

Draft Report: Independent Environmental, Health, Safety and Social Compliance Audit Report

Ashoka Highways Durg Limited

Durg, Chhatisgarh, India

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Quality information

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Executive Summary

Ashoka Concessions Ltd (ACL) is a company involved in development of BOT/Annuity based Highway Projects of Ashoka Group. Under its umbrella, ACL has floated seven special purpose vehicle companies (SPVs) to implement road development projects in India. **Ashoka Highway Durg Limited** (hereinafter referred as 'AHDL' or 'Client') is one of such SPVs, which was formed to develop and widen a stretch of 82.6 km four-lane road asset on NH-6 starting at 322.400 km on Durg side at the end of Durg bypass and ending at 405.00 km at Chhatisgarh-Maharashtra border (hereinafter referred to as 'Project'). The concessionaire agreement was signed by AHDL on 23rd January 2008 to manage the road asset for a period of 20 years on BOT basis.

AHDL later appointed Ashoka Buildcon Limited (hereinafter referred as 'ABL') as an EPC contractor for undertaking four-laning of end Durg Bypass to Wainganga Bridge under NHDP-III/ BOT/ IV/ 01 & 02. In this context, NHAI had prepared and submitted the Environmental Impact Assessment Report (EIA) and Resettlement Action Plan (RAP) to ABL.

The project is a joint consortium of Ashoka Buildcon (90%) and India Infrastructure Fund (IDFC Project Equity) (10%) for operating NHAI toll road on BOT basis. Currently, the road asset is operational and is being maintained by AHDL.

The project Equity Group of IDFC requires the project to meet all requirements of the IFC Performance Standards. AHDL has requested AECOM India Private Limited (hereinafter referred as 'AECOM') to provide its technical services for undertaking an Independent Environment, Health, Safety and Social (hereinafter referred as 'EHSS') Compliance Audit for the operating 80 km road stretch.

This Independent Environment, Health, Safety and Social Compliance Audit Report details out the observations made during the assessment along with gaps identified and recommendations to mitigate or minimize the Environment and Social (E&S) risk or impact as identified.

The corrective action plan is presented in Table E1 below:

Table E 1: Corrective Action Plan Table

Item No.	Corrective Actions	Priority (Low/Med./High)	Responsibility	Estimated cost	Expected Deliverables (Report/Measurement)	Deadline (months)
1.	IFC Performance Standards					
1.1.	Record-keeping procedures pertaining to EHS performance reporting, monitoring and assessment for Sub-Contractors to be strengthened.	High	Project Head and HSE Officer-AHDL - Ensure and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> AHDL needs to strengthen on assessment of EHS Performance reporting, monitoring and assessment for all the contractors engaged on monthly basis and conduct audits on frequent intervals 	One (1) month
1.2.	Provision of proper Illumination Arrangements at ASC Infraprojects Sites	Medium	Project Head & ASC Infraprojects	Cost in providing illumination arrangements	<ul style="list-style-type: none"> Proper illumination arrangements needs to be provided at ASC Infraprojects Sites 	One (1) month
1.3.	Proper use of PPE's at +km 342.00 and ASC Infraprojects Sites	High	Project Head & ASC Infraprojects HSE Officer-AHDL- Ensure and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> Proper use of PPE's such as safety helmets, safety shoes, googles, and gloves needs to be carried out at +km 342.00 and Tappa Camp office AHDL needs to ensure that all the sub-contractors engaged are adhering to EHS norms and maintaining records for inspection PPE Compliance inspections. 	Fifteen (15) days
1.4.	Safety monitoring inspections at chainage +342.00 ASC Infraprojects Sites	High	HSE Officer-AHDL and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> Water tanks at +km 342.00 needs to be covered and proper barricading of the area needs to be carried out by M/s. ASC. The sub-contractors engaged should maintain daily safety inspection reports including that of lifting tools and tackles and submit the same to HSE officer, AHDL. Further, AHDL needs to ensure that all non-conformances observed should be resolved within a timeframe of fifteen (15) days 	Fifteen (15) days
1.5.	Grievance reporting and communication	Medium	Project Head , Toll manager and site HRD & HSE Team	Budget within existing resources	<ul style="list-style-type: none"> ABL/AHDL is recommended to update all manual formulated at corporate to develop an external grievance reporting and communication system under current Grievance Redressal Mechanism. 	Two (2) month
1.6.	Strengthening Health and Safety arrangements at Labour Camp	High	Project Head Site HRD Team Site HSE Team	Budget within existing resources	<ul style="list-style-type: none"> AHDL to ensure that the quality of drinking water supplied to direct and indirect workers meets the IS drinking water quality standards. AHDL to ensure that its sub-contractors provide portable/ mobile urinal/ toilet facility at all labour camps. Dysfunctional toilets to be repaired immediately 	One (1) month

