cases are related to reassessment of compensation. OPIPL is not involved/ party to any litigation.

4.6.6 PS-5 Compliance Gaps and Recommendations

There are gaps in compliance to PS-5 provisions. However considering the land acquisition was the responsibility of the Government (NHAI) and residual impacts which took place a decade ago are difficult to assess and mitigate. As project falls in Category-1, the gaps with respect to PS-5 compliance are not required to be addressed. Hence, no further recommendation is provided.

4.7 IFC PS-6: BIO-DIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

4.7.1 Legally Protected Internationally Recognized Areas and Critical habitat

No protected area is located near the project road. The project is not crossing any ecological sensitive areas like national park, wild life sanctuary, tiger reserve, biosphere reserves, lakes and wet lands. Nearest wildlife sanctuary is Ralamandal present at a distance of ~ 11 km from the starting point. Also, there is no endangered flora or fauna along the road corridor. The stretch is not on migratory route of wildlife.

4.7.2 Modified and Natural Habitat

The project area is mainly dominated by agricultural land and residential area. The project also involved diversion of 54.3 ha of forest land. Project road crosses two major river, namely River Ajnar and River Karam, both are non-perennial, have no flow for most part of the year.

During construction of the project ~ 4500 revenue trees were felled from the existing ROW. As compensatory afforestation, at least three times i.e. 13500 trees were to be planted. Total avenue plantation for the project as on the date of site visit was reported to be 25261. Thus, adequate plantation is carried out to mitigate the impact of the tree cutting.

4.7.3 Protection and Conservation of Bio-diversity

ROW maintenance requires regular clearance of vegetation. However, removal of unnecessary amounts of vegetation often results in the continual replacement of successional species and an increased likelihood of the establishment of invasive species. Vegetation clearance should be carried out to the lowest extent possible. Further, OPIPL should not intentionally introduce any new alien species, and should select native species for avenue plantation and median plantation.

4.7.4 *PS-6 Compliance Gaps and Recommendations*

Gap Area	Recommendation
Threats from Alien Species	Vegetation clearance should be to the lowest extent possible. OPIPL should not introduce any new alien species, and should select native species for avenue plantation and median plantation.

4.8 *IFC PS 7: INDIGENOUS PEOPLE*

4.8.1 *Presence of IPs*

The Indore-Khalghat Toll Road passes through 53 villages out of which 28 villages are in Indore District, 22 in Dhar District and 3 villages in Khargone District. The Dhar and Khargone Districts are recognized as Schedule-V areas and therefore impact on Scheduled Tribe population and their collective rights over land and forest resources were anticipated. Some of the villages in Indore District also were found to have significant (>50%) ST population. The demographic composition of the villages from which land was acquired (under provisions of NH Act 1956) during conversion of the road from 2 to 4 lane was checked using census data of 2011 and is provided in Table below. The table also provides the details of the public land (pasture or charnoi, and government or abadi) available in these villages vis-à-vis the area acquired for the project.

Table 4.3 Presence of ST population Vis-à-vis Land Acquisition Impacts in Villages from where Land was acquired for Indore-Khalghat project

District	Taluka	Village	Households	% ST	Total Area of the Village	Total Forest Area in Village	Total Pasture Area in Village	Total Area Acquired (ha)	Area of Pasture* (ha) Acquired	% of Pasture Area Acquired	Area under Aabadi** (Govt.) Acquired	Forest Area Acquired (ha)	% of Forest Area Acquired
Dhar	Dhar	Bondiya	588	83.8	N.A.	N.A.	N.A.	39.222	0.051	NA	0		
		Khandwa	401	16	248.26	0	22.13	15.413	0.604	2.73%	0		
		Kaliyankhedi	N.A.	N.A.	41.28	0	1.2	7.818	0		0		
		Pitampur	31136	13.1	N.A.	N.A.	N.A.	12.23	0		0	0.463	
		Dhal	81	100	281.47	218.57	3.01	3.898	0.08	2.66%	0	6.2	2.84%
		Palasmal	104	99.8	393.7	328.32	2	1.051	0.083	4.15%	0	9.365	2.85%
	Dharamपुरi	Chiktiyawad	763	55.7	665.58	0	46.2	8.606	0.27	0.58%	1.085		
		Dhariya	163	60.1	129.07	0	7.56	3	0		0		
		Dhudhi	358	39.9	332.73	0	39.6	15.332	0.82	2.07%	0		
		Dogani	183	99.9	251.85	101.22	29.14	6.371	0.33	1.13%	0.61	3.528	3.49%
		Eklerakhurd	81	59.6	258.17	0	24.61	7.884	0.6	2.44%	0		
		Gujari	586	16.9	188.09	0	9.16	10.314	0.5	5.46%	0		
		Khalbujurag	514	8.7	530.55	0	31.24	10.355	0.17	0.54%	0.063		
		Khalkhurd	264	4.9	473.12	0	3.87	0.43	0		0		
		Morgadi	360	6	559.49	0	33.73	0.05	0		0		
		Sirsodiya	595	96.2	688.66	0	171.93	11.227	2.46	1.43%	0		
		Dhamnood	6386	20.8	N.A.	N.A.	N.A.	5.68	0		0		
		Lodhipura	334	65.5	474.61	0	129.02	6.369	0		0.385		
		Bundiyaal	N.A.	N.A.	N.A.	N.A.	N.A.	6.105	0		0		
Bikron	595	29.7	1025.46	0	14.94	19.75	0		0				

District	Taluka	Village	Households	% ST	Total Area of the Village	Total Forest Area in Village	Total Pasture Area in Village	Total Area Acquired (ha)	Area of Pasture* (ha) Acquired	% of Pasture Area Acquired	Area under Aabadi** (Govt.) Acquired	Forest Area Acquired (ha)	% of Forest Area Acquired
		Guljhari	100	76.9	752.92	0	16.89	1.902	0		0		
Total- Dhar District			43592	19.9	7295.01	648.11	586.23	193.007	5.968	1.02%	2.143	19.556	3.02%
Khargone	Maheshwar	Bakaner	263	97.3	594.83	350.72	70.37	12.059	2.047	2.91%	0	4.030	1.15%
		Kushumbiya	280	98.6	225.49	14.81	47.56	0.607	0.607	1.28%	0	0.367	2.48%
		Kakada	371	29	242.68	0	41.65	6.544	1.396	3.35%	0		
Total-Khargone District			914	69.6	1063	365.53	159.58	19.21	4.05	2.54%	0	4.397	1.20%
Total- Schedule V Area			44506	21	8358.01	1013.64	745.81	212.217	10.018	1.34%	2.143	23.953	2.36%
Indore	Indore	Rau	7502	8%	NA	NA	NA	0.427	0.097	NA	0		
	Mhow	Pigdamber	756	16%	462.49	0	6.3	10.909	0.23	3.65%	0.175		
		Umariya	638	12%	301.06	0	6.2	1.431	0		0		
		Bhaislay	422	7%	546.9	0	0	10.09	0		0		
		Sonway	762	18%	531.49	0	0	24.219	0		0		
		Tihi	349	11%	574.74	0	17.94	27.017	0.718	4.00%	0		
		Bhatkhedi	830	18%	938.92	0	16.38	20.825	0.134	0.82%	0		
		Banjari	2025	7%	165.4	0	0.09	10.524	0		0		
		Panjariya	155	31%	287.97	0	4.17	8.748	0.024	0.58%	0		
		Jamniya	117	38%	307	26.57	1.72	3.796	0		0	0.627	2.36%
		Aawlay	239	26%	574.34	153.09	7.59	13.99	0		0	4.493	2.93%
		Thawliya	117	32%	322.9	0	5.61	17.897	0		0		
		Nanded	222	43%	455.5	89.96	6.02	12.553	0		1.588	1.776	1.97%
		Ahilyapur	26	99%	390.94	3.88	3.97	10.524	0		0	0.102	2.63%
		Bicholi	232	41%	595.04	149.8	11.58	16.496	0		0.397	3.212	2.14%
Kuwali	211	44%	434.13	162.21	20.82	4.882	0.222	1.07%	0.025	1.214	0.75%		

District	Taluka	Village	Households	% ST	Total Area of the Village	Total Forest Area in Village	Total Pasture Area in Village	Total Area Acquired (ha)	Area of Pasture* (ha) Acquired	% of Pasture Area Acquired	Area under Aabadi** (Govt.) Acquired	Forest Area Acquired (ha)	% of Forest Area Acquired
		Rajpura	294	54%	211.31	0	2.14	4.614	0.15	7.01%	0		
		Badkuwa	128	68%	701.41	547.03	2.89	2.488	0		0		
		Yashwant Nagar	441	64%	943.31	529.43	38.28	6.549	0.413	1.08%	0.453	5.580	1.05%
		Kakriya	406	97%	564.79	112.26	9.2	5.76	0.692	7.52%	0.396	2.326	2.07%
		Udwa	83	92%	299.54	68.87	1.76	0.796	0		0	1.112	1.61%
		Manpur	1376	22%	NA	NA	NA	4.308	0		1.355		
		Rampuriya Khurd		65%	201.93	0	9.17	2.332	0.032	0.35%	0.2		
		Awalipura	106	72%	159.98	26.77	0	1.496	0		0	1.064	3.97%
		Phut talaw	105	95%	239.61	146.18	2.5	7.109	0		0	3.258	2.23%
		Awaliya	13	64%	161.18	0	2.81	3.342	0		0		
		Gadaghat	29	100%	250.52	215.08	0	0.932	0		0	2.564	1.19%
		Kalikiray	173	99%	684.54	394.14	2.83	4.75	0		0.62	3.426	0.87%
Total- Indore District			17757	21%	11306.94	2625.27	179.97	238.804	2.712	1.51%	5.209	30.754	1.17%
GRAND TOTAL			62263	21	19664.95	3638.91	925.78	451.021	12.73	1.38%	7.352	54.707	1.50%
Villages with Significant (>50%) ST Population					9525.41	3057.28	623.84	113.666	7.764	1.24%	3.749	40.358	1.32%

Source: Census of India 2011

- *Government land categorised as *Charnoi* (Grazing);
- **Government land categorised as *Aabadi* or populated;
- Urban Areas;
- Villages with more than 50% ST population.

It was observed that 96% of the land acquired for the road was private land and only 4% of the land could be classified as collective or community land. It was further observed that 24 villages out of 56 villages had significant percentage of ST population. Land acquired from these villages with significant ST population is 113.666 ha, which comprises of 25% of the total land (451.021ha) acquired for the project. The pastureland acquired from these villages with significant ST population is only 7.764ha, which is 7% of the total land acquired from these villages.

The details of the total pasture land available in these villages vis-à-vis quantity of land acquired for the project is provided in Table 4.1. It shows that percentage of pastureland affected by the project varies between 0.35% and 7.52%. Rajpura and Kakriya in Mhow Taluk of Indore District have lost the maximum of >7% of their total pastureland in the village. The overall loss of the pasturelands in villages with significant ST population is only 1.24% of the sum total of their total pastureland. Hence, the extent of loss of pastureland in these villages appears to be negligible.

4.8.2 *Impacts & Mitigation Planning/Implementation*

No Resettlement Action Plan or Indigenous Peoples Development Plan was prepared for the project. However, as per regulatory requirements this is not required. Therefore, only compensation for land parcels and structures impacted by the project was provided by NHAI

4.8.3 *Country Specific Regulations*

The Fifth Schedule of the Constitution of India deals with administration and control of scheduled areas and scheduled tribes in these areas. In the state of Madhya Pradesh following districts are designated as Schedule V Areas: Jhabua, Mandla, Dhar, Khargone, East Nimar (Khandwa), Sailana tehsil in Ratlam district, Betul, Seoni, Balaghat, Morena.

4.8.4 *Consultation and Consent (FPIC) Requirement & Adequacy of Process followed*

No information on specific consultation undertaken with ST communities of Bhils and Bhilalas was available. Therefore the triggers for the Free Prior Informed Consent (FPIC) were examined on the basis of limited information available.

In addition to private land acquired under NH Act, 54.707 ha of forestland was diverted vide letter 8th Jan 2007. The break-up of the forestland diverted shows that 30.754 ha (56%) was from Indore District. In Dhar and Khargone District, only 19.556 ha (36%) and 4.397 ha (8%) forestland was diverted. The total forestland in villages from these three districts vis-à-vis the forestland diversion for this project is provided in **Table 4.4** below.

Table 4.4: Total forestland vis-a-vis forestland diverted for the project

District Name	Total Forest Land in Impacted Villages (in Ha)	Forest Land Acquired from Impacted Villages (in Ha)	% of Forest Land
Indore	2625.27	30.754	1.17%
Dhar	648.11	19.556	3.02%
Khargone	365.53	4.397	1.20%
Total	3638.91	54.707	1.50%
Villages with >50% ST Population	3057.28	40.358	1.32%

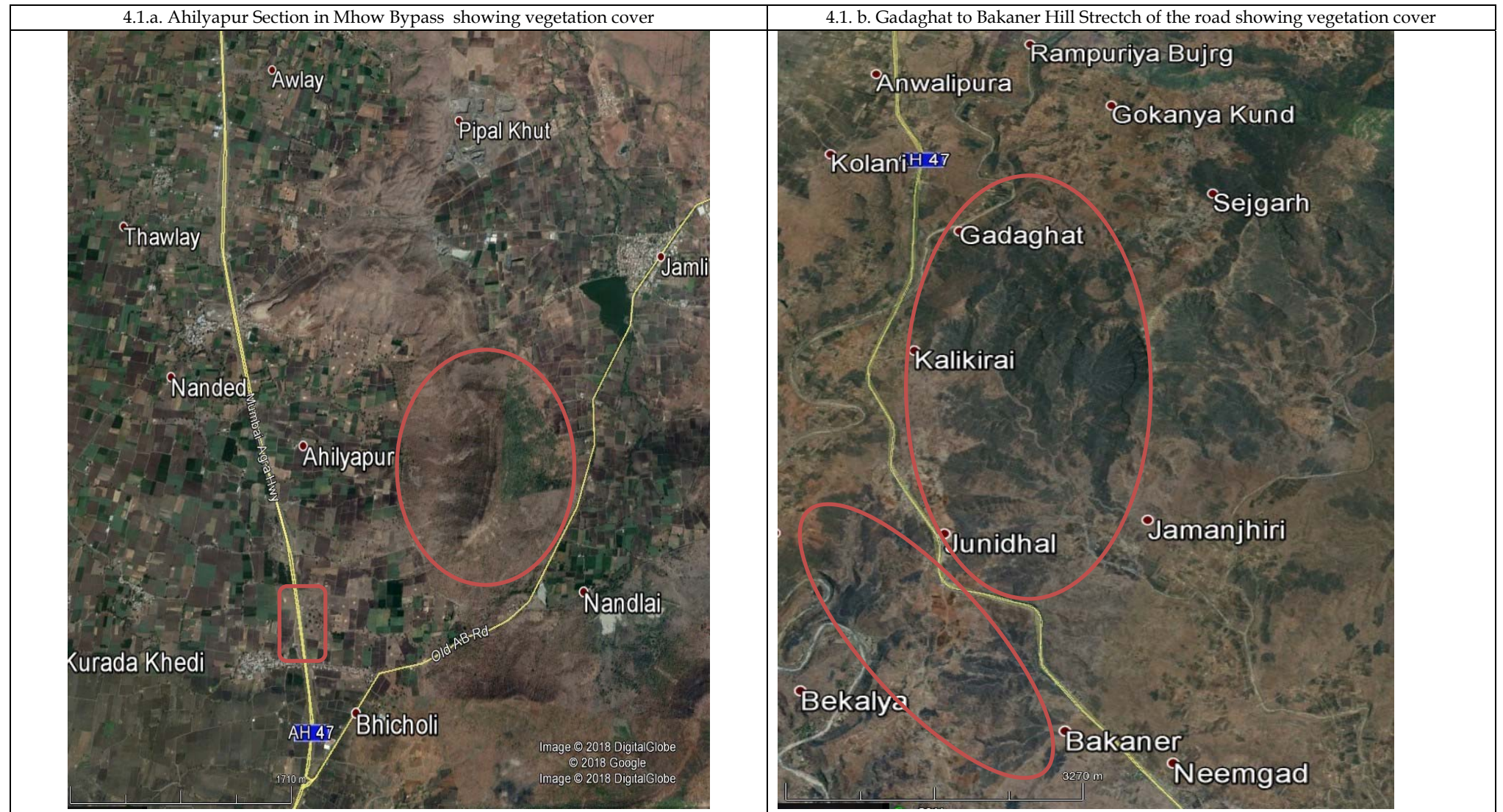
Source: Census of India 2011

The total forestland diverted for the project constitutes 1.5% of the total available forestland. If we consider villages with significant ST population, the total forestland acquired for the project is 40.358 ha which constitutes 1.32% of the total forestland available in these villages. The forestland acquired at village level varies the range between 0.87% and 3.97%. The maximum forestland is diverted from Awalipura in Mhow Taluka of Indore District. However, the maximum forestland diverted is 5.5ha from Yashwant Nagar in Indore District. Thus, the extent of the loss of forestland is low for most of the affected villages.