					<ul style="list-style-type: none"> AHDL to ensure that, ASC provide washing and bathing areas for labour at labour camp and construct proper drains to avoid water logging. Fire extinguishers to be provided in the labour camp. 	
1.7.	Contractor's Management Plan	Medium	Project EQA Head and HR & Admin Head	Budget within existing resources	<ul style="list-style-type: none"> AHDL to develop a formal contractor management plan with documented procedures and ensure its execution at SPV level. It is also to be ensured that, the contractors and sub-contractors are apprised of the contractor management plan and the procedures. Records of monthly statement of deposit PF slip/challans are also to be maintained by AHDL management. 	One (1) month
1.8.	Contracted labour employment Terms	Medium	EQA & Contract Team Corporate HR & Admin	Budget within existing resources	<ul style="list-style-type: none"> AHDL to develop a formal contractor management plan with documented procedures and ensure its execution. 	One (1) month
2.	<i>EHS & Industry Sector Guidelines</i>					
2.1.	Strengthening safety practices along the road stretch	High	Patrolling Team Project Head & HSE Officer-AHDL/ Corporate HSE Team- ACL	Cost incurred in putting barricading and display of warning signages	<ul style="list-style-type: none"> Barricading along the flyover near Somani village at chainage +km 328.500 needs to be carried out Display of warning signages on speed breaker and speed limits near Thakutola Toll Plaza at chainage +km 331.5-+km 332.00 needs to be carried out Patrolling team needs to conduct inspections for ensuring display of warning signages, speed breaker and speed limits along the entire road stretch Monitoring inspections needs to be conducted by Patrolling Team and EHS officer deputed at Toll Plaza on monthly basis for ensuring display of warning signages. 	Two (2) months

1. Introduction

Ashoka Concessions Ltd (ACL) is a company involved in development of BOT/Annuity based Highway Projects of Ashoka Group. Under its umbrella, ACL has floated seven special purpose vehicle companies (SPVs) to implement road development projects in India. Ashoka Highway Durg Limited (hereinafter referred as 'AHDL' or 'Client') is one of such SPVs, which was formed to develop and widen a stretch of 82.6 km four-lane road asset on NH-6 starting at 322.400 km on Durg side at the end of Durg bypass and ending at 405.00 km at Chhatisgarh-Maharashtra border (hereinafter referred to as 'Project'). The concessionaire agreement was signed by AHDL on 23rd January 2008 to manage the road asset for a period of 20 years on BOT basis.

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The project is a joint consortium of Ashoka Buildcon (90%) and India Infrastructure Fund (IDFC Project Equity) (10%) for operating NHAI toll road on BOT basis. Currently, the road asset is operational and is being maintained by AHDL.

The project Equity Group of IDFC requires the project to meet all requirements of the IFC Performance Standards. AHDL has requested AECOM India Private Limited (hereinafter referred as 'AECOM') to provide its technical services for undertaking an Independent Environment, Health, Safety and Social (hereinafter referred as 'EHSS') Compliance Audit for the operating 82.6 km road stretch.

The EHSS Compliance Audit was carried out by a team of four (4) EHSS professionals from AECOM from 23rd-26th October, 2016. The key observations with respect to EHSS issues, status of compliance against IFC PS, legal requirements and previously suggested Environment and Social Action Plan (India Infrastructure Fund's (IIF) ESAP) in Environment and Social Review were made during the visit and document review. The health, safety and social factors related to the operation and maintenance of the road that directly and indirectly affect the commuters, maintenance staff and nearby communities were assessed.

This Independent Environment, Health, Safety and Social Compliance Audit Report details out the observations made during the assessment along with gaps identified and recommendations to mitigate or minimize the Environment and Social (E&S) risk or impact as identified.

1.1 Objective of the Study

The objectives of the audit are as follows:

- Evaluating the adequacy of Environmental and Social Management System (ESMS) developed and evaluating its implementation at Site;
- Assessing compliance with Environmental and Social Action Plan (ESAP) developed for the project and IFC's Performance Standards, 2006;
- Recommendation of mitigation measures to address anticipated risks and closing the areas of concerns identified; and
- Developing Corrective Action Plan, with timelines and responsibilities, to address any gaps or issues that need to be managed throughout the operational life of the project

1.2 Scope of Work

The scope of work for the study entails the following:

- Review of status of operational E&S permits and status of compliance to permitted conditions along with supporting documents

- Review of the environment, health and safety and social management systems of AHDL and sub-contractors engaged along with the role and influence of regulatory authorities and evaluating its adequacy and status of implementation;
- Review of project operations and associated facilities such as Toll Booth, Control Room, Site office, labour camp and construction site, labour / staff accommodation, onsite maintenance units and set-ups etc;
- Review of land procurement process, labour related issues, environmental concerns, stakeholder concerns and other risks;
- Status of environmental clearances and applicable permits, particularly conditions that apply during the operation phase of the project; and
- Consultations with the community in the immediate vicinity and adjacent to the right of way (ROW) of the road as well as any directly impacted land owners during the right of way acquisition

1.3 Approach and Methodology

The scope of work as provided by the Client and detailed out in the proposal has been the guiding criteria for undertaking this Environment and Social Assessment. The approach and methodology that was adopted for this assessment has been presented below:

Data collection and Desktop Review:

A detailed review and assessment of documents was undertaken in order to attain a comprehensive understanding of the project. A list of documents reviewed has been appended as Annexure A2. At the initial phase of the due diligence exercise, collection of data relating to the different phases of the project such as Environment Impact Assessment (EIA) study undertaken for the road asset by National Highway Authority of India (NHAI), Social Impact Assessment (SIA) Plan, Resettlement Action Plan (RAP), Punch list and its Compliance Status, Grievances Raised (if any), Permits and Approvals, Monitoring Reports, Environmental and Social Action Plan (ESAP), Environment and Social Policies and Procedures developed and implemented for the project, records maintained etc. from was initiated and reviewed.

Site Assessment:

A site visit was undertaken to assess the status of the RoW, review the implementation of the policies and procedures on site, assess if any encroachment cases have been identified along the RoW, assess the status of compliance to permitted conditions along with review of supporting documents, assess the adequacy of the roles and responsibilities of the personnel handling environmental and social risks and impacts, consultations undertaken with direct and indirect stakeholders of the project, identify gaps in compliance of regulatory and statutory requirements, assess if the road asset is passing through any scheduled areas, critical natural habitat and including evaluating the adequacy of mitigation measures implemented for impacts from air and/or noise in accordance with IFC's Performance Standards and World Bank Group EHS Guidelines.

The assessment included understanding the general operations, identifying potentially unsafe areas, health and safety practices, existing pollution management systems, reporting systems, worker management, emergency response systems, ecology, cultural heritage sites and Indigenous People. It also included interactions direct employees of the project proponent, technical O&M staff, contractors, contractual labour.

Report Preparation

A detailed Independent Environment, Health, Safety and Social Compliance Audit Report has been prepared mentioning the project operations, applicability of the reference framework, site observations and associated non-conformance/ non-compliances and area of concerns and mitigation measures proposed in form of Environment and Social Action Plan which has detailed corrective and preventive actions, mitigation measures along with timelines, deliverables and responsibilities.

1.4 Applicable International Guidelines and Conventions/ Protocols

The Reference Framework for the proposed Independent Environment, Health, Safety and Social Compliance Audit is as follows:

- IFC Performance Standards on Social and Environment, 2006

- Applicable World Bank Group/IFC Environment Health and Safety (EHS) Guidelines, specifically, the following World Bank EHS Guidelines, published on 30th April, 2007
 - IFC EHS General Guidelines; and
 - IFC EHS Guidelines for Toll Roads

1.5 Limitations and Data Gaps

This report describes results of AECOM's Independent Environment, Health, Safety and Social assessment conducted to assess potential EHS and Social issues associated with project related activities. As with any assessment / due diligence study, there is a certain degree of dependence on verbal information provided by facility or site representatives, which is not readily verifiable through visual observations or supported by any available written documentation. During the course of this site assessment, AECOM has attempted to independently assess the potential presence of such conditions within the limits established under the scope of work as described in our proposal. However, verification of potentially important facts is not always possible. AECOM shall not be held responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed by facility or site representative during the assessment process.