Except Ahilyapur, other villages in Mhow Bypass do not have significant ST Population. Total forestland diverted in Ahilyapur is only 0.102 ha which constitutes 2.63% of the total forestland available in this village. During drive through the road, it was noticed that Mhow bypass stretch did not have any significant vegetation cover along the road corridor. The google imagery (see Fig 5.1a below) covering Ahilyapur section of the road revealed that a small patch of forestland touched the road corridor while the hillock with vegetation cover was located away from RoW of the road.

A relatively denser vegetation cover was noticed in Ghat sections (from Gadaghat to Bakaner) of the road where existing RoW was increased to 15m additional width. The construction area was reportedly limited to construction of two additional lanes that was not more than 10m in width. The vegetation cover along the road corridor was thinner than the section away from it. The google image for this section of the road also confirms this (see Fig-4.1b). Community members available at Dhal and Palasmal within this stretch were consulted for the loss of any significant forest cover during expansion of the road. They also agreed that the forest cover away from the road corridor is denser and their dependence on the patch of forestland closer to the road corridor was minimum.

Figure.4.1 Images of forest and vegetation cover at selected stretches of projects where significant ST population lives



Consultation with Forest Office at Dhamod revealed that they have not issued any Forest Rights ownership documents in the villages within road corridor. The forest rights documents under the Forest Rights Act 2006 recognises both individual and collective rights of STs and other traditional forest dwelling communities. It is significant to note that FRA implementation in MP was started in 2008 and claims were received till Dec 2010. Though issuance of forest rights document is still not completed, the consultation with Forest Office at Dhamnod revealed that these claims were mostly from the forest villages located at interior places rather than close to the NH-3 corridor of Indore-Khalghat Toll Road. The consultation also revealed that the forest along the road corridor is thinner and does not have trees which are considered useful minor forest produce by ST communities.

Brief consultations with people at Palasmal (~5 men) and Dhal (~20 men and ~10 women) that are predominantly ST villages also confirmed that the forest patch from which they collect MFPs with economic value are located away from the road corridor. They also informed that the road expansion did not affect their critical heritage structures or cultural sites. However, around 40-50 houses were demolished at Palasmal and a few at Dhal. The owners of these houses/structures were paid compensation by NHAI. These families moved rebuilt their houses on the remaining portion of their affected land parcels or moved to alternative sites owned by them within the same village. As these families held the land and houses as private property, this would come within the ambit of PS-5 rather than being dealt under PS-7.

The consultations with community at Palasmal and Dhal as well as with District Administration did not reveal that non-titleholder ST families being relocated due to the project. It is understood that these villages along NH-3 were long recognised as revenue villages, hence, unlike the villages located in interior places, had their individual and community ownership (Nistar rights) well documented.

5 *ROAD CATEGORIZATION AND KEY EHS AND SOCIAL OBSERVATIONS*

5.1 *KEY EHS AND SOCIAL ISSUES*

The following table summarizes the key EHS and Social observations by applying the IFC ESDD screening criteria for operational Toll Roads. .

Table 5.1: Summary of Key EHS and Social Issues

Sr. No	Aspects	Description	Analysis & alignment with applicable standards.	Risk Rating
1	Litigation	<p>Review of available information indicated that there are currently 15 cases/ litigations pending out of which nine (9) are related to land acquisition or compensation. Discussions with NHAI Project Director, Indore PIU indicated that these litigations are between NHAI and the appellant and are related to reassessment of compensation. OPIPL is not involved/party to any litigation as informed.</p> <p>99% of compensation for land acquisition for the road under NH Act, 1956 has been disbursed.</p>		Low
2	Other risks	<p>The media reports on the road did not show any public protests on adverse environment or social impacts of the road. There are however, news articles on road accidents.</p>		Low
3	Assessment and Management of Environment and Social Risks and Impacts	<p>EIA for the project was carried out and Environment Clearance (EC) was obtained from Ministry of Environment and Forest (MoEF) via letter No. 5-26/2006-IA-III dated 17th November 2006. EIA study was undertaken as per regulatory requirement and is line with the same. OSE has a documented Environmental Management Manual at Corporate Level, applicable to all its SPVs. The EMS manual defines the EHS policy, roles and responsibility at various levels, legal and other requirements, training and awareness, Risk and Disaster Management Plan. Existing EMS partially meets the requirements under PS-1. The existing manuals do not provide adequate and detailed guidance on key issues.</p> <p>Management programme incorporated in CA are regularly monitored and progress on the same is presented in the form of Monthly Progress Report (MPR) to the Independent Engineer for further review and comments.</p> <p>Annual environmental monitoring is carried out for ambient air quality, wastewater quality and noise levels; parameters were observed to be within limits.</p> <p>Monthly Progress Report covering; road user’s complaint compliance report; accident/ incident report, report on damage, encroachment removal, dead animal removal, emergency services, etc. and maintenance report including preventive / periodic maintenance details, material modification report, tests conducted during the month, etc. is prepared and submitted to the Independent Engineer.</p>	<p>Existing EMS does not fully comply with IFC PS Requirements. Existing EMS lacks procedure on monitoring of EHS aspects. Monitoring of parameters as required under CA is only carried out.</p>	Moderate

Sr. No	Aspects	Description	Analysis & alignment with applicable standards.	Risk Rating
4	Resettlement Action Plan (RAP)	<p>OPIPL reported that no RAP was prepared for the project by them or NHAI to their knowledge. However, as per regulatory requirements this is not required. Therefore, only compensation for land parcels and structures impacted by the project was provided by NHAI</p> <p>Hence, socio-economic baseline information of those affected by the project is not available. Land acquisition was undertaken between 2007 and 2009 and in 2011 as per the requirements of NH Act, 1956. However, baseline data is not sufficient to retrospectively carry out a resettlement completion audit or ascertain whether non-titleholders were covered in land acquisition, compensation and resettlement and rehabilitation process.</p>		Moderate
5	Stakeholder/Community Engagement	<p>OPIPL does not have a formal stakeholder engagement policy or plan in place. OPIPL has undertaken very few community awareness campaigns on road safety. The company does not have a dedicated CSR Department to look into community relationship either. There are few charity-based activities undertaken by OPIPL.</p> <p>There is a complaint and suggestion feedback procedure for road users. Each Toll Plaza office, as mandated by the requirement of NHAI, is required to maintain a complaint register for registering complaints and suggestion from road users. Review of the complaints register indicated that most of the complaints were related to road safety, toll fee, toilet facilities etc.</p> <p>Therefore, it can be concluded that meaningful Stakeholder Engagement has neither occurred nor been documented from design/permitting through operation, with focus on operation phase</p>	Stakeholder Engagement and community development are not being done in systematic and planned manner.	Moderate

Sr. No	Aspects	Description	Analysis & alignment with applicable standards.	Risk Rating
6	Grievance Mechanism	<p>External Stakeholders There is a complaint and suggestion feedback procedure for road users. Each Toll Plaza office, as mandated by the requirement of NHAI, is required to maintain a complaint register for registering complaints and suggestion from road users. Review of the complaints register indicated that most of the complaints were related to road safety, toll fee, toilet facilities etc. There is no grievance mechanism for concerns apart from road use- such as access restriction, encroachment issues, public concerns on accidents, construction etc.</p> <p>Employees and Contract Workers A formal Grievance Redressal Mechanism for employees is present as part of the HR Manual. It was reported that site senior management is directly approachable and any person can directly contact his/her own supervisor, site in charge or approach the project head directly. If not resolved informally, there is a three stage escalation process. However, contract workers are not covered as part of the mechanism.</p>	OPIPL/OSE should formulate an external grievance redressal mechanism. In addition, it should extend the Grievance Redressal Mechanism to all workers at site. A grievance register for workers should be maintained at site and workers should be informed about it.	Low
7	Health & Safety	<p>A dedicated safety officer is not deployed for the project. Training on EHS aspects is being conducted covering safety sign awareness and road safety, use of PPEs on site. Incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work. Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room, however staff was not aware of the presence of any kind of emergency response plan. Also documented copy of plan was not made available for review. During site visit, some of the potential risk for road accident such as random parking of vehicles, animal movement, wrong side driving, were noticed. Action plan in case of accidental spillage of hazardous material on road is not place.</p>	<p>Dedicated safety officer is not deputed at site.</p> <p>Site-specific EPRP has not been prepared and was not available for review.</p> <p>Staff was not aware of the EPRP.</p> <p>Incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work.</p>	Low

Sr. No	Aspects	Description	Analysis & alignment with applicable standards.	Risk Rating
8	HR/ Contractor Management	<p>OPIPL 216 direct employees and has additional 45 security guards (contracted) and 40-50 daily wage workers engaged in median and avenue plantation maintenance.</p> <p>There is an HR Team at corporate level as well as a dedicated HR staff at project level to take care of workers issues. The HR officer oversees the implementation of Indian statutory requirements pertaining to labour, labour welfare and disputes (at each site and at corporate level). OPIPL has an HR Manual, which is applicable to its employees. . ERM observed a satisfactory level of compliance in statutory requirements for OPIPL staff and skilled work force.</p> <p>There are approximately 45 contracted workers engaged across three stretches of the road for maintenance activities. The workers are engaged by OPIPL The working hours are from 8:00 hrs to 18:00 hrs, which includes one-and-a-half hours of break. Workers reported that there are very few instances of overtime work. In case there is overtime work then the workers are paid double the hourly rate as mandated by law. A contractor management system vis-a-vis hiring and payment of contractors and contract workers is present in the HR Policy.</p> <p>Review of HR Policy, sample appointment letters of lower grade workers and worker consultations (post site visit by client) related to probation indicated that there are instances of prolonged probation periods.</p>	<p>OSE should revise its terms and conditions of employment to check prolonged probation period.</p> <p>In addition, OSE should have a policy statement in the HR Manual on non-discrimination and equal opportunity.</p>	Moderate
9	Pollution Prevention	<p>Annual monitoring is carried out for ambient air quality, wastewater quality and noise levels.</p> <p>As a part of waste management plan, four colour-coded drums are placed at site for waste segregation; however, its implementation required improvement.</p> <p>Waste generation records are not maintained.</p> <p>Burning of waste is being practised on site.</p> <p>Records of hazardous waste generation on site are also not maintained in Form 3 as required under Hazardous waste Rules and also annual return in Form 4 is not submitted to PCB.</p> <p>Hazardous waste was seen stored at site for more than 1 year. However, as per hazardous waste rules, hazardous waste need to be disposed of in 90 days.</p> <p>Hence, noncompliance with respect to hazardous waste rules was observed at site.</p> <p>Water meter at Khalghat toll plaza not installed</p>	<p>Waste Management at site needs improvement.</p> <p>Applicable requirement under hazardous waste rules are not being complied.</p> <p>Water consumption records are not maintained and water meter not installed at bore well</p>	Moderate

Sr. No	Aspects	Description	Analysis & alignment with applicable standards.	Risk Rating
10	Natural Habitats	<p>There are no ecologically sensitive areas including national parks, wildlife sanctuaries, biosphere reserves, and conservation reserves, wetlands of conservation importance or key biodiversity areas in a 5 km radius of the road project.</p> <p>Nearest wildlife sanctuary is Ralamandal present at a distance of ~ 11 km from the starting point.</p> <p>The project involved diversion of 54.3 ha of forest land for 4 laning of NH-3 from 12.6 km to 84.7 km. Forest clearance for diversion of forest land has been obtained by MoEF (F.C. Division) dated 3rd September 2008. As compensatory afforestation, at least three times i.e. 13500 trees were to be planted. Total avenue plantation for the project, as on the date of site visit is 25,261.</p>	Required Forest Clearance secured and compensatory plantation was undertaken.	Low
11	Indigenous peoples, tribes and communities	<p>The two districts of Dhar and Khargone are Schedule V areas. The project impacted two tribal communities in the area - Bhils and Bhilalas. Both communities are categorised as Scheduled Tribes. No Resettlement Action Plan or Indigenous Peoples Development Plan was prepared for the project.</p> <p>However, as per regulatory requirements this is not required. Therefore, only compensation for land parcels and structures impacted by the project was provided by NHAI.</p>	<p>The trigger for FPIC in Indore-Khalghat section of the NH-3 was found relevant due to impact on 'charnoi' or 'pastureland'. However, as the concerned project of widening an existing road required lateral expansion of the existing RoW, the loss of grazing land was small in quantity and the net loss of total pastureland available in the village was a small percentage only.</p> <p>Therefore, the impact on the pastureland is assessed to be insignificant.</p> <p>ST families losing land were paid cash compensation, but the impact on livelihood of ST families who lost land for expansion of the road was not assessed. Hence, the significance of the residual impacts and vulnerability of these households is not known.</p>	Moderate
12	Cultural Heritage	There was no impact reported on any cultural heritage in general and of IPs in particular in the area.		Acceptable

5.2 PROJECT CATEGORIZATION

5.2.1 Rationale for Categorization

The projects are screened using 12 key environment and social criteria, which covers IFC PS-1 to 8 (see table below).

Sl. No	E&S Criteria	Relevant IFC PS
1	Litigation	PS-1
2	Protests	
3	Assessment and Management of Environment and Social Risks and Impacts	
4	Stakeholder/Community Engagement	
5	Grievance Mechanism	
6	HR/ Contractor Management	PS-2
7	Health and Safety	PS-2 and PS-4
8	Pollution Prevention	PS-3
9	Resettlement Action Plan (RAP)	PS-5
10	Natural Habitat	PS-6
11	Indigenous Peoples	PS-7
12	Cultural Heritage	PS-8

The overall risk or compliance ratings for these key screening criteria was assigned using the definitions below.

Significant Gap	Material issue with potential severe consequences and limited opportunities of correcting, leading to operations shut down or triggering of IFI's accountability mechanism (e.g. CAO/Ombudsman, CEIU, Inspection Panel, etc.).
H	Material regulatory and/or policy non-compliances that may: <ul style="list-style-type: none"> <i>induce temporary business interruption, and/or</i> <i>induce a material cost, and/or</i> <i>significantly affect sensitive (IP, vulnerable, protected area, C/N habitat, water source, etc.)receptors,</i> <i>induce community opposition that may damage Owner's reputation.</i> <i>Contradict the intent of the applicable standards (e.g. compensation at replacement value, non-titled land users, no-net loss/net gain of biodiversity, broad community support, etc.)</i> <i>Have residual impact not acceptable as per applicable standards and with a low likelihood to remediate</i> Severe cases may affect business continuity and/or trigger Lender's compliance mechanism
M	Regulatory permitting non-compliance, which may result in non-material rectification cost or fine, and is unlikely to result in the short term in business discontinuity in current regulatory enforcement context. Residual impact not in line with applicable standards and likelihood to remediate high
L	Legal non-compliance, which may result in minor cost or only requires management time to address the issue. Or opportunity for improvement. Residual impact could be considered acceptable as per applicable standards and necessity to remediate low
A	Acceptable performance and compliance to IFC PS Requirements

5.2.2 Screening of Critical Habitat

There are no ecologically sensitive areas including national parks, wildlife sanctuaries, biosphere reserves, and conservation reserves, wetlands of conservation importance or key biodiversity areas in a 5 km radius of the road project. The stretch is not on migratory route of animals. Nearest wildlife sanctuary is Ralamandal present at a distance of ~ 11 km from the starting point.

5.2.3 Screening of FPIC Triggers

FPIC Trigger as per PS-7	ERM evaluation
Impacts on land and natural resources subject to traditional ownership or under customary use	<p>Land Acquisition under NH Act 1957 comprises 94% of private land and only 5% of the land acquired is reported as grazing (charnoi) land. Only 23.9 ha of forestland out of 54.7 ha of total forestland diverted for the project fall in Schedule-V area of Dhar and Khargone District. Consultations revealed that no claims of forest rights in these affected area were claimed under FRA 2006 during its implementation between Feb 2008 and Dec 2010. Further, community members interviewed informed that the forest land along the corridor of NH-3 has hardly any minor forest produce with economic value. Hence, impacts on land and natural resources subject to traditional ownership or under customary use is less likely to have existed.</p> <p>However, the project acquired 12.76ha of pasture land and out of this 7.764ha of pastureland was from 24 villages with significant (>50%) ST population. This constitutes 7% of the total land acquired from these villages and only 1.24% of the total pastureland available in these villages. There are only two villages from where the pastureland lost is ~7% of their total pastureland available. For remaining villages, the loss of pastureland vis-à-vis the total pastureland available is negligible.</p>
Relocation of Indigenous Peoples from Lands and Natural Resources subject to traditional ownership or under customary use.	<p>Documents from the project planning and implementation phase informs that house structures of few ST families were impacted and affected families received compensation. The relocation of these families mostly to the adjacent areas and within the village itself. As these affected structures were private properties, such impact comes in the ambit of PS-5 rather than PS-7. Considering their relocation to adjacent areas, their access to the collectively owned or traditionally used land and natural resources must have continued. As the impacted land for the project are not identified to have any significant customary use or ownership of the ST communities, their relocation from such land and natural resources is not expected.</p>
Impact on critical cultural heritage that is essential to the identity and/or cultural,	Neither such impact was mentioned in the documents with OPIPL, nor did the community members

FPIC Trigger as per PS-7	ERM evaluation
ceremonial, or spiritual aspects of Indigenous Peoples lives.	interviewed in Palasmal and Dhal (both predominantly ST villages) informed about existence of such critical cultural heritage site or structure.
Use of cultural heritage including knowledge, innovations, or practices of Indigenous Peoples for commercial purposes	Not relevant for a Toll Road Project.