This report was prepared by AECOM for the client; AHDL. AECOM's client may disclose information to third parties, who may use and rely upon the information at their discretion. Any use of or reliance upon the information by any party shall be solely at the risk of such third party and without legal recourse against AECOM, its parent, its subsidiaries and affiliates; or their respective employees, Officers, or Directors; regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent, or other negligence and strict liability of AECOM), statute, or otherwise.

The Independent Environment, Health, Safety and Social Assessment is largely based on the documents made available, discussions with stakeholders and observations from site walk through undertaken by AECOM during the assessment process.

Wherever AECOM has been unable to make a judgment or assess any process, it has highlighted the same as an information gap and suggested a way forward.

1.6 Layout of the Report

The layout of the report is provided as below,

Chapter 2	Project Description
Section 3	Compliance Status with respect to Fund's ESAP
Section 4	Compliance Status with respect to IFC PS
Section 5	Corrective Action Plan

Annexures have also been added to the Report to support the observations made in preparation of the report.

Appendix A.1: Strip Plan for the Project

Appendix A.2: List of documents reviewed

Appendix A.3: Photo Documentation

2. Project Description

This section of the report provides the details about the project background and current status of the operating road asset. It also provides a description of project components along with associated facilities.

2.1 Project Background

AHDL was appointed as Concessionaire by National Highways Authority of India (NHAI) on 23rd January, 2008 for a period of 20 years including 2.5 years construction timeframe for implementation of design, construction, development, finance, operation and maintenance of the road asset End of Durg Bypass-Chhattisgarh /Maharashtra Border from km 322.400km to 405.000 of NH-06 Under NHDP Phase IIIA on Build Operate Transfer (BOT) basis. The project became operational on 15th February, 2012.

The project starts from chainage 322.400km at Anjora Village, End of Durg By-pass-Chattisgarh and ends at chainage 405.000km at Village Bag Nadi, Maharashtra Border in the district of Rajnandgaon, traverses a total length of 82.6 km as presented below in **Figure 2-1**.

The road passes through urban and semi urban areas on National Highway No.6 (NH-6), originating from Kolkata which further traverses through the states of West Bengal, Jharkhand, Orissa, Chattisgarh, Maharashtra and Gujarat and terminates at Hazira in Gujarat. The geo-coordinates of the project alignment are given in **Figure 2-2**.