Based on the available information, field observation, and consultation with key institutional stakeholders and members of ST community at Palasmal and Dhal, the trigger (as in PS-7 para 13 to 17) for FPIC in Indore-Khalghat section of the NH-3 is due to impact on 'charnoi' or 'pastureland' which are under customary use of ST families.

However, as the concerned project of widening an existing road required lateral expansion of the existing RoW, the loss of grazing land was small in quantity and the net loss of total pastureland available in the village was a small percentage only. Therefore, the impact on the pastureland is assessed to be insignificant. Though there are a few news articles on road accidents, particularly at Ghat section near Khalghat, no public protest on land acquisition and resettlement issues was found in public domain.

5.2.4 Categorisation of the Road

Table below provide our findings of our screening of these criteria for the Indore - Khalghat road.

Table 5.2 Project categorisation screening for Indore-Khalghat Road

Criteria	Findings
Years in Operation	Concession agreement of the project was signed on 10 th March 2006. Concession period of the project is 20 years from the appointment date. Provisional completion certificate was obtained dated 20 th August 2009 and completion certificate was obtained dated 18 th December 2009. Hence, the road is operational for more than 8 years.
Status of Land Acquisition	A total of 523.678 ha land has been acquired for the project. This includes 54.3 ha of forestland diverted for non-forest use and 469.578 of government and private land acquired through NH Act 1956. Almost 98% of private land was acquired between 2006 and 2009 (remaining was completed in 2011). As land acquisition process was completed long time back, the details (3G Notification) were not available for review. However, ERM team confirmed from consultation with NHAI-PD that no land acquisition related matter pending. However, a few litigation on compensation disbursement is pending now.

The road has been operational for more than 2 years with no pending land acquisition (as reported by NHAI); hence, the road is considered as Category 1. The current overall risk ratings for each of the screening criteria as well as risk ratings expected after implementation of ESAP is provided below.

IFC PS	Screening Criteria	Current Risk Rating	Risk Rating After ESAP Implementation
PS-1	1. Litigation	Low	Low
	2. Other risks- Protests	Low	Acceptable
	3. Assessment and Management of Environment and Social Risks and Impacts	Moderate	Acceptable
	4. Stakeholder/Community Engagement	Moderate	Acceptable
	5. Grievance Mechanism	Low	Acceptable
PS-2	6. HR/ Contractor Management	Moderate	Acceptable
PS-2 & 4	7. Health & Safety	Low	Acceptable
PS-3	8. Pollution Prevention	Moderate	Acceptable
PS-5	9. Resettlement Action Plan (RAP)	High	Low
PS-6	10. Natural Habitats	Low	Acceptable
PS-7	11. Indigenous peoples, tribes and communities	Moderate	Acceptable
PS-8	12. Cultural Heritage	Acceptable	Acceptable
Overall Site Ranking		Moderate	Acceptable

Thus, the overall current risk rating of the road is “Moderate” which would be reduced to “Acceptable” level after implementation of ESAP recommended in Chapter-6 of this report.

6 ENVIRONMENT AND SOCIAL ACTION PLAN

Keeping the magnitude of the environment and social action impacts, the recommended Environment and Social Corrective Action Plan (E&S CAP) is provided in Table below *Error! Reference source not found..*

Table 6.1 Environmental and Social Corrective Action Plan

No.	Applicable Standard (regulatory requirement, IFC PS, WBG EHS Guideline, etc.)	Specific Gap	Recommendation	Priority	Responsible Person / Function	Deadline / Project Cycle Phase	Completion Indicator	Cost Estimate of corrective actions / liabilities
1.	Legal or Regulatory Compliance	<p>No legal register is prepared and maintained by OPIPL covering necessary permits, approvals and regulatory reporting requirement.</p> <p>Following are the non-compliance observed with respect to the permits obtained.</p> <ul style="list-style-type: none"> As per the Hazardous Waste Authorization obtained for khalghat Toll Plaza, records of hazardous waste are not maintained in Form 3 and annual return in Form 4 is not submitted as per the Rules Hazardous waste is stored for more than 90 days <p>Management has applied for Combined Consent for Sonway Toll Plaza (seen operational at the time of site visit) dated 6th March 2018, which also includes authorization under hazardous waste rules.</p>	OPIPL should develop an environment and social legal register for the project to ensure a comprehensive list is available and compliance to all applicable permits conditions are systematically tracked.	High	OPIPL	1 Month	Legal Register (Updated in every Quarter)	Minor cost and Management Time
2.	Legal or Regulatory Compliance	The Locators Safety and Security Protections which is deployed at Sonway Toll Plaza is registered in MP and their licence is valid till 27th Jan 2019.	Falcon Guard Pvt Ltd should obtain registration under MP Private Security Agencies (Regulation) Rules 2012.	High	OPIPL	1 Months	Copy of registration	Minor Cost and Management Time
3.	IFC Performance Standard 1 - Assessment and Management of Environmental and Social Risks and Impacts	Oriental has a procedure for Environmental Management System (EMS) and SOPs. It includes Planning, Environmental Aspects, Objectives, Targets & Programmes, Legal and Other Requirement, Implementation & Operation and Competence, Training and Awareness. This was reported to be applicable to its SPVs including OPIPL. Overall implementation of Environmental Management Manual at the site level was observed to be satisfactory. However, gaps were observed with respect with respect to the adoption and implementation of some of the policies and procedures provided for within the EMM at the asset level. Although policies with respect to public communication and grievances has been established at the corporate level, the adoption of the same at the site level was observed to be weak or informal in nature.	OSE should update the existing EHMS by a Third Party to include adequate level of details to fully comply to PS-1 Requirements	Medium	OSE	Within 6 Months	Project specific ESMS and documented management plans	Minor cost for engaging third party and/or requires management time to address the issue.

¹ MLC - "Most Likely Case"; RWC - "Reasonable Worst Case"; Where 'minor costs' is been stated, this indicates a figure less than USD25,000 and management/personnel time.

No.	Applicable Standard (regulatory requirement, IFC PS, WBG EHS Guideline, etc.)	Specific Gap	Recommendation	Priority	Responsible Person / Function	Deadline / Project Cycle Phase	Completion Indicator	Cost Estimate of corrective actions / liabilities
4.	IFC Performance Standard 1 - Assessment and Management of Environmental and Social Risks and Impacts	O&M manual prepared for the project provides guidelines, procedures and system for implementation of operation & maintenance of the project. It has section on Health and Safety, Traffic Management and EMP. However, EMP is limited to pollution control measures, environmental pollution monitoring during construction period, redevelopment of borrow areas, planting and maintenance of trees. Specific Environment and Social Management plans to be implemented at site during operation and maintenance phase have not been prepared.	Specific management plans to be prepared by OPIPL shall include the following: <ul style="list-style-type: none"> • Carriageway solid waste management plan; • Oil/ chemical spill contingency plan; • Storm water management Plan; • Avenue and Median Plantation and management plan. • Stakeholder Engagement Plan • Emergency Preparedness Plan 	Medium	OPIPL	Within 6 Months	Copy of site specific Plans	Management time in preparation of site-specific management plans and its implementation on site.
5.	IFC Performance Standard 1: Para 12: identify individuals and groups that may be directly and differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status	The project affected two tribal communities in the area - Bhils and Bhilalas. Both communities are categorised as Scheduled Tribes. Approx. 150 Project Affected Persons belong to these communities from the villages of Dhal, Palasmal, Bakaner, Janavav Kutti, Jhamanjhiri, Dugani (with >90% ST population) etc. were affected Screening of impacts as per FPIC triggers (refer 5.2.3) suggest that the concerned project of widening an existing road required lateral expansion of the existing RoW, the loss of grazing land was small in quantity and the net loss of total pastureland available in the village was a small percentage only and the impact on the pastureland is assessed to be insignificant. Data on village wise break up of physically displaced households or that of STs is not available with NHAI. However, discussions with ST community confirmed that there was indeed physical displacement of ST households, especially in Dhar and Khargone districts from villages of Dhal, Palasmal, Bakaner, Jhamanjhiri, Dugani. Approx. 150 ST families losing land were paid cash compensation; however livelihood impact due to lost land for expansion of the road was not assessed, due to lack of readily available data. As per section 4.2.2 which covers "Livelihood Dependence on Forest Land Diversion" community members agreed that the forest cover away from the road corridor is denser and their dependence on the patch of forestland closer to the road corridor was minimum.	OPIPL is recommended to prepare and implement targeted and differentiated measures in sharing development benefits and opportunities. Considering STs as a vulnerable group, OPIPL is recommended to further assess if adverse impacts of the project had any disproportionate impact on them and if they are disadvantaged in availing development benefits and opportunities. The assessment, undertaken through the SPV and InvIT's E&S staff, will be used to design and implement the differentiated development measures for targeting vulnerable population including priority for villages with predominant ST population. Suggested List of CSR activities mentioned under Companies Act 2013, may be used as starting point for finalizing these welfare & development activities. OPIPL will choose contextual and localized options for undertaking such welfare and development activities.	Medium	OPIPL	Within 6 Months	Report on CSR activities	Management time, Cost to be covered under CSR budget for the Company.
6.	IFC Performance Standard 1 - Assessment and Management of Environmental and Social Risks and Impacts	Project does not have dedicated EHS personnel for overall management and supervision of EHS aspects associated with project operations.	EHS management at corporate level (OSE), and project level (OPIPL): Qualified and experienced personnel to be engaged for implementation monitoring and review meet following Criteria: Corporate level, EHS Manager: A graduate in occupational health and safety or related field with a minimum of 8 to 10 years working experience in road and infrastructure projects. The incumbent shall be well versed with good industrial H&S practices and all applicable Environmental related laws.	Medium	OSE/OPIPL	Within 3 Months	Appointment Letters of EHS Manager/ EHS Supervisor at Corporate and Regional levels	Operation Cost in terms of Employing EHS Personnel at the corporate level.

No.	Applicable Standard (regulatory requirement, IFC PS, WBG EHS Guideline, etc.)	Specific Gap	Recommendation	Priority	Responsible Person / Function	Deadline / Project Cycle Phase	Completion Indicator	Cost Estimate of corrective actions / liabilities
			Regional level, Supervisor - EHS: graduate / diploma in occupational health and safety or related field with a minimum of 3 to 5 years working experience in road and infrastructure projects.					
7.	IFC Performance Standard 1 - Assessment and Management of Environmental and Social Risks and Impacts	Procedures to monitor and measure the effectiveness of the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements has not been established.	OPIPL at the corporate level is required to establish monitoring and review procedures for effective supervision of EHS implementation by OSE staff and its subcontractors. These shall be the responsibilities of EHS Manager and the EHS Supervisor. The procedure shall include the minimum following requirements: <ul style="list-style-type: none"> - Establishing parameters for supervision on all aspects outlined in the SOPs or Environment Management Manual; - Establish an audit schedule for bi-annual internal audits to be conducted at each of its SPVs including OSE; - Establish reporting formats for providing corrective actions for gaps identified during the audit; - Procedures for review of closure for implementation of corrective actions. 	Medium	OSE	Within 6 months	Monitoring and Review Procedure	Management time in development of monitoring and review procedure and its implementation.
8.	IFC Performance Standard 1 - Assessment and Management of Environmental and Social Risks and Impacts	As per requirement of CA, OPIPL has been preparing and submitting the Monthly Progress Report, however preparation of annual EHS performance report to check performance is not in place.	Annual EHS Performance Report should be prepared to supplement the Annual Report.	Medium	OSE/OPIPL	Every Calendar or Financial Year	Annual EHS Performance Report	Management Time and Operational Cost
9.	IFC Performance Standard 2: Labour and Working Conditions	Dedicated safety officer is not deployed for the project. It was noted that incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work. Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room, however staff was not aware of the presence of any kind of emergency response plan. Documented copy of the plan was not made available for review.	Following measures on Occupational Health & Safety to be taken: <ul style="list-style-type: none"> • Qualified safety personnel need to be engaged for the project. • Accident/ incident register to be maintained at both the Toll Plazas. • Emergency preparedness and response plan to be prepared, communicated to the staff. Staff to be trained on handling of emergency situations. 	Medium	OPIPL	Within 3 Months	Safety Officer Copy of accident/ incident register Copy of EPRP.	Operation Cost for employment of Safety Officer. Management Time for recoding accidents and maintaining incident/ incident register and development of EPRP.
10.	IFC Performance Standard 2: Labour and Working Conditions	A formal Grievance Redressal Mechanism for employees and contract workers does not exist. It was reported that site senior management is directly approachable and any person can directly contact his/her own supervisor, site in charge or approach the project head directly. Grievance records are not maintained by OPIPL.	OPIPL/OSE should extend the Grievance Redressal Mechanism to all workers at site. A grievance register for workers should be maintained at site and workers should be informed about it.	Medium	OPIPL	Within 2 months	Documented Employee Grievance Redressal Policy and records	Management Time
11.	IFC Performance Standard 3: Resource Efficiency and Pollution Prevention	As a part of waste management prepared by OPIPL, four different coloured drums (Blue, Yellow, Red and Black) were seen placed at both the plazas for collection of segregated waste. However its implementation required improvement.	Ensure required training and awareness of staff on the waste management plan to ensure its effective implementation and to stop burning of waste	Medium	OPIPL	Within 3 Month	Physical verification	Management time for imparting training to site staff and maintaining records.

No.	Applicable Standard (regulatory requirement, IFC PS, WBG EHS Guideline, etc.)	Specific Gap	Recommendation	Priority	Responsible Person / Function	Deadline / Project Cycle Phase	Completion Indicator	Cost Estimate of corrective actions / liabilities
12.	IFC Performance Standard 3: Resource Efficiency and Pollution Prevention	Solid waste and litter was observed to be scattered on the ROW edge as well as the median in some chainages. It was reported that manual labours are deployed for collection of waste and as a practise they collect waste from median and dump it out of the RoW.	Ensure cleaning of the road side and median regularly to avoid dumping and maximizing of road side waste. Waste from median and ROW to removed and ensure disposal as per the norms.	Medium	OPIPL	Within 3 Month	Physical verification	Management Time
13.	IFC Performance Standard 3: Resource Efficiency and Pollution Prevention	Records of hazardous waste are not maintained in Form 3 and annual return in Form 4 is not submitted as required under authorization obtained under Hazardous and Other Waste (Management and Transboundary Movement) Rules. ~ 40 to 50 liters of waste/ used oil was seen stored on land without any secondary containment for more than 90 days at site which is again non-compliance under Hazardous Waste Rules.	Management of Hazardous Waste at both the sites as per norms, Form 3 – record of hazardous waste to be maintained, Form 4 – annual return to be submitted to the Pollution Control Board Hazardous waste not be stored for more than 90 days and to be disposed as per the norms with the authorized vendor	High	OPIPL	Within 3 Months	Copy of Form 3, Form 4, Hazardous waste manifest	Management Time in maintaining records
14.	IFC Performance Standard 3: Resource Efficiency and Pollution Prevention	Procedure to measure utilization of water resource for the project is not in place and water consumption records are not maintained at site. Well present at Khalghat Toll Plaza was observed to be non-metered.	Water meter to be installed at well present at Khalghat Toll Plaza. Water Consumption Records to be made and initiatives to be taken	High	OPIPL	Within 3 Months	Water meter at Well Water consumption records (daily/ weekly/ monthly)	Minor cost in installation of water meter and maintaining water consumption records
15.	IFC Performance Standard 4: Community Health, Safety, and Security	During site assessment, following observations were made which might act as potential risk for road accidents; <ul style="list-style-type: none"> Vehicles were seen parked in the corridor and in ROW at many places Vehicles were observed driving in opposite direction 	Undertake awareness program for community and to ensure vehicles are not parked within the corridor or in ROW and people should not cross in opposite direction.	High	OPIPL	Within 6 Months	Awareness Program Photos and Schedules	Minor Cost in undertaking community awareness programme.
16.	IFC Performance Standard 4: Community Health, Safety, and Security	External Stakeholders There is no grievance mechanism for concerns apart from road use- such as access restriction, encroachment issues, public concerns on accidents, construction, maintenance etc. Employees and Contract Workers Contract workers are not covered as part of the mechanism.	OPIPL/OSE should formulate an external grievance redressal mechanism. In addition, it should extend the Grievance Redressal Mechanism to all workers at site. A grievance register for workers should be maintained at site and workers should be informed about it.	Medium	OPIPL	Within 3 months	Grievance Redress Mechanism	Management Time

Annex A

List of Documents
Reviewed by ERM for
this ESDD

Annexure-A: List of Documents Reviewed by ERM for this ESDD

<i>Title of the Document</i>	<i>Date/Year</i>	<i>Source/Department</i>
Environment Clearance for the four laning of Indore Khalghat section from km 12.600 to km 84.700 of NH-3 in the state of Madhya Pradesh	17-11-2006	Ministry of Environment and Forest
Forest Clearance for diversion of forest land for 4 laning of NH-3 from 12.6 km to 84.7 km in Madhya Pradesh	3-09-2008	Ministry of Environment and Forest (MoEF) (F.C Division)
Forest Clearance for diversion of 54.3 ha of forest land for 4 laning of NH-3 from 12.6 km to 84.7 km in Madhya Pradesh	8-01-2007	Ministry of Environment and Forest (MoEF) (F.C Division)
Tree Cutting Permission for 1122 trees falling with the ROW in Dhar District	8-01-2007	Additional Collector, Dhar
Tree Cutting Permission for 526 trees falling with the ROW in Maheshwar Tehsil	27-09-2006	Additional Collector, Khargone
Tree Cutting Permission for 2896 trees falling with the ROW in Indore District	05-12-2006	Additional Collector, Indore
Consent to Operate (CTO) for Toll Plaza, Khalghat, Telsil Dharamapuri, District Dhar	01-06-2015	Madhya Pradesh Pollution Control Board (MPPCB)
Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules for Toll Plaza, Khalghat	01-06-2015	MPPCB
Consent to Establish for project office at Sonway Toll Plaza, Sonway, A.B. Road, District Indore (MP)	22-12-2017	MPPCB
NOC for abstraction of water from well present at Khalghat Toll Plaza	19-01-2018	Gram Panchayat, Khal Bujurg
Fire NOC for Sonway Toll Plaza	06-01-2018	Department of City Council, Rau, District Indore
Completion Certificate (CC)	18-12-2009	Sheladia Associates, Inc
Provisional Completion Certificate	20-8-2009	Sheladia Associates, Inc
Environment Management Manual		Oriental Structural Engineers Pvt. Ltd.
Concession Agreement (CA) between National Highway Authority of India (NHAI) and M/s Oriental Pathways (Indore) Private Limited (OPIPL)	March 2006	OPIPL
Operation and Maintenance (O&M) Plan for the first year of operation	April 2009	OPIPL
Manual for Operation and Maintenance		OPIPL
Maintenance service contract for diesel generator for Khalghat toll plaza	06-08-2017	OPIPL
Permission for installation of D.G. at Khalghat Toll Plaza	23-04-2011	Electrical Safety and Sub Chief Electrical Inspector, Madhya Pradesh
Permission for installation of D.G. at Sonway Toll Plaza	23-01-2007	Electrical Safety Sub Chief Electrical Inspector, Madhya Pradesh
Air Analysis Report for Khalghat	10-01-2018	Regional Laboratory, MPPCB
Noise Monitoring Report for Khalghat	10-01-2018	Regional Laboratory, MPPCB
Organisation Chart for the Toll Plazas		OPIPL
Information for conducting Due Diligence on Environmental Issues/ safeguards on projects funded by IIFCL		OPIPL
Training calendar for year 2017-2018	25-03-2017	OPIPL
Sample of Issuance of personal protective equipment to labours	01-12-2017	OPIPL
Executive Summary of the Project - EIA Report	March 2006	OPIPL
Monthly Operation and Maintenance Report	October 2017	Independent Consultant (IE)
Photographs of celebration of road safety week at site for year 2017		OPIPL
Accident data from 2014 to 2017		OPIPL
Sub-contract work order and agreement for supply of	1-04-2017	OPIPL

water with Contractor - Suresh Chandra Sharma		
Sub-contract work order and agreement for supply of water with contractor named Radheyshyam Patil	1-04-2017	OPIPL
Sub-contract work order and agreement for supply of water with contractor named Santosh Patil	1-04-2017	OPIPL
Sub-contract work order and agreement for supply of water for Toll plaza, Sonway with contractor named Sardar Singh	1-04-2017	OPIPL
Sub-contract work order and agreement for landscaping & maintenance of Sonway Toll Plaza	1-04-2017	OPIPL
Report of joint survey of avenue plants with IE representative	26-04-2017	OPIPL
Daily Project Report (DPR)	January 2018	OPIPL
Environment, Health & Safety (EHS) Policy		OPIPL
Annual maintenance programme for the year 2017-2018		OPIPL
Letter to the Collector of District Dhar regarding actions taken for prevention of accidents at Bakaner Ghat	02-09-2013	OPIPL
Operation and Maintenance Report for November 2017 submitted to IE		OPIPL
Accident data from 2013 to 2017		OPIPL
Log Book of vehicle at site for the month of December 2017		OPIPL
Details of fire extinguishers present at site		OPIPL
Details of wages for the month of December 2017 for M/s Falcon Guard Private Limited	December 2017	OPIPL
Register of Wages for labours	December 2017	OPIPL
Details of wages for the month of December 2017 for M/s Omsai Professional Detective & Security Services (P) Limited	December 2017	OPIPL
Court Order giving details of arbitration	10-06-2013	
Copy of Petition		
HR Manual		OPIPL
Land Acquisition 3D Notifications		OPIPL/NHAI/public domain
Contractor Agreement		OPIPL and Falcon
Labour License		OPIPL
PF/ESIC details		OPIPL
CSR Activities photos		OPIPL
BOCW License		OPIPL

Annex B

Screening Checklist for
Issues Covered in IFC
Performance Standards,
2012

Annex-B: Screening Checklist for Issues Covered in IFC Performance Standards, 2012.

Project and Its Area of Influence	
Project Proponent	Oriental Pathways (Indore) Private Limited (OPIPL) OPIPL is a Special Purpose Vehicle (SPV) promoted by Oriental Structural Engineers Pvt Ltd & Delhi Brass & Metal Works (DBMW) consortium was incorporated in September 2005 for improvement, operation and maintenance including strengthening and widening of the existing two-lane road to four-lane dual carriageway from km 12.600 – km 84.700 of NH-3 (Indore - Khalghat section) in the state of Madhya Pradesh on a Build, Operate and Transfer (BOT) basis.
Project Summary	The project involves for improvement, operation and maintenance including strengthening and widening of the existing two-lane road to four-lane dual carriageway from km 12.600 – km 84.700 of NH-3 (Indore - Khalghat section) in the State of Madhya Pradesh. OPIPL has entered into an agreement with NHAI to construct, Operate and Maintain the proposed road for the horizon period of 20 years. Salient Points of the Project are: Date of Signing of Concession Agreement- 10 th March 2006 Date of commencement- 6 th September 2006 Date of commercial operation – 21 st August 2009
Area of Influence (PS-1:8)	Project includes four-lane dual carriageway of 72 km. project required acquisition of 498 hectares of land – private, government and forest. The land required for the project came from 51 villages from 5 talukas of 3 districts of Madhya Pradesh (3 villages from Khargone District, 20 villages from Dhar District, and 28 villages Indore District).
Major Sub-contractors (PS-1: 9)	O&M is entirely undertaken by OPIPL. Sub contracted activities include security only

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
PS-1: ESH Management System					
1.1	PS-1: 5	Management System	The client will establish and maintain an ESMS appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts. The ESMS will incorporate the following elements: (i) policy; (ii)	Oriental has a procedure for Environmental Management System (EMS) and SOPs. It includes Planning, Environmental Aspects, Objectives, Targets & Programmes, Legal and Other Requirement, Implementation &	OSE should update the existing EHMS by a Third Party to include adequate level of details to fully comply to PS-1 Requirements.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			identification of risks and impacts; (iii) management programs; (iv) organizational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review.	<p>Operation and Competence, Training and Awareness. This was reported to be applicable to its SPVs including OPIPL.</p> <p>OSE has an overarching Environmental, Health and Safety (EHS) Policy signed by Director, applicable to the project.</p> <p>Impact Assessment Study for the project was undertaken prior to construction of the project by NHAI. There is no dedicated EHS officer at site; HR and administration manager look into permitting and legal compliance at site. Emergency preparedness and Response plan is not in place.</p>	(see comments in 1.4 to 1.10 below)
1.2	PS-1: 6	Policy Framework	The client will establish an overarching policy defining the environmental and social objectives and principles that guide the project to achieve sound environmental and social performance. The policy should be consistent with the principles of the Performance Standards and applicable laws.	<p>OSE has an overarching Environmental, Health and Safety (EHS) Policy signed by Director, applicable to the project. Policy was seen displayed at various locations at both the Toll Plazas (Sonway and Khalghat). As per the policy, OSE is committed to</p> <ul style="list-style-type: none"> • Comply with all the applicable environmental laws, regulations and permit. • Investigate environmental incidents, identify root causes and implement corrective actions. 	-

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<ul style="list-style-type: none"> • Undertake regular reviews of the environmental aspects and impact registers. • Ensure safe working conditions and health environment for employees. 	
1.3	PS-1: 7-12	Identification of Risk and Impacts	The type, scale, and location of the project guide the scope and level of effort devoted to the risks and impacts identification process. The process may comprise a full-scale environmental and social impact assessment, a limited or focused environmental and social assessment, or straightforward application of environmental siting, pollution standards, design criteria, or construction standards. If assets to be developed, acquired or financed have yet to be defined, the establishment of an environmental and social due diligence process will identify risks and impacts at a point in the future when the physical elements, assets, and facilities are reasonably understood. The risks and impacts identification process will consider all relevant environmental and social risks and impacts of the project, including the issues identified in Performance Standards 2 through 8.	<p>Environmental and Social Impact Assessment (ESIA) study was carried out for the project and Environment Clearance (EC) was obtained from Ministry of Environment and Forest (MoEF) via letter No. 5-26/2006-IA-III dated 17th November 2006.</p> <p>EIA report has section on environmental impacts and mitigation measures along with environmental management and monitoring plan.</p>	-
			Where individuals or groups are identified as disadvantaged or vulnerable, the client	The project affected two tribal communities in the area - Bhils and Bhilalas. Both communities are	OPIPL is recommended to prepare and implement

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			will propose and implement differentiated measures so that adverse impacts do not fall disproportionately on them and they are not disadvantaged in sharing development benefits and opportunities.	<p>categorised as Scheduled Tribes. Approx. 150 Project Affected Persons belong to these communities from the villages of Dhal, Palasmal, Bakaner, Janavav Kutti, Jhamanjhiri, Dugani (with >90% ST population) etc. were affected</p> <p>Screening of impacts as per FPIC triggers (refer 5.2.3) suggest that the concerned project of widening an existing road required lateral expansion of the existing RoW, the loss of grazing land was small in quantity and the net loss of total pastureland available in the village was a small percentage only and the impact on the pastureland is assessed to be insignificant.</p> <p>Data on village wise break up of physically displaced households or that of STs is not available with NHAI. However, discussions with ST community confirmed that there was indeed physical displacement of ST households, especially in Dhar and Khargone districts from villages of Dhal, Palasmal, Bakaner, Jhamanjhiri, Dugani. Approx. 150 ST families losing land were paid cash compensation; however livelihood impact due to lost land for expansion of the road was not assessed, due to lack of readily available data.</p>	<p>targeted and differentiated measures in sharing development benefits and opportunities. Considering STs as a vulnerable group, OPIPL is recommended to further assess if adverse impacts of the project had any disproportionate impact on them and if they are disadvantaged in availing development benefits and opportunities. The assessment, undertaken through the SPV and InvIT's E&S staff, will be used to design and implement the differentiated development measures for targeting vulnerable population including priority for villages with predominant ST population.</p> <p>Suggested List of CSR activities mentioned</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				As per section 4.2.2 which covers "Livelihood Dependence on Forest Land Diversion" community members agreed that the forest cover away from the road corridor is denser and their dependence on the patch of forestland closer to the road corridor was minimum.	under Companies Act 2013, may be used as starting point for finalizing these welfare & development activities. OPIPL will choose contextual and localized options for undertaking such welfare and development activities.
1.4	PS-1: 13-16	Management Programs	The client will establish management programs that, in sum, will describe mitigation and performance improvement measures and actions that address the identified environmental and social risks and impacts of the project. Depending on the nature and scale of the project, these programs may consist of some documented combination of operational procedures, practices, plans, and related supporting documents (including legal agreements) that are managed in a systematic way. The management programs will establish environmental and social Action Plans, which will define desired outcomes and actions to address the issues raised in the risks and impacts identification process, as measurable events to the extent possible, with elements such as performance indicators, targets, or acceptance criteria	Schedule L of CA outlines preparation of O&M manual to be finalised in consultation with the Independent Consultant. The manual to include but not limited to the following aspects: <ul style="list-style-type: none"> • Traffic management plan including the corridor control plan; • Safety management programme including the emergency response protocol; • Environment Management Plan (EMP); • Organisation structure with responsibilities of key personnel; etc. O&M manual prepared for the project provides guidelines, procedures and system for implementation of operation & maintenance of the project. It has	OSE is recommended to update the existing Manual with adequate details through a competent Third Party. <p>Specific management plans to be prepared include the following:</p> <ul style="list-style-type: none"> • Carriageway solid waste management plan including construction waste; • Oil/ chemical spill contingency plan; • Storm water management Plan; • Avenue and Median Plantation and management plan.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			that can be tracked over defined time periods, and with estimates of the resources and responsibilities for implementation.	section on Health and Safety, Traffic Management and EMP. However, EMP is limited to pollution control measures, environmental pollution monitoring during construction period, redevelopment of borrow areas, planting and maintenance of trees. Specific Environment and Social Management plans to be implemented at site during operation and maintenance phase have not been prepared.	
1.5	PS-1: 17-19	Organizational Capacity	Key environmental and social responsibilities should be well defined and communicated to the relevant personnel and to the rest of the client's organization. Sufficient management sponsorship and human and financial resources will be provided on an ongoing basis to achieve effective and continuous environmental and social performance. Personnel will also possess the knowledge, skills, and experience to implement the specific measures and actions required under the ESMS and the methods required to perform the actions in a competent and efficient manner.	There is no dedicated EHS officer at site; HR and administration manager look into permitting and legal compliance at site. O&M In charge along with his team is responsible for undertaking routine and periodic maintenance including repair activities, cleaning, regular water and maintenance of avenue and median plants. Hence, there was a visible gap in the knowledge skill and experience of the personnel handling these responsibilities.	EHS management at corporate level (OSE), and project level (OPIPL): Qualified and experienced personnel to be engaged for implementation monitoring and review meet following Criteria: Corporate level, EHS Manager: A graduate in occupational health and safety or related field with a minimum of 8 to 10 years working experience in road and infrastructure projects. The incumbent shall be well versed with good industrial H&S