Figure 2-1: Location Map

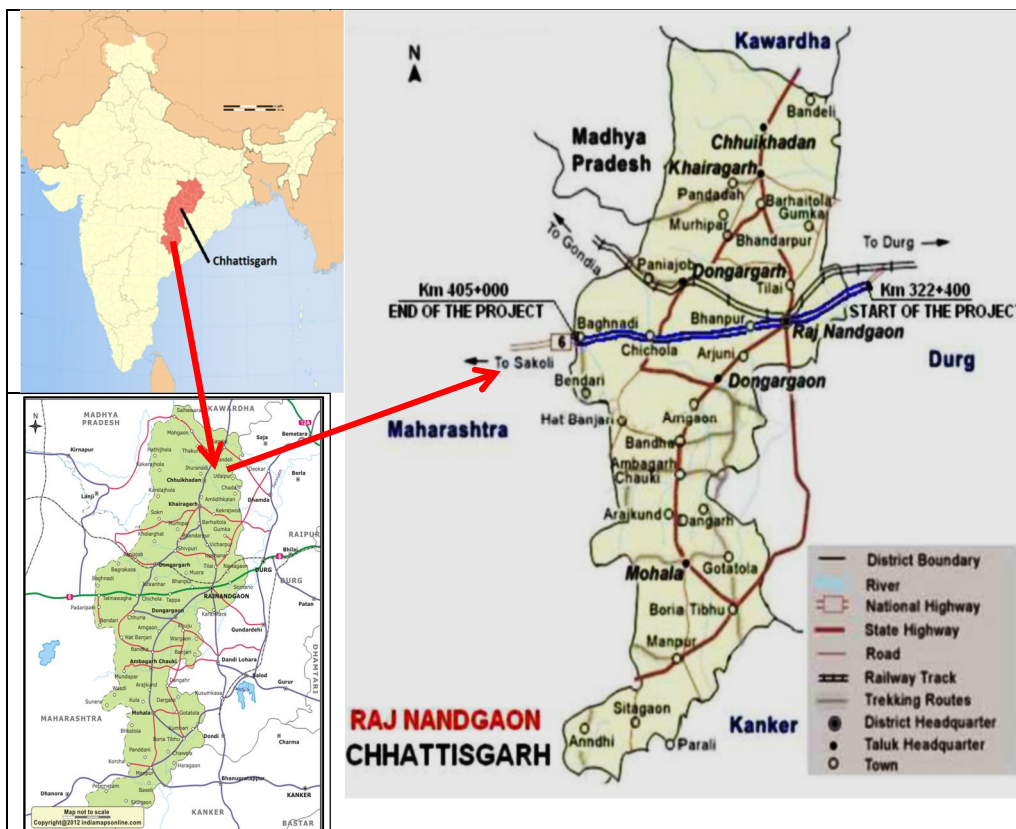


Table 2-1: Geo-coordinates of the project alignment

Milestone	Location	Chainage	Coordinates
AHDL Project Starting point	Anjora Village	322.400 km	21° 9'4.52"
	End of Durg Bypass		81°12'22.32"E
AHDL Project End point	Bag Nadi	405.00 km	21° 4'21.05"N
	Maharashtra Border		80°27'3.43"E

The details of the areas falling under the operational road asset are given below in **Table 2-2**. The operational road asset of AHDL passes through a total of forty three (43) villages in Rajnandgaon district in Chhatisgarh.

Table 2-2: Details of areas under the operational road asset

S.No	District	Tehsil	Name of the Village	
1	Rajnandgaon	Rajnandgaon	Baputola	
2			Chabuknala	
3			Janakpur	
4			Majraipur	
5			Nagarkohra	
6			Patekohra	
7			Rangitalab	
8			Ranitalab	
9			Sadak Banjari	
10			Sadak Chirchari	
11			Kopedeeh	
12			Malaidabri	
13			Tappa	
14			Anjora	
15			Barga	
16			Bhanpuri	
17			Dawada	
18			Indamara	
19			Indawani	
20			Kouribhata	
21			Lakholi	
22			Manki	
23			Parrikala	
24			Rajanandgaon	
25	Rajnandgaon	Rajnandgaon	Somni	
26			Sundra	
27			Tedesara	
28			Thakurtola	
29			Thakula	
30			Torankatta	
31			Dongargarh	Riwagahan
32				Banbhedi
33				Tendunala

34		Tumbibord
35		Baghnadi
36	Manpur	Kohka
37	Churiya	Ghortalab
38		Jhandatalab
39		Kolihapuri
40		Narayangarh
41		Rampur
42		Uraidabri
43		Pendri

It was noted during the review of Resettlement Action Plan (RAP) that the total land acquired for the project and associated facilities is 100.01 ha. The compensation details for land acquisition are given in **Table 2-3**.

Table 2-3: Compensation details for land acquisition

Aspect	Details
Total Land acquired (ha)	100.1 Ha
Number of land owners	1789
Total compensation paid (INR)	40,98,25,693.8
Average rate per sq. m (INR)	409.8

The project was awarded Environmental Clearance by Ministry of Environment and Forests vide letter no. 5-18/2007-IA-III dated 11th June, 2007.

2.2 Current Status of the Project

The project is operational since February 2012. The present road configuration is 8.75 m carriageway including paved shoulder with available ROW varying from 33.5 m to 60 m and a total length of 82.6 km. The details of the road stretch are given below in **Table 2-4**.

Table 2-4: Details of road stretch of AHDL

Components	Details
Service Road (km)	18.90
Major Intersections (no.)	54
Major Intersections (no.)	40
Major Bridges (no.)	1
Minor Bridges (no.)	11
Pedestrian underpasses (no.)	10
Flyovers (no.)	2
Junctions (no.)	4
Bus bays (no.)	22
Culverts (no.)	88
Truck Parking/Lay-bays (no.)	2

During construction phase, M/S Consulting Engineers Group (CEG) was appointed as an Independent Consultant for the project for monitoring and supervision of the quality, environment & safety related aspects.

Presently, AHDL is the concessionaire to manage the road asset for a period of 20 years on BOT basis. As part of this concessionaire agreement, M/S Kawade & Gawade Project Pvt. Ltd has been appointed as an Independent Consultant for the project for monitoring and supervision of the same aspects. As mentioned above, ABL has further engaged subcontractors for O&M activities such as flyover construction, labour supply, road marking etc include - M/s. ASC Infratech, M/s. ATR Infraprojects Pvt. Ltd., M/s. Kataline Construction technologies Pvt. Ltd., M/s. Tuljaai Transport and M/s. Linnhoff India Pvt. Ltd.

Manpower

It is reported that AHDL has employed direct and indirect staff (ninety-two (92) workers engaged through contractors). The direct employees include two (2) control room office members and seven (07) paramedical staff members. Further, one (1) HSE officer and nineteen (19) security guards including three (3) gunmen are provided at site on payroll of AHDL.

ABL has signed a contract with a manpower consultancy firm, M/S ATR Infraprojects Pvt. Ltd. (ATR) for supplying the skilled manpower and labour to carry out work related to maintenance of road such as painting, repairing and cleaning of road; watering of plants, grass cutting and stone fixing, etc.

Thakur tola Toll Plaza (+km 331.865)

The Toll Plaza comprises of 12 lanes (5 Lane + 1 Lane for oversize-dimension vehicle) along with administrative office for O&M activities like fencing, lined drain and parking area. The Toll booth operation is carried out in three shifts per day. The Toll Booth Operation team comprises Administrative officer, Assistant Accountant, Shift-In charge, Toll Manager, Toll Supervisor, Asst. Toll Supervisor, Toll Collector, Toll Attendant, Barrier Man, Gun man

- As observed, one (1) 40 kVA DG set has been installed at Toll Plaza for power backup.
- There is one (1) borewell which is used for meeting water requirements of the site including plantation, drinking and domestic water requirements. For drinking water, the water is treated using Reverse Osmosis (RO system).
- **Emergency Preparedness:** It was observed:
 - A copy of the Emergency Response Preparedness Plan (EPRP) was available at the Toll plaza.
 - The inventory and Issue Register for Personal Protective Equipment (PPE) was maintained at Toll Plaza.
 - The EHS Policy, contact numbers of Emergency Response Team (ERP) and Emergency Evacuation Plan were found to be displayed at the Main Gate of Toll Plaza.
 - The signages pertaining to emergency exit, Assembly Point were observed at the Plaza.
 - Eleven fire extinguishers, comprising of one (1) CO₂-type and nine (9) Dry Chemical type (DCP) and one (1) first aid box were observed at Toll Plaza.
 - Two (2) patrolling vehicles of AHDL were operational round the clock; one (1) ambulance equipped with Cardio Pulmonary Resuscitation (CPR) and Oxygen Cylinder are available

Tappa Camp Office (+km 364.800)

- The Camp office is situated at Tappa which is responsible for O&M activity for the entire stretch of the project roadway.
- It was observed that a hot mix plant of capacity 120 TPH was being operated by M/s. Linnhoff India Pvt. Ltd. and supervision of the contractor related work is carried out by AHDL.
- There is one (1) borewell at Tappa Camp Office used for meeting water requirements of the Hot Mix Plant and Batching Unit, domestic requirements and drinking water supplies after the RO treatment and for meeting water requirements for plantation, at Camp office. The water from tankers is used for meeting water requirements of avenue and median plantation.
- The daily water consumption is around 41000 litres/ day which comprises of 4000 litres/day at Tappa Camp office, 2000 litres/day at Toll Plaza and 35000 litres/ day for watering the plantations at the medians and the avenues.
- The display of EHS Policy, implementation of EPRP, first aid box (1) and 5 fire extinguishers (two (2) CO₂-type and three (3) Dry Chemical type (DCP)) were observed at Tappa Camp Office.

2.3 Permits and Approvals

The Permits and Licenses obtained for this project in the Operations and Maintenance Phase have been provided below:

Table 2-5: List of Permits/ Licenses taken

S.No.	Licence/Permits	Approval
1	Environmental Clearance	Environmental Clearance was obtained from MoEF vide letter no. 5-18/2007-IA.III dated 11 th June, 2007
2	Consent to Operate for HMP Plant from Chhattisgarh Environmental Conservation Board.	Consent to Operate under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 was granted to Ashoka Buildcon dated 03 rd June 2016 vide letter no. 716/RO/TS