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
					<p>practices and all applicable Environmental related laws.</p> <p>Project level, Supervisor - EHS: graduate / diploma in occupational health and safety or related field with a minimum of 3 to 5 years working experience in road and infrastructure projects.</p>
1.6	PS-1: 20-21	Emergency Preparedness and Response	<p>The client will be prepared to respond to accidental and emergency situations associated with the project in a manner appropriate to prevent and mitigate any harm to people and/or the environment. This preparation will include the identification of areas where accidents and emergency situations may occur, communities and individuals that may be impacted, response procedures, provision of equipment and resources, designation of responsibilities, communication, including that with potentially Affected Communities and periodic training to ensure effective response. The emergency preparedness and response activities will</p>	<p>Oriental has a policy on Emergency preparedness, applicable for all its projects. However, documented copy of site-specific emergency response plan was not available for review.</p> <p>Management of road side emergency like road accident is assigned to the two plazas. For emergency preparedness ambulance, patrol vehicle and crane are available at both the Toll Plazas. In addition camp has been established in Bakaner Ghat (danger prone zone) with one ambulance having para medical staff, one crane and one patrolling vehicle. 2 high masts are also installed at Bakaner Ghat area.</p>	<p>Onsite emergency preparedness and response plan (covering road stretch, Toll Plazas and other associated facilities) to be prepared, maintained at site, communicated to the staff. The staff will be trained on handling and responding to various kind of emergencies identified in the plan in regular interval.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>be periodically reviewed and revised, as necessary, to reflect changing conditions.</p>	<p>Emergency helpline number is displayed at various locations along the entire road stretch.</p> <p>Emergency contact numbers including number of police, ambulance, nearest hospital, fire station, etc. was seen displayed at Control Centre.</p> <p>Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room. It was noted that emergency mock drill was conducted in 2017.</p> <p>It was reported that on an average response time is 20 minutes. However, it was noted that response time is not noted in the log book maintained with ambulance at Bakaner Ghat area.</p> <p>First aid kits are present at both the Toll Plazas. Sonway Toll Plaza has a dedicated first aid room with 24x7 available staff.</p> <p>Fire extinguishers, sand buckets, smoke detectors, fire alarm system is present at both the Toll Plazas. Khalghat Toll Plaza</p>	<p>Emergency assembly area to be identified and to be displayed.</p> <p>Log book maintained at ambulances to include the response time for each incidence.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				also has fire hydrant. There is no dedicated fire water tank but the hydrant is connected to the domestic water tank. Both the Toll Plazas also have obtained fire NOC.	
1.7	PS-1: 25-33	Stakeholder Engagement	Clients should identify the range of stakeholders that may be interested in their actions and consider how external communications might facilitate a dialog with all stakeholders. The client will develop and implement a Stakeholder Engagement Plan that is scaled to the project risks and impacts and development stage, and be tailored to the characteristics and interests of the Affected Communities.	Stakeholder Engagement : OPIPL does not have a formal stakeholder engagement policy or plan in place. OPIPL has undertaken very few community awareness campaigns on road safety. There are few charity based activities undertaken by OPIPL. There is a complaint and suggestion feedback procedure for road users. Each toll booth office, as mandated by the requirement of NHAI, is required to maintain a complaint register for registering complaints and suggestion from road users. Review of the complaints register indicated that most of the complaints were related to road safety, toll fee, toilet facilities etc. Emergency contact details are displayed at toll booth locations	OPIPL should formulate a Stakeholder Engagement Plan and carry out stakeholder engagement systematically
1.8	PS-1: 34-35	External Communication & Grievance Mechanisms	Clients will implement and maintain a procedure for external communications that includes methods to (i) receive and register external communications from the public; (ii) screen and assess the issues raised and determine how to address them; (iii) provide, track, and document responses, if any; and (iv) adjust the management program, as appropriate. In addition, clients are encouraged to make publicly available periodic reports on their environmental and social sustainability.		
1.9	PS-1: 22-24	Monitoring and Review	The client will establish procedures to monitor and measure the effectiveness of	It was reported that CEO visits project site on a monthly basis to monitor and	OPIPL at the corporate level is required to

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements. Where the government or other third party has responsibility for managing specific risks and impacts and associated mitigation measures, the client will collaborate in establishing and monitoring such mitigation measures. Where appropriate, clients will consider involving representatives from Affected Communities to participate in monitoring activities. The extent of monitoring should be commensurate with the project's environmental and social risks and impacts and with compliance requirements. Senior management in the client organization will receive periodic performance reviews of the effectiveness of the ESMS, based on systematic data collection and analysis.</p>	<p>review the implementation of management at site.</p> <p>Management programme incorporated in CA are regularly monitored and progress on the same is presented in the form of Monthly Progress Report (MPR) to the Independent Engineer for further review and comments.</p>	<p>establish monitoring and review procedures for effective supervision of EHS implementation by OSE staff and its subcontractors. These shall be the responsibilities of EHS Manager and the EHS Supervisor.</p> <p>The procedure shall include the minimum following requirements:</p> <ul style="list-style-type: none"> - Establishing parameters for supervision on all aspects outlined in the SOPs or Environment Management Manual; - Establish an audit schedule for bi-annual internal audits to be conducted at each of its SPVs including OSE; - Establish reporting formats for providing corrective actions for

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
					gaps identified during the audit; - Procedures for review of closure for implementation of corrective actions.
1.10	PS-1: 36	EHS Performance Reporting	The client will provide periodic reports to the Affected Communities that describe progress with implementation of the project Action Plans on issues that involve ongoing risk to or impacts on Affected Communities and on issues that the consultation process or grievance mechanism have identified as a concern to those Communities.	As per requirement of CA, OPIPL has been preparing and submitting the Monthly Progress Report covering monthly fee collection at the Toll Plazas; road user's complaint compliance report; weather report; list of hindrances; route operations covering accident/ incident report, report on damage, encroachment removal, dead animal removal, emergency services, etc. and maintenance report including preventive / periodic maintenance details, material modification report, tests conducted during the month, etc. to the Independent Engineer.	Annual EHS Performance Report should be prepared to supplement the Annual Report.
Labour Rights and Working Conditions					
2.1		Employees (Direct Employees Indirect Employees, Other Temporary)	The scope of application of this Performance Standard depends on the type of employment relationship between the client and the worker. It applies to workers directly engaged by the client (direct workers), workers engaged through third parties to perform work related to core	OPIPL has a total of 216 direct employees (124 at Khalghat and 92 at Sonwai toll plazas) which are stationed at the project office / toll plaza offices. Each toll plaza has a similar staff profile which includes: Toll Plaza Manager, Assistant Manager, Admin & HR, Assistant Manager, IT	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			business processes of the project for a substantial duration (contracted workers), as well as workers engaged by the client's primary suppliers (supply chain workers)	<p>Systems, Assistant Manager, Finance & Account, toll collectors etc. The table below provides a summary of number of workers and their job profile at each toll plaza:</p> <p>Apart from this, there are 45 security staff which are contracted through Falcon Guards Pvt Ltd for Khalghat plaza (28 security guards) and Om Sai Detective and Securities Ltd for Sonwai plaza (17 security guards).</p> <p>The toll road has been divided into three 26km stretches for the purpose of median and RoW maintenance. Each stretch engages approx. 10-15 contract labourers for the tasks associated with maintenance.</p>	
2.2	PS-2: 7-8	Human Resource Policies and Procedures	The client will adopt and implement human resources policies and procedures appropriate to its size and workforce that set out its approach to managing workers consistent with the requirements of this Performance Standard and national law. The client will provide workers with documented information that is clear and understandable, regarding their rights under national labor and employment law and any applicable collective agreements,	<ul style="list-style-type: none"> • OPIPL has a corporate level Human Resources Policy which is applicable to all its employees. The HR Policy includes the following: <ul style="list-style-type: none"> ○ Recruitment and Selection Policy ○ Leave and Attendance Policy ○ Rewards and Recognition Policy ○ Mobile Telephone Policy 	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			including their rights related to hours of work, wages, overtime, compensation, and benefits upon beginning the working relationship and when any material changes occur.	<ul style="list-style-type: none"> ○ Prevention of Sexual Harassment Policy ○ Canteen at Project Policy ○ Accommodation at Project Site Policy ○ Guidelines for Mentoring ○ Internal Transfer Policy ○ Travel and Procedure ○ Welfare and Benefits ● There is a dedicated HR/ Admin officer who oversees the implementation of Indian statutory requirements pertaining to labour, labour welfare and disputes. ● As part of the recruitment process, the employees receive joining/appointment letters which highlights the terms and conditions of employment, working hours, compensation and benefits and salary break-up etc. ● Based on a review of sample documentation, the employees were found to be provided with an appointment letter which contains the following: <ul style="list-style-type: none"> ○ Appointment and conditions of employment ○ Duties and obligations of the employee 	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<ul style="list-style-type: none"> o Compensation and Benefits o Term, termination and consequences of termination <p>Employees are provided with salary slips which include details on salary, applicable Provident Fund and tax deductions etc.</p>	
2.3	PS-2: 9	Working Conditions	the client will provide reasonable working conditions and terms of employment	<ul style="list-style-type: none"> • As mentioned, the terms and conditions of employment and various benefits /allowances are governed by the HR policy in place and the statutory requirement. The awareness pertaining to some of these policies/rules was varying across various staff members. All of these aspects are covered as part of the in-house induction and training sessions. • The wages for daily wage workers were observed to as per the Minimum Wage requirements as laid down by Madhya Pradesh government for the year 2017-18 and Chief Labour Commissioner in for Road/highway sector significantly w.e.f. April 2017. • The notice boards across all the facilities highlight key rules, rights of workers; labour licenses and registration, abstract of Minimum 	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>Wages, 1948 and Contract Labour Act 1971;</p> <ul style="list-style-type: none"> • The general working shift is from 08:30 hrs to 18:00 hrs. The toll plaza operations are run in three shifts: <ul style="list-style-type: none"> ○ Shift A- 00:00 hrs to 08:00 hrs ○ Shift B- 08:00 hrs to 16:00 hrs ○ Shift C- 16:00 hrs to 006:00 hrs • The security workers have two shifts of 12 hours each. • OPIPL has a system of relievers and hence, instances of overtime payments do not occur regularly. However, if any worker working overtime (more than 9 hours a day) is paid the due overtime payment of double of the hourly rate calculated at gross levels. • An attendance register for employees and muster roll for contract workers is maintained at toll plaza offices for tracking attendance and in-time and out-time of employees. • Drinking Water is provided through local mineral water vendors at each of the toll booths. • Applicability of ESIC is as per Indian regulations (for any employee earning a monthly salary less than 	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>INR 18,000). This is applicable for all workers and contract workers.</p> <ul style="list-style-type: none"> There are adequate toilet facilities at each toll booth location. Additional toilets and washrooms have been constructed in month of January 2018. 	
2.4	PS-2: 11	Migrant Workers	The client will identify migrant workers and ensure that they are engaged on substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	It was reported that no migrant workers are currently engaged. Employees of OPIPL who are from outside of the area are provided guest house facilities at Khalghat toll plaza or HRA provisions.	
2.5	PS-2: 12	Workers Accommodation	Where accommodation services are provided to workers covered by the scope of this Performance Standard, the client will put in place and implement policies on the quality and management of the accommodation and provision of basic services. The accommodation services will be provided in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association.	The guest house block near Khalghat plaza was observed to be having adequate facilities including rooms, beddings, drinking water, kitchen and mess facilities, toilets, common rooms etc.	
2.6	PS-2: 23	Occupational Health and Safety	The client will provide a safe and healthy work environment, taking into account inherent risks in its particular sector and specific classes of hazards in the client's work areas, including physical, chemical, biological, and radiological hazards, and	<p>Dedicated safety officer is not deployed for the project.</p> <p>It was observed that training on EHS aspects, safety sign awareness and road</p>	As per the Schedule L of CA, dedicated person with requisite qualification and experience to be engaged for the project to enable

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>specific threats to women. The client will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, as far as reasonably practicable, the causes of hazards. In a manner consistent with good international industry practice, as reflected in various internationally recognized sources including the World Bank Group EHS Guidelines, the client will address areas that include the</p> <ul style="list-style-type: none"> (i) identification of potential hazards to workers, particularly those that may be life-threatening; (ii) provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (iii) training of workers; (iv) documentation and reporting of occupational accidents, diseases, and incidents; and (v) emergency prevention, preparedness, and response arrangements. 	<p>safety, personal protective equipment were conducted on site.</p> <p>It was noted that Safety Jackets, Helmets and Gloves are issued to the labour engaged for O&M activities and records are maintained on site.</p> <p>First aid and firefighting arrangement is available at both the Toll Plazas.</p> <p>It was noted that incident/ accident reporting is only limited to road accidents and does not cover incidents/ accidents occurring during maintenance or site work.</p> <p>Flow chart depicting emergency response plan for booth/ tunnel was seen displayed at Control Room, however staff was not aware of the presence of any kind of emergency response plan. Documented copy of the plan was not made available for review.</p>	<p>concessionaire to meet O&M requirement which include safety of persons deployed and users of the project facility. Also as per the proposed organisation structure in O&M manual (approved by independent consultant), concessionaire has proposed 2 no. of safety officers. It is recommended to deploy dedicated safety officer at site.</p> <p>Accident/ incident register to be maintained at both the Toll Plazas.</p> <p>Emergency preparedness and response plan to be prepared, communicated to the staff. Staff to be trained on handling of emergency situations.</p>
2.7	PS-2: 21-22	Prohibitory Labour Practices- Child and Forced Labour	The client will not employ children in any manner that is economically exploitative, or is likely to be hazardous or to interfere	No child labour or bonded labour was reported at any of the work sites, and at the toll plazas visited.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. The client will identify the presence of all persons under the age of 18. Where national laws have provisions for the employment of minors, the client will follow those laws applicable to the client. Children under the age of 18 will not be employed in hazardous work. All work of persons under the age of 18 will be subject to an appropriate risk assessment and regular monitoring of health, working conditions, and hours of work.</p> <p>The client will not employ forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. The client will not employ trafficked persons.</p>		
2.8	PS-2: 13-14	Workers Organization	In countries where national law recognizes workers' rights to form and to join workers' organizations of their choosing without interference and to bargain collectively, the client will comply with national law. Where national law substantially restricts workers'	It was reported that none of the employees of OPIPL are part of any union. Discussions with corporate management indicated that the company does not encourage unionisation or workers forming a forum for collective	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			organizations, the client will not restrict workers from developing alternative mechanisms to express their grievances and protect their rights regarding working conditions and terms of employment. The client should not seek to influence or control these mechanisms	engagement though this is not officially stated. While Shops and Establishment Act recognises trade unions; it does not mandate formation of trade unions for facilities registered under the act	
2.9	PS-2: 20	Grievance Mechanism	The client will provide a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. The mechanism should not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements.	A formal Grievance Redressal Mechanism for employees and contract workers does not exist. It was reported that site senior management is directly approachable and any person can directly contact his/her own supervisor, site in charge or approach the project head directly. Grievance records are not maintained by OPIPL.	OPIPL/OSE should extend the Grievance Redressal Mechanism to all workers at site. A grievance register for workers should be maintained at site and workers should be informed about it.
2.10	PS-2: 24-26	Workers Engaged by Third Parties	With respect to contracted workers the client will take commercially reasonable efforts to ascertain that the third parties who engage these workers are reputable and legitimate enterprises and have an appropriate ESMS that will allow them to operate in a manner consistent with the requirements of this Performance Standard, except for paragraphs 18-19 (Retrenchment), and 27-29 (Supply Chain).	As reported by the site management, the company recruits security workers and median and RoW maintenance workers on a contractual basis. There are approximately 45 contracted workers engaged across three stretches of the road for maintenance activities. The workers are engaged by OPIPL The working hours are from 8:00 hrs to 18:00 hrs which includes one-and-a-half hours of break. Workers reported that there are very few instances of overtime work. In case there is overtime work then the workers are	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>paid double the hourly rate as mandated by law.</p> <p>Wages register for these workers were made available for review. It was reviewed that that workers are paid wages on a monthly basis. Each worker is provided with a wage card where details of wages are recorded.</p>	
2.11	PS-2: 27-29	Labour Rights in Supply Chain	<p>The client will monitor its primary supply chain on an ongoing basis in order to identify any significant changes in its supply chain and if new risks or incidents of child and/or forced labor are identified, the client will take appropriate steps to remedy them.</p> <p>Additionally, where there is a high risk of significant safety issues related to supply chain workers, the client will introduce procedures and mitigation measures to ensure that primary suppliers within the supply chain are taking steps to prevent or to correct life-threatening situations.</p>	<p>OPIPL sources its raw materials from various suppliers located in the area. Main items procured are water tankers; maintenance works materials like cement, soil, sand etc.</p> <p>A supplier agreement was not made available for review but it was reported that the agreement covers aspects such as delivery schedule, rate, and product description and there is no process by which OPIPL ensures that these vendors comply with at least the legal requirements pertaining to environment, health & safety and labour rules and regulations.</p> <p>A formal contractual agreement is entered between the company and the</p>	<p>Develop a contractor management plan to manage key labour compliance aspects chain pertaining to child and forced labour and key EHS aspects in the supply chain/among vendors.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				contractors for providing security labour and workforce.	
PS – 3: Pollution and Resource Efficiency					
3.1	PS-3: 1-2	Requirements under laws of the nation	The client need to comply with applicable national law [e.g., The Environment (Protection) Act, 1986, The Forest Conservation Act, 1980, The Water (Prevention and Control of Pollution) Act, 1974; Noise Pollution (Regulation and Control) Rules, 2000; The Air (Prevention and Control of Pollution) Act, 1981; Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016]	<p>Environment Clearance (EC) has been obtained for the four laning of Indore Khalghat section from km 12.600 to km 84.700 of NH-3 in the state of Madhya Pradesh from the Ministry of Environment and Forest via letter No. 5-26/2006-IA-III dated 17th November 2006 prior to start of construction.</p> <p>Project also required diversion of forest land, for which Forest Clearance was obtained via F.No. 8-98/2006 - FC dated 8th January 2007.</p> <p>The project is currently under Operation and Maintenance (O&M) stage and tolling is currently underway. Both the Toll Plazas has 2 D.G. sets each (2 D.G. sets of capacity 100 kVA each at Sonway and D.G. set of capacity 125 kVA and 82.5 kVA at Khalghat Toll Plaza. Following are the legal permits obtained and required by the project:</p> <ul style="list-style-type: none"> • Consent to Operate via consent no. AH-30792 dated 06-05-2015 issued by M.P. Pollution Control Board (MPPCB) for operation of D.G. sets at Toll Plaza Khalghat, 	Develop an environmental and social legal register for the project to ensure a comprehensive list is available and compliance to all applicable permits conditions are systematically tracked.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>Tehsil Dharampuri, District – Dhar (MP), valid till 04-10-2019</p> <ul style="list-style-type: none"> • Consent to Establish via Consent No: CTE-50587 under the Water (Prevention & Control of Pollution) Act, 1974 and under the Air (Prevention & Control of Pollution) Act, 1981, for project office at Sonway Toll Plaza, District Indore (MP), valid till 21-12-2018 • Management has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules. • Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained for Toll Plaza, Khalghat via letter no. 1061/RO-Dhar/MPPCB/Dhar-88/15 dated 01-06-2015, valid till 04-10-2019. • Main source of water at Khalghat Toll Plaza is open well; permission to abstract water from well has been obtained from gram panchayat. However registration of well was not available for review at the time of site assessment. 	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
3.2	PS-3: 4-5	WBG EHS Guidelines	The principles and techniques applied during the project life-cycle will be tailored to the hazards and risks associated with the nature of the project and consistent with good international industry practice (GIIP), as reflected in various internationally recognized sources, including the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines).	<p>The project road is designed based on the national guidelines, i.e. India Road Congress (IRC) guidelines. However, in the below mention areas there are gaps in the current practices as compared with GIIP.</p> <ul style="list-style-type: none"> • Management of solid and hazardous waste at both the Toll plaza (Refer SI. No. 3.6 and 3.7 of this table) • Maintenance of ROW and carriageway (Refer SI. No. 3.6 of this table) • Compliance to regulatory requirement (Refer SI. No 3.1 above of this table) • Efficient utilization of natural resources Refer SI. No. 3.3 and 3.4 of this table) • Occupational Health & Safety (Refer SI. No 2.6 of this table) 	Refer SI. No. 2.6, 3.1, 3.3, 3.4, 3.6 and 3.7
3.3	PS-3: 6-7	Resource Efficiency- Greenhouse Gasses	The client will implement technically and financially feasible and cost effective measures for improving efficiency in its consumption of energy, water, as well as other resources and material inputs, with a focus on areas that are considered core business activities. In addition to the resource efficiency measures described above, the client will consider alternatives and implement technically and financially	As reported no measures are taken to account GHG emissions from the project. Also no measures are adopted to reduce GHG emissions. However it was reported that energy efficient LED and CLF are fitted at both the Toll Plazas.	OPIPL should estimate the total GHG emissions in terms of CO2 equivalent that are released from the total number of motorized vehicles that ply on the project road on monthly basis.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			feasible and cost-effective options to reduce project-related GHG emissions during the design and operation of the project. For projects that are expected to or currently produce more than 25,000 tonnes of CO2-equivalent annually, the client will quantify direct emissions from the facilities owned or controlled within the physical project boundary, as well as indirect emissions associated with the off-site production of energy used by the project.		
3.4	PS-3: 9	Resource Efficiency-Water Consumption	When the project is a potentially significant consumer of water, in addition to applying the resource efficiency requirements of this Performance Standard, the client shall adopt measures that avoid or reduce water usage so that the project's water consumption does not have significant adverse impacts on others.	<p>Procedure to measure utilization of water resource for the project is not in place and water consumption records are not maintained at site.</p> <p>Tanker water is the source of water used for watering of avenue and median plants along the project corridor. OPIPL has entered into agreement with the 3 different contractors for supply of tanker water for the entire road stretch and the same was verified during site assessment.</p> <p>Source of domestic water required at Sonway Toll Plaza is also tanker water and OPIPL has signed agreement with the contractor for supply of water, work order and agreement was verified at the time of site assessment.</p>	OPIPL should install a meter to the bore-well. It should keep records of water consumption and try taking initiatives to reduce water consumption, if possible.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>For drinking propose RO water is purchased from a local vendor.</p> <p>Source of water at Khalghat plaza is open well. Permission for abstraction of water has been obtained from Gram Panchayat.</p> <p>In terms of stage of ground water development, Dharmapuri block, where Khalghat Toll Plaza is located, is categorized as over exploited.¹ Hence, as per requirement OPIPL has applied for permission to dig a bore well to meet requirements of drinking and domestic use (not to be used for irrigation or industrial purpose).</p> <p>RO plant of capacity 50 l/hour has been installed for treatment of water for drinking purpose.</p>	
3.5	PS-3: 10-11	Pollution Prevention	The client will avoid the release of pollutants or, when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release. This applies to the release of pollutants to air, water, and land due to routine, non-	D.G. sets installed at both the Toll Plazas are the main source of gaseous pollutions. CTE and CTO has been obtained by MPPCB (refer Sr. No. 3.1 of this table). D.G sets were observed to be	-

¹ District Ground Water Information Booklet - Dhar, MP by Ministry of Water Resources, Central Ground Water Board, Bhopal

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			routine, and accidental circumstances with the potential for local, regional, and transboundary impacts.	<p>in acoustic enclosure, with stack height of more than 2 m.</p> <p>Annual environment monitoring is carried out at site which includes monitoring of ambient air quality, water quality and noise quality.</p> <p>Both the Toll Plazas have septic tank for treatment of sewage generation.</p>	
3.6	PS-3: 12	Waste Management	Where waste generation cannot be avoided, the client will reduce the generation of waste, and recover and reuse waste in a manner that is safe for human health and the environment. Where waste cannot be recovered or reused, the client will treat, destroy, or dispose of it in an environmentally sound manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material.	<p>Waste generated in O&M stage include road litter, illegal dumped waste, municipal solid waste from the Toll Plazas, animal carcasses, vegetation waste from ROW maintenance, and sediment and sludge from storm water drainage system maintenance.</p> <p>As a part of waste management, four different coloured drums (Blue, Yellow, Red and Black) were seen placed at both the plazas for collection of segregated waste. However its implementation required improvement.</p> <p>Waste generation records are not maintained at site. It was noted that metal scrap generated at both the plazas is sold to authorised vendor however dry</p>	<p>OPIPL should ensure required training and awareness of staff on the waste management plan to ensure its effective implementation.</p> <p>Should stop burning of dry waste in open.</p> <p>OPIPL should ensure cleaning of the road side and median regularly to avoid dumping and maximizing of road side waste.</p> <p>Waste from median and ROW to be removed and</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>waste is burned in open behind the Toll Plazas.</p> <p>Solid waste and litter was observed to be scattered on the ROW edge as well as the median in some chainages. It was reported that manual labours are deployed for collection of waste and as a practise they collect waste from median and dump it out of the RoW.</p>	ensure disposal as per the norms.
3.7	PS-3: 13	Hazardous Material Management	The client will avoid or, when avoidance is not possible, minimize and control the release of hazardous materials. In this context, the production, transportation, handling, storage, and use of hazardous materials for project activities should be assessed. The client will consider less hazardous substitutes where hazardous materials are intended to be used in manufacturing processes or other operations	<p>Hazardous waste during operation phase includes generation of waste/ used oil from D.G sets installed at Toll Plazas.</p> <p>Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules has been obtained for Toll Plaza, Khalghat via letter no. 1061/RO-Dhar/MPPCB/Dhar-88/15 dated 01-06-2015, valid till 04-10-2019.</p> <p>It was noted that OPIPL has done Annual Maintenance Contract (AMC) for D.G. maintenance and waste/ used oil generated is disposed of through authorized vendor.</p> <p>However, records of hazardous waste are not maintained in Form 3 and annual</p>	<p>OPIPL should keep records of hazardous waste generation in Form 3 and should submit Annual Return in Form 4.</p> <p>Hazardous waste to be not stored on site for more than 90 days.</p> <p>Storage of hazardous waste should be as per CPCB guidelines.</p> <p>Oil/ Chemical spill Contingency Plan should be prepared. In case of spillage of oil, measures to be taken as per the plan.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>return in Form 4 is not submitted as per the Rules.</p> <p>~ 40 to 50 liters of waste/ used oil was seen stored on land without any secondary containment for more than 90 days at site.</p> <p>The waste was seen stored in the D.G. set area without any signboard of "Hazardous Waste Storage Area" and "Danger".</p> <p>Oil spills was also observed in the area.</p> <p>OPIPL has applied for Combined Consent for Sonway Toll Plaza dated 6th March 2018, which also includes authorization under hazardous waste rules. It was reported that site has not disposed hazard waste since its operations i.e. more than one year.</p> <p>Used paint containers categorized under hazardous waste under Hazardous Waste Rules, were also observed to be stored at Toll Plazas and is being disposed along with the other scrap stored at site.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
3.8	PS-3: 14-16	Pesticide use and management	<p>The client will, where appropriate, formulate and implement an integrated pest management (IPM) and/or integrated vector management (IVM) approach targeting economically significant pest infestations and disease vectors of public health significance. The client's IPM and IVM program will integrate coordinated use of pest and environmental information along with available pest control methods, including cultural practices, biological, genetic, and, as a last resort, chemical means to prevent economically significant pest damage and/or disease transmission to humans and animals.</p> <p>In addition, pesticides will be handled, stored, applied, and disposed of in accordance with the Food and Agriculture Organization's International Code of Conduct on the Distribution and Use of Pesticides or other GIIP.</p> <p>The client will not purchase, store, use, manufacture, or trade in products that fall in WHO Recommended Classification of Pesticides by Hazard Class Ia (extremely hazardous); or Ib (highly hazardous). The client will not purchase, store, use, manufacture or trade in Class II (moderately hazardous) pesticides, unless the project has appropriate controls on</p>	As reported during site visit, pesticide is not being used for the project. Organic manure is being used for avenue and median plantation.	-

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>manufacture, procurement, or distribution and/or use of these chemicals.</p> <p>These chemicals should not be accessible to personnel without proper training, equipment, and facilities to handle, store, apply, and dispose of these products properly.</p>		
<p>PS-4: Community Health Safety and Security</p> <p>The client will evaluate the risks and impacts to the health and safety of the Affected Communities during the project life-cycle and will establish preventive and control measures consistent with good international industry practice (GIIP), such as in the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines) or other internationally recognized sources. The client will identify risks and impacts and propose mitigation measures that are commensurate with their nature and magnitude. These measures will favor the avoidance of risks and impacts over minimization.</p>					
4.1	PS-4: 6	Infrastructure and Equipment Design and Safety	<p>The client will design, construct, operate, and decommission the structural elements or components of the project in accordance with GIIP, taking into consideration safety risks to third parties or Affected Communities.</p>	<p>Reportedly all the material used for road construction and method adopted was strictly in accordance with MORTH's specifications for road and bridge work.</p> <p>Quality control test on material and work are being carried out as per the requirement.</p> <p>Roughness survey is carried out twice a year (pre monsoon and soon after the monsoon) as per the CA.</p>	---

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				Benkelman Beam Deflection and Pavement Condition Survey is assessed every year.	
4.2		Traffic safety	The client will consider traffic safety will design, construct, and operate the project.	<p>The project is designed considering relevant standards/ guidelines of India Road Congress IRC) related to safety (IRC: SP-84), road geometrics, bridges, culverts, road signs (IRC: SP-67), pavement marking (IRC: 35), road delineator (IRC:79), etc.</p> <p>Safety measures taken at site include pedestrian guard railing, crash barrier, sign boards, rumples, speed breakers, speed limit boards, median plantation, etc. as required by NHAI as a condition in CA.</p> <p>Median plantation at number of stretches along the road was observed to be very thin.</p> <p>During site assessment, following observations were made which might act as potential risk for road accidents;</p> <ul style="list-style-type: none"> • Vehicles were seen parked in the corridor and in ROW at many places 	<p>Median plantation needs to be strengthened.</p> <p>OPIPL to undertake awareness program for community and to ensure vehicles are not parked within the corridor or in ROW and people should not drive in opposite direction.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<ul style="list-style-type: none"> Vehicles were observed driving in opposite direction 	
4.3	PS-4: 7	Hazardous Material Management and Safety	The client will avoid or minimize the potential for community exposure to hazardous materials and substances that may be released by the project. Where there is a potential for the public (including workers and their families) to be exposed to hazards, particularly those that may be life-threatening, the client will exercise special care to avoid or minimize their exposure by modifying, substituting, or eliminating the condition or material causing the potential hazards.	<p>Project road is currently in operation phase. Hazardous material and substances were not seen stored at site which can be a potential for the public to be exposed to hazards. Also both the Toll Plazas are away from human habitation areas.</p> <p>Emergency action plan in case of accidental spillage of hazardous material on road is not in place.</p>	Emergency Action Plan to address accidental spillage of hazardous material to be prepared
4.4	PS-4: 8	Ecosystem Services	<p>The project's direct impacts on priority ecosystem services may result in adverse health and safety risks and impacts to Affected Communities. With respect to this Performance Standard, ecosystem services are limited to provisioning and regulating services as defined in paragraph 2 of Performance Standard 6.</p> <p>The diminution or degradation of natural resources, such as adverse impacts on the quality, quantity, and availability of freshwater, may result in health-related risks and impacts. Where appropriate and feasible, the client will identify those risks and potential impacts on priority</p>	<p>Project road traverse through modified habitats, agricultural field and residential area. Project also required diversion of forest land for which forest clearance was obtained and compensatory afforestation was carried out.</p> <p>Project road crosses two major rivers namely River Ajnar and River Karam, which are mostly non perennial. Sanjay Jalashay, artificial lake with water treatment plant created for suppling water to Pithampur Industrial Area, present at a distance of ~ 400 m from the project corridor.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			ecosystem services that may be exacerbated by climate change.	Suitable mitigation measures were taken during construction stage to mitigate the impact on the water bodies. Compensatory plantation with native species was planned to mitigate impacts from tree cutting. Also storm water drainage system is proposed along the road to mitigate the impacts on natural drainage pattern.	
4.5	PS-4: 9-10	Community Exposure to Disease	<p>The client will avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases, and communicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. Where specific diseases are endemic in communities in the project area of influence, the client is encouraged to explore opportunities during the project life-cycle to improve environmental conditions that could help minimize their incidence.</p> <p>The client will avoid or minimize transmission of communicable diseases that may be associated with the influx of temporary or permanent project labor.</p>	<p>The proposed project is a part of NH-3. Currently a significant number of trucks ply on the road. ~ 50 % of the road users are trucks including three axel, multi axel and over size vehicle. Stopover of truckers at major junctions on the road may play a role in the spread of communicable diseases (HIV/ AIDS) in the area.</p> <p>The transit people would also interact with local vendors at random locations through the entire stretch of the road and may increase communicable disease in the area.</p> <p>Presently 02 truck lay byes are constructed along the road. However rest areas are yet to be developed.</p>	<p>OPIPL should conduct awareness campaign among the truck drivers to prevent HIV/ AIDS.</p> <p>Rest area to be completed as proposed in the CA.</p>

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
4.6	PS-4:	Emergency Preparedness and Response	In addition to the emergency preparedness and response requirements described in Performance Standard 1, the client will also assist and collaborate with the Affected Communities, local government agencies, and other relevant parties, in their preparations to respond effectively to emergency situations, especially when their participation and collaboration are necessary to respond to such emergency situations. If local government agencies have little or no capacity to respond effectively, the client will play an active role in preparing for and responding to emergencies associated with the project. The client will document its emergency preparedness and response activities, resources, and responsibilities, and will disclose appropriate information to Affected Communities, relevant government agencies, or other relevant parties.	Refer Sr. No. 1.6	Refer Sr. No. 1.6
4.7	PS-4: 12-14	Security Personnel	When the client retains direct or contracted workers to provide security to safeguard its personnel and property, it will assess risks posed by its security arrangements to those within and outside the project site. In making such arrangements, the client will be guided by the principles of proportionality and good international	There are 45 security workers which are contracted through Om Sai for Sonwai plaza and Falcon Securities for Khalghat. There are 4-5 armed guards in total. At least one armed guard is deployed at each Toll Plaza round the clock. The security agency was reportedly not received any training on human rights	Falcon Guard Pvt Ltd should obtain registration under MP Private Security Agencies (Regulation) Rules 2012.

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>practice in relation to hiring, rules of conduct, training, equipping, and monitoring of such workers, and by applicable law.</p> <p>The client will consider and, where appropriate, investigate all allegations of unlawful or abusive acts of security personnel, take action (or urge appropriate parties to take action) to prevent recurrence, and report unlawful and abusive acts to public authorities.</p>	<p>and other 'good conduct' and best practices.</p> <p>The Falcon Guard Pvt Ltd which is contracted for Khalghat Toll Plaza is registered in Delhi and Uttar Pradesh The Locators Safety and Security Protections which is deployed at Sonway Toll Plaza is registered in MP and their licence is valid till 27th Jan 2019.</p>	<p>The Grievance Redress Mechanism for the project should cover special provisions for investigations of unlawful or abusive acts of security personnel.</p>
PS-5: Land Acquisition and Involuntary Resettlement					
5.1	PS-5: 5-7	Land Acquisition Process	<p>This Performance Standard applies to physical and/or economic displacement resulting from the following types of land-related transactions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Land rights or land use rights acquired through expropriation or other compulsory procedures in accordance with the legal system of the host country; <input type="checkbox"/> Land rights or land use rights acquired through negotiated settlements with property owners or those with legal rights to the land if failure to reach settlement would have resulted in expropriation or other compulsory procedures; <input type="checkbox"/> Project situations where involuntary restrictions on land use and access to natural resources cause a community or groups within a community to lose access 	<p>Land required for the Project was acquired by NHAI using land acquisition provisions of NH Act 1956. Total additional land requirement for the project was 520.032 ha including 54 ha of forestland. Land acquisition was undertaken between 2007 and 2009, though a small amount of land was acquired in 2011.</p> <p>The project is reported to have both physical and economic displacement. The project entailed displacement of approx. 639 households. The acquisition of private land with structures which were under mixed use (residential as well as commercial). It is also not clear as to how many encroachers (non-titleholders) were</p>	-

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>to resource usage where they have traditional or recognizable usage rights;</p> <ul style="list-style-type: none"> □ Certain project situations requiring evictions of people occupying land without formal, traditional, or recognizable usage rights;8 or □ Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, freshwater, medicinal plants, hunting and gathering grounds and grazing and cropping areas. <p>This Performance Standard does not apply to resettlement resulting from voluntary land transactions (i.e., market transactions in which the seller is not obliged to sell and the buyer cannot resort to expropriation or other compulsory procedures sanctioned by the legal system of the host country if negotiations fail). It also does not apply to impacts on livelihoods where the project is not changing the land use of the affected groups or communities.</p> <p>Where project impacts on land, assets, or access to assets become significantly adverse at any stage of the project, the</p>	<p>evicted for the project. The loss of agricultural land and families' dependent on these agricultural land (as wage labors or share croppers) have faced economic displacement.</p> <p>The project also entailed physical and economic displacement of Scheduled Tribe households (Bhils and Bhilalas). More details are provided in Indigenous Peoples section. The project is also reported to have evicted a number of encroachers in RoW for construction of the six-lane carriage way or other road facilities such as service roads, junctions, cart tracts etc.</p> <p>Therefore, PS-5 provisions are applicable to the project.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			client should consider applying requirements of this Performance Standard, even where no land acquisition or land use restriction is involved.		
5.2	PS-5: 30-31	Private Sector Responsibilities under Government Managed Resettlement	Where land acquisition and resettlement are the responsibility of the government, the client will collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with this Performance Standard. In addition, where government capacity is limited, the client will play an active role during resettlement planning, implementation, and monitoring, as described below. In the case of acquisition of land rights or access to land through compulsory means or negotiated settlements involving physical displacement, the client will identify and describe government resettlement measures. If these measures do not meet the relevant requirements of this Performance Standard, the client will prepare a Supplemental Resettlement Plan that, together with the documents prepared by the responsible government agency, will address the relevant requirements of this Performance Standard (the General Requirements and requirements for Physical Displacement	As per the Concession Agreement, the responsibility of land acquisition was on NHAI who is obliged to provide encumbrance free land to OPIPL for construction and operation of the road. Hence, the responsibilities of OPIPL in this government led land acquisition process are to prepare a supplemental Resettlement Plan to supplement efforts of the Government to meet the requirements under PS-5.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>and Economic Displacement above). The client will need to include in its Supplemental Resettlement Plan, at a minimum (i) identification of affected people and impacts; (ii) a description of regulated activities, including the entitlements of displaced persons provided under applicable national laws and regulations; (iii) the supplemental measures to achieve the requirements of this Performance Standard as described in paragraphs 19–29 (provisions for physical and economic displacement) in a way that is permitted by the responsible agency and implementation time schedule; and (iv) the financial and implementation responsibilities of the client in the execution of its Supplemental Resettlement Plan.</p> <p>In the case of projects involving economic displacement only, the client will identify and describe the measures that the responsible government agency plans to use to compensate Affected Communities and persons. If these measures do not meet the relevant requirements of this Performance Standard, the client will develop an Environmental and Social Action Plan to complement government</p>		

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			action. This may include additional compensation for lost assets, and additional efforts to restore lost livelihoods where applicable.		
5.3	PS-5: 9	Compensation and Benefit	When displacement cannot be avoided, the client will offer displaced communities and persons compensation for loss of assets at full replacement cost and other assistance ¹¹ to help them improve or restore their standards of living or livelihoods, as provided in this Performance Standard. Compensation standards will be transparent and applied consistently to all communities and persons affected by the displacement. Where livelihoods of displaced persons are land-based, or where land is collectively owned, the client will, where feasible, offer the displaced land-based compensation. The client will take possession of acquired land and related assets only after compensation has been made available and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons in addition to compensation. The client will also provide opportunities to displaced communities and persons to derive appropriate development benefits from the project.	NHAI has paid cash compensation for the land it acquired under NH Act 1956. The compensation amount paid included market value assessed on the basis of prevailing basic guidance value along with value of other fixed assets on the land such as structures, trees etc. As per discussions with PAPs and NHAI, compensation ranged between 2 lakh to 5 lakhs per acre. However, it could not be ascertained whether this compensation was at par with the prevailing market value and met the requirement of 'full replacement cost'.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
5.4	PS-5: 8	Project Design to avoid or minimize physical/ economic displacement	The client will consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.	The road planning was undertaken more than 15 years ago, with land acquisition commencing from 2006. Hence, details on project designing and avoidance of impacts are not available. However, the road includes three by-passes, at Mhow, Gujri and Dhamond. It is assumed that these by-passes have improved travel time and also led to reduction in physical displacement or forced eviction of encroachers.	
5.5	PS-5: 12-16	Resettlement and Livelihood Restoration Planning and Implementation	Where involuntary resettlement is unavoidable, either as a result of a negotiated settlement or expropriation, a census will be carried out to collect appropriate socio-economic baseline data to identify the persons who will be displaced by the project, determine who will be eligible for compensation and assistance, and discourage ineligible persons, such as opportunistic settlers, from claiming benefits. The client will establish procedures to monitor and evaluate the implementation of a Resettlement Action Plan or Livelihood Restoration Plan (see paragraphs 19 and 25) and take corrective action as necessary.	OPIPL reported that no RAP was prepared for the project by them or NHAI to their knowledge. Hence, socio-economic baseline information of those affected by the project is not available.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>Implementation of a Resettlement Action Plan or Livelihood Restoration Plan will be considered completed when the adverse impacts of resettlement have been addressed in a manner that is consistent with the relevant plan as well as the objectives of this Performance Standard. It may be necessary for the client to commission an external completion audit of the Resettlement Action Plan or Livelihood Restoration Plan to assess whether the provisions have been met, depending on the scale and/or complexity of physical and economic displacement associated with a project.</p>		
5.6	PS-5: 10	Community Engagement	<p>The client will engage with Affected Communities, including host communities, through the process of stakeholder engagement described in Performance Standard 1. Disclosure of relevant information and participation of Affected Communities and persons will continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement to achieve outcomes that are consistent with the objectives of this Performance Standard.</p>	<p>The project land was acquired as per NH Act, 1956. Details on community engagement are not available for review.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
5.7	PS-5: 11	Grievance Mechanism- Access to Legal Process	<p>The client will establish a grievance mechanism consistent with Performance Standard 1 as early as possible in the project development phase. This will allow the client to receive and address specific concerns about compensation and relocation raised by displaced persons or members of host communities in a timely fashion, including a recourse mechanism designed to resolve disputes in an impartial manner.</p> <p>Grievance Mechanism as per PS-1: 35 should not impede access to judicial or administrative remedies.</p>	<p>The NH Act provides opportunity to file objections and access to arbitration process for contesting the compensation offered.</p>	
5.8	PS-5: 17-23	Physical Displacement	<p>Project-related land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement. Consequently, requirements of this Performance Standard in respect of physical displacement and economic displacement may apply simultaneously. In the case of physical displacement, the client will develop a Resettlement Action Plan that covers, at a minimum, the applicable requirements of this Performance Standard regardless of the number of people affected. The client is not required to compensate or assist those who encroach on the project</p>	<p>The project entailed displacement of PAPs including ST households. While the records for total number of economically and physically displaced households were not available with the concessionaire or with NHAI, it was confirmed during the discussions with NHAI that approx. 639 households were displaced for the project. A due diligence report on Environment Issues and Safeguards on project funded by IIFCL dated 01-12-2007 was reviewed. As per the report, the total numbers of displaced households were:</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation																		
			area after the cut-off date for eligibility, provided the cut-off date has been clearly established and made public	<p><i>No text of specified style in document..1</i></p> <p>Displaced Households</p> <table border="1"> <thead> <tr> <th>District</th> <th>Taluka</th> <th>No. of Displaced Households</th> </tr> </thead> <tbody> <tr> <td>Indore</td> <td>Mhow</td> <td>355</td> </tr> <tr> <td>Dhar</td> <td>Dhar</td> <td>60</td> </tr> <tr> <td>Dhar</td> <td>Dharpuri</td> <td>164</td> </tr> <tr> <td>Khargone</td> <td>Maheshwar</td> <td>60</td> </tr> <tr> <td>Total</td> <td></td> <td>639</td> </tr> </tbody> </table> <p>Source: Environment Issues and Safeguards Due Diligence Report IIFCL dated 01-12-2007</p> <p>Data on village wise break up of physically displaced households or that of STs is not available in the report or with NHAI.</p> <p>The acquisition of private land with structures which were under mixed use (residential as well as commercial) and eviction of encroachers (non-titleholders) has caused physical displacement. The loss of agricultural land and families dependent on these agricultural land (as wage labours or share croppers) have faced economic displacement.</p> <p>As RAP/LRP was not prepared for the project, adverse impacts on project</p>	District	Taluka	No. of Displaced Households	Indore	Mhow	355	Dhar	Dhar	60	Dhar	Dharpuri	164	Khargone	Maheshwar	60	Total		639	
District	Taluka	No. of Displaced Households																					
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SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				affected families/ persons have remained un-addressed.	
5.9	PS-5: 24	Forced Eviction	Forced evictions will not be carried out except in accordance with law and the requirements of this Performance Standard.	Information pertaining to this issue was not made available by OPIPL/NHAI neither is available in public domain.	
5.10	PS-5: 25-29	Economic Displacement	<p>In the case of projects involving economic displacement only, the client will develop a Livelihood Restoration Plan to compensate affected persons and/or communities and offer other assistance that meet the objectives of this Performance Standard.</p> <p>The mitigation of economic displacement will be considered complete when affected persons or communities have received compensation and other assistance according to the requirements of the Livelihood Restoration Plan and this Performance Standard, and are deemed to have been provided with adequate opportunity to re-establish their livelihoods.</p> <p>In addition to compensation for lost assets, if any, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning</p>	NHAI has paid compensation for the land and structures (including affected encroachments). However, no socio-economic survey was conducted to understand the adverse impacts on their livelihood and income levels.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>capacity, production levels, and standards of living.</p> <p>Transitional support should be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.</p>		
5.11	PS-5: 30-32	Private Sector Responsibilities Under Government-Managed Resettlement	<p>Where land acquisition and resettlement are the responsibility of the government, the client will collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with this Performance Standard. In addition, where government capacity is limited, the client will play an active role during resettlement planning, implementation, and monitoring, as described below.</p> <p>In the case of acquisition of land rights or access to land through compulsory means or negotiated settlements involving physical displacement, the client will identify and describe government resettlement measures. If these measures do not meet the relevant requirements of this Performance Standard, the client will prepare a Supplemental Resettlement Plan that, together with the documents prepared by the responsible government</p>	<p>As per CA, it was obligation of the NHAI to provide access to encumbrance free land to OPIPL. The responsibility to compensate land owners for their loss of land and livelihood was on NHAI. Relevant points have been addressed in the sections above. As reported by OPIPL, it was not involved in this process.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>agency, will address the relevant requirements of this Performance Standard (the General Requirements and requirements for Physical Displacement and Economic Displacement above). The client will need to include in its Supplemental Resettlement Plan, at a minimum (i) identification of affected people and impacts; (ii) a description of regulated activities, including the entitlements of displaced persons provided under applicable national laws and regulations; (iii) the supplemental measures to achieve the requirements of this Performance Standard as described in paragraphs 19-29 in a way that is permitted by the responsible agency and implementation time schedule; and (iv) the financial and implementation responsibilities of the client in the execution of its Supplemental Resettlement Plan.</p> <p>In the case of projects involving economic displacement only, the client will identify and describe the measures that the responsible government agency plans to use to compensate Affected Communities and persons. If these measures do not meet the relevant requirements of this Performance Standard, the client will</p>		

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			develop an Environmental and Social Action Plan to complement government action. This may include additional compensation for lost assets, and additional efforts to restore lost livelihoods where applicable.		
<p>PS-6: Bio-diversity Conservation and Sustainable Management of Living Natural Resources Based on the risks and impacts identification process, the requirements of this Performance Standard are applied to projects (i) located in modified, natural, and critical habitats; (ii) that potentially impact on or are dependent on ecosystem services over which the client has direct management control or significant influence; or (iii) that include the production of living natural resources (e.g., agriculture, animal husbandry, fisheries, forestry).</p>					
6.1	PS-6: 6	General Requirement	This process will consider relevant threats to biodiversity and ecosystem services, especially focusing on habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, and pollution. It will also take into account the differing values attached to biodiversity and ecosystem services by Affected Communities and, where appropriate, other stakeholders.	<p>The project area is mainly dominated by agricultural land and residential area. The project also involved diversion of 54.3 ha of forest land for 4 laning of NH-3 from 12.6 km to 84.7 km. Forest clearance for diversion of forest land has been obtained by MoEF (F.C. Division) dated 3rd September 2008.</p> <p>There are no ecologically sensitive areas including national parks, wildlife sanctuaries, biosphere reserves, conservation reserves, wetlands of conservation importance or key</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				<p>biodiversity areas in a 5 km radius of the road project. Nearest wildlife sanctuary is Ralamandal present at a distance of ~ 11 km from the starting point.</p> <p>Project road crosses two major river, namely River Ajnar and River Karam, both are non-perennial, have no flow for most part of the year.</p> <p>Before construction of the project ~ 4500 revenue trees were felled from the existing ROW. As compensatory afforestation, at least three times i.e. 13500 trees were to be planted. Total avenue plantation for the project as on the date of site visit is 25261.</p>	
6.2		Protection and Conservation of Bio-diversity	For the purposes of implementation of this Performance Standard, habitats are divided into modified, natural, and critical. Critical habitats are a subset of modified or natural habitats. For the protection and conservation of biodiversity, the mitigation hierarchy includes biodiversity offsets, which may be considered only after appropriate avoidance, minimization, and restoration measures have been applied.	Refer SI. No. 6.1	Refer Sr. No. 6.1

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
6.3	PS-6: 11-12	Modified Habitat	Modified habitats may include areas managed for agriculture, forest plantations, reclaimed coastal zones, and reclaimed wetlands. This Performance Standard applies to those areas of modified habitat that include significant biodiversity value, as determined by the risks and impacts identification process required in Performance Standard 1. The client should minimize impacts on such biodiversity and implement mitigation measures as appropriate.	Refer SI. No. 6.1	Refer Sr. No. 6.1
6.4	PS-6: 13-15	Natural Habitat	Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.	Refer SI. No. 6.1	Refer Sr. No. 6.1
6.5	PS-6: 16-	Critical habitat,	Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems;	The project is not crossing any ecological sensitive areas like national park, wild life sanctuary, tiger reserve, biosphere reserves, lakes and wet lands. Also, there is no endangered flora or fauna along the road corridor. The stretch is not on migratory route of animals.	--

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>and/or (v) areas associated with key evolutionary processes.</p> <p>In such cases where a client is able to meet the requirements defined in paragraph PS-6: 17, the project's mitigation strategy will be described in a Biodiversity Action Plan and will be designed to achieve net gains¹⁵ of those biodiversity values for which the critical habitat was designated.</p>		
6.6	PS-6: 20	Legally Protected Internationally Recognized Areas	<p>In circumstances where a proposed project is located within a legally protected area¹⁶ or an internationally recognized area, the client will meet the requirements of paragraphs 13 through 19 of this Performance Standard, as applicable. In addition, the client will:</p> <ul style="list-style-type: none"> • Demonstrate that the proposed development in such areas is legally permitted; • Act in a manner consistent with any government recognized management plans for such areas; • Consult protected area sponsors and managers, Affected Communities, Indigenous Peoples and other stakeholders on the proposed project, as appropriate; and • Implement additional programs, as appropriate, to promote and enhance 	No protected area is located near the project road.	---

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			the conservation aims and effective management of the area.		
6.7	PS-6: 21-23	Invasive Alien Species	The client will not intentionally introduce any new alien species (not currently established in the country or region of the project) unless this is carried out in accordance with the existing regulatory framework for such introduction. The client will implement measures to avoid the potential for accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbor alien species. Where alien species are already established in the country or region of the proposed project, the client will exercise diligence in not spreading them into areas in which they have not already been established.	ROW maintenance requires clearance of vegetation. However, removal of unnecessary amounts of vegetation often results in the continual replacement of successional species and an increased likelihood of the establishment of invasive species.	Vegetation clearance should be carried out to the lowest extent possible. Further, OPIPL should not intentionally introduce any new alien species, and should select native species for avenue plantation and median plantation.
6.8	PS-6: 24-25	Management of Eco-system Service	Where a project is likely to adversely impact ecosystem services, as determined by the risks and impacts identification process, the client will conduct a systematic review to identify priority ecosystem services. With respect to impacts on priority ecosystem services of relevance to Affected Communities and where the client has direct management control or significant influence over such ecosystem services, adverse impacts should be	Refer SI No. 4.4	Refer SI No. 4.4

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			avoided. If these impacts are unavoidable, the client will minimize them and implement mitigation measures that aim to maintain the value and functionality of priority services. Additional provisions for ecosystem services are included in Performance Standards 4, 5, 7, and 8.		
6.9	PS-6: 26-29	Sustainable Management of Living Natural Resources	Where feasible, the client will locate land-based agribusiness and forestry projects on unforested land or land already converted. Clients who are engaged in such industries will manage living natural resources in a sustainable manner, through the application of industry-specific good management practices and available technologies. Where such primary production practices are codified in globally, regionally, or nationally recognized standards, the client will implement sustainable management practices to one or more relevant and credible standards as demonstrated by independent verification or certification.	Not Applicable	
6.10	PS-6: 30	Supply Chain	Where a client is purchasing primary production (especially but not exclusively food and fiber commodities) that is known to be produced in regions where there is a risk of significant conversion of natural and/or critical habitats, systems and verification practices will be adopted as	Not Applicable	---

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			part of the client's ESMS to evaluate its primary suppliers. The ability of the client to fully address these risks will depend upon the client's level of management control or influence over its primary suppliers.		
<p>PS-7: Indigenous Peoples Rights This Performance Standard applies to communities or groups of Indigenous Peoples who maintain a collective attachment, i.e., whose identity as a group or community is linked, to distinct habitats or ancestral territories and the natural resources therein. It may also apply to communities or groups that have lost collective attachment to distinct habitats or ancestral territories in the project area, occurring within the concerned group members' lifetime, because of forced severance, conflict, government resettlement programs, dispossession of their lands, natural disasters, or incorporation of such territories into an urban area.</p>					
7.1	PS-7: 7-8	Identification	<p>The client will identify, through an environmental and social risks and impacts assessment process, all communities of Indigenous Peoples within the project area of influence who may be affected by the project, as well as the nature and degree of the expected direct and indirect economic, social, cultural (including cultural heritage²), and environmental impacts on them.</p> <p>The client may be required to seek inputs from competent professionals to ascertain whether a particular group is considered as Indigenous Peoples for the purpose of this Performance Standard.</p>	<p>The two districts of Dhar and Khargone are Schedule V areas. The project impacted two tribal communities in the area - Bhils and Bhilalas. Both communities are categorised as Scheduled Tribes. approx. 150 Project Affected Persons belong to these communities from the villages of Dhal, Palasmal, Bakaner, Janavav Kutti, Jhamanjhiri, Dugani etc.</p>	
7.2	PS-7: 9	Adverse Impacts	<p>Adverse impacts on Affected Communities of Indigenous Peoples should be avoided where possible. Where alternatives have</p>	<p>The villages of Dhal, Palasmal, Bakaner, Janavav Kutti, Jhamanjhiri, Dugani were found to be with more than 90% tribal</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>been explored and adverse impacts are unavoidable, the client will minimize, restore, and/or compensate for these impacts in a culturally appropriate manner commensurate with the nature and scale of such impacts and the vulnerability of the Affected Communities of Indigenous Peoples.</p>	<p>population. The review also indicates that there are typically two types of land impacted with regard to scheduled tribes:</p> <ul style="list-style-type: none"> • Private land belonging to STs: these land parcels were privately owned by ST families and have been compensated as per the NH Act, 1956. This also includes patta land (the government had allotted certain parcels to vulnerable communities including STs for residential and agricultural purposes) belonging to STs: • The collectively owned and used land which may be under ownership of government or classified as nistar or charnoi (grazing land). <p>In addition, 54 ha of forest land was diverted for this road.</p> <p>Data on village wise break up of physically displaced households or that of STs is not available in the report or with NHAI. However, discussions with ST community confirmed that there was indeed physical displacement of ST households, especially in Dhar and Khargone districts from villages of Dhal, Palasmal, Bakaner, Jhamanjhiri, Dugani.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
				No Resettlement Action Plan or Indigenous Peoples Development Plan was prepared for the project.	
7.3		Country specific legal and regulatory provisions		<p>The two districts of Dhar and Khargone are Schedule V areas. The Fifth Schedule of the Constitution of India deals with administration and control of scheduled areas and scheduled tribes in these areas. The Fifth Schedule covers Tribal areas in 9 states of India namely Andhra Pradesh, Jharkhand, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Chattisgarh, Orissa and Rajasthan.</p> <p>In the state of Madhya Pradesh following districts are designated as Schedule V Areas: Jhabua, Mandla, Dhar, Khargone, East Nimar (Khandwa), Sailana tehsil in Ratlam district, Betul, Seoni, Balaghat, Morena.</p>	
7.4	PS-7: 21-22	Private sector responsibilities where Government is responsible for managing IP issues.	Where the government has a defined role in the management of Indigenous Peoples issues in relation to the project, the client will collaborate with the responsible government agency, to the extent feasible and permitted by the agency, to achieve	No Indigenous Peoples Development Plan was prepared by NHAI or OPIPL	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			outcomes that are consistent with the objectives of this Performance Standard. The client will prepare a plan (Indigenous People's Plan) that, together with the documents prepared by the responsible government agency, will address the relevant requirements of this Performance Standard.		
7.5	PS-7: 10-15	Consultation and Consent Requirement/Process followed	The client will undertake an engagement process with the Affected Communities of Indigenous Peoples as required in Performance Standard 1. This engagement process includes stakeholder analysis and engagement planning, disclosure of information, consultation, and participation, in a culturally appropriate manner. In recognition of this vulnerability, in addition to the General Requirements of this Performance Standard, the client will obtain the FPIC of the Affected Communities of Indigenous Peoples in the circumstances described in paragraphs 13-17 of this Performance Standard. FPIC applies to project design, implementation, and expected outcomes related to impacts affecting the communities of Indigenous Peoples.	No information on specific consultation undertaken with ST communities of Bhils and Bhilalas was available	
7.6	PS-7: 14	Adequacy of FPIC Process	If the client proposes to locate a project on, or commercially develop natural resources on lands traditionally owned by, or under	FPIC was not undertaken for the project. As can be seen from the project details, the project has impacted collectively	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>the customary use of, Indigenous Peoples, and adverse impacts can be expected, the client will take the following steps:</p> <ul style="list-style-type: none"> □ Document efforts to avoid and otherwise minimize the area of land proposed for the project; □ Document efforts to avoid and otherwise minimize impacts on natural resources and natural areas of importance to Indigenous People; □ Identify and review all property interests and traditional resource uses prior to purchasing or leasing land; □ Assess and document the Affected Communities of Indigenous Peoples' resource use without prejudicing any Indigenous Peoples' land claim. The assessment of land and natural resource use should be gender inclusive and specifically consider women's role in the management and use of these resources; □ Ensure that Affected Communities of Indigenous Peoples are informed of their land rights under national law, including any national law recognizing customary use rights; and □ Offer Affected Communities of Indigenous Peoples compensation and due process in the case of commercial development of their land and natural 	<p>owned grazing land under customary use.</p> <p>However, as the concerned project of widening an existing road required lateral expansion of the existing RoW, the loss of grazing land was small in quantity and the net loss of total pastureland available in the village was a small percentage only. Therefore, the impact on the pastureland is assessed to be insignificant.</p>	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			resources, together with culturally appropriate sustainable development opportunities.		
7.7	PS-7: 16	Critical Cultural Heritage of Indigenous Peoples	Where significant project impacts on critical cultural heritage are unavoidable, the client will obtain the FPIC of the Affected Communities of Indigenous Peoples.	There was no impact reported on any critical cultural heritage of IPs in the area (one temple of Bhilad Deva was relocated in Janapav Kutti).	
7.8	PS-7: 17	Commercial Use of Indigenous Cultural Heritage	Where a project proposes to use the cultural heritage including knowledge, innovations, or practices of Indigenous Peoples for commercial purposes, the client will inform the Affected Communities of Indigenous Peoples of (i) their rights under national law; (ii) the scope and nature of the proposed commercial development; (iii) the potential consequences of such development; and (iv) obtain their FPIC.	Not Applicable	
7.9	PS-7: 18-20	Mitigation and Community Benefit Planning/ Implementation	The client will ensure the timely and equitable delivery of agreed measures to the Affected Communities of Indigenous Peoples. The determination, delivery, and distribution of compensation and other benefit sharing measures to the Affected Communities of Indigenous Peoples will take account of the laws, institutions, and customs of these communities as well as	No Indigenous Peoples Development Plan was prepared by NHAI or OPIPL.	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			their level of interaction with mainstream society.		
<p>PS-8: Cultural Heritage During the project life-cycle, the client will consider potential project impacts to cultural heritage and will apply the provisions of this Performance Standard. For the purposes of this Performance Standard, cultural heritage refers to (i) tangible forms of cultural heritage, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values; (ii) unique natural features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditional lifestyles.</p>					
8.1	PS-8: 5-6	Applicability	The requirements of this Performance Standard apply to cultural heritage regardless of whether or not it has been legally protected or previously disturbed. In addition to complying with applicable law on the protection of cultural heritage, including national law implementing the host country's obligations under the Convention Concerning the Protection of the World Cultural and Natural Heritage, the client will identify and protect cultural heritage by ensuring that internationally recognized practices for the protection, field-based study, and documentation of cultural heritage are implemented.	Details on exact number of cultural or religious structures impacted by the project were not available for review. There was no impact reported on any critical cultural heritage of IPs in the area.	
8.2	PS-8: 6	Protection of Cultural Heritage on Project Design and Execution	Where the risk and identification process determines that there is a chance of impacts to cultural heritage, the client will retain competent professionals to assist in the identification and protection of cultural heritage.	Please see point 8.1	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
8.3	PS-8: 8	Chance Find Procedures	The environmental and social risks and impacts identification process should determine whether the proposed location of a project is in areas where cultural heritage is expected to be found, either during construction or operations. In such cases, as part of the client's ESMS, the client will develop provisions for managing chance finds ¹ through a chance find procedure which will be applied in the event that cultural heritage is subsequently discovered.		
8.4	PS-8: 16	Project's use of cultural heritage	Where a project proposes to use the cultural heritage, including knowledge, innovations, or practices of local communities for commercial purposes, the client will not proceed with such commercialization unless it (i) enters into a process of ICP as described in Performance Standard 1 and which uses a good faith negotiation process that results in a documented outcome and (ii) provides for fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with their customs and traditions.	Please see point 8.1	
8.5	PS-8: 9	Consultation with stakeholders	The client will consult with the Affected Communities to identify cultural heritage of importance, and to incorporate into the client's decision-making process the views	Please see point 8.1	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			of the Affected Communities on such cultural heritage. Consultation will also involve the relevant national or local regulatory agencies that are entrusted with the protection of cultural heritage.		
	PS-8: 10	Community Access	Where the client's project site contains cultural heritage or prevents access to previously accessible cultural heritage sites being used by, or that have been used by, Affected Communities within living memory for long-standing cultural purposes, the client will, based on consultations under paragraph, allow continued access to the cultural site or will provide an alternative access route, subject to overriding health, safety, and security considerations.	Please see point 8.1	
8.6	PS-8: 11	Removal of Replicable Tangible Cultural Heritage	Where the client has encountered tangible cultural heritage that is replicable and not critical, the client will apply mitigation measures that favor avoidance. Where avoidance is not feasible, the client will apply a mitigation hierarchy	Please see point 8.1	
8.7	PS-8:12	Removal of Non-replicable Cultural Heritage	The client will not remove any nonreplicable cultural heritage, unless all of the following conditions are met: <input type="checkbox"/> There are no technically or financially feasible alternatives to removal;	Please see point 8.1	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<ul style="list-style-type: none"> <input type="checkbox"/> The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and <input type="checkbox"/> Any removal of cultural heritage is conducted using the best available technique. 		
8.8	PS-8: 13-14	Critical Cultural Heritage	<p>Critical cultural heritage consists of one or both of the following types of cultural heritage: (i) the internationally recognized heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes; or (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation. The client should not remove, significantly alter, or damage critical cultural heritage. In exceptional circumstances when impacts on critical cultural heritage are unavoidable, the client will use a process of Informed Consultation and Participation (ICP) of the Affected Communities as described in Performance Standard 1 and which uses a good faith negotiation process that results in a documented outcome.</p>	Please see point 8.1	
8.9	PS-8: 15	Legally Protected Cultural Heritage Area	In circumstances where a proposed project is located within a legally protected area or a legally defined buffer zone, the client, in addition to the requirements for critical	Please see point 8.1	

SL. No.	Ref to PS	Subject	Requirement	Observations/Gaps	Recommendation
			<p>cultural heritage, will meet the following requirements:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Comply with defined national or local cultural heritage regulations or the protected area management plans; <input type="checkbox"/> Consult the protected area sponsors and managers, local communities and other key stakeholders on the proposed project; and <input type="checkbox"/> Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area. 		

Annex C

Photo-documentation

Photo-documentation



Photo 1: View of Khalghat Toll Plaza



Photo 2: View of Project Road



Photo 3: First Aid Box at Sonway Toll Plaza



Photo 4: View of Sonway Toll Plaza

Project : Environment and Social Due Diligence

Client: Oriental Pathways (Indore) Private Limited

ERM India Private Limited

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Photo-documentation



Photo 5: View of Waste Management Park – for collection of segregated waste



Photo 6: Mixed Waste in Blue colored Drum placed for collection of paper waste



Photo 7: View of D.G. sets kept at Sonway Toll Plaza with fencing



Photo 8: View of Median Plantation

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Photo-documentation



Photo 9: View of Median Plantation



Photo 10: Crossing at the road



Photo 11: Driving in opposite direction



Photo 12: Parking of vehicles within RoW

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Photo-documentation



Photo 13: Storage of waste/used oil from D.G set at Sonway Toll Plaza



Photo 14: Parking of truck on the road



Photo 15: Spillage of oil at D.G. area at Khalghat Toll Plaza



Photo 16: Waste/used oil kept near D.G. area with signs of spillage

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Photo-documentation



Photo 17: Burning of Waste at Khalghat Toll Plaza



Photo 18: Waste thrown near the boundary of Khalghat Toll Plaza



Photo 19: Display of Danger Sign mentioning start of Ghat Area



Photo 20: Emergency Helpline Number displayed all along the road

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Photo-documentation



Photo 21: Signboard displaying accident prone area 500 m ahead

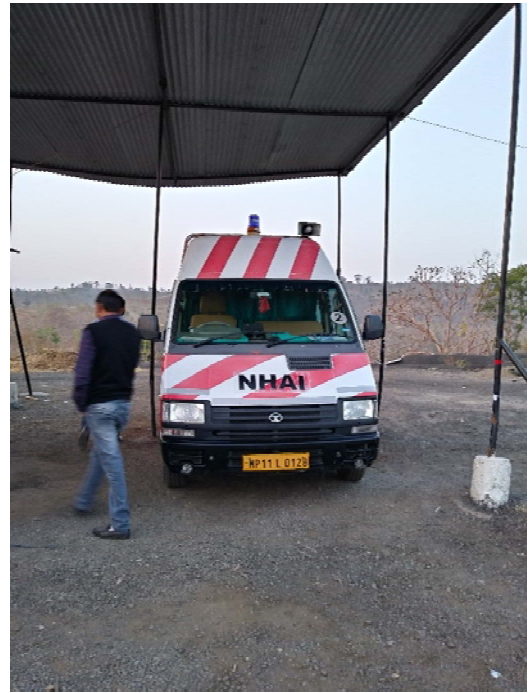


Photo 22: Ambulance stationed at Highway Camp up at Bakaner Ghat



Photo 23: Crane stationed at Highway Camp



Photo 24: View of turning at Bakaner Ghat

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Photo-documentation



Photo 25: View of Stakeholder Consultation



Photo 26: View of Stakeholder Consultation



Photo 27: View of Truck Bay at Site



Photo 28: View of Bore well covered with metal sheets at Khalghat Toll Plaza

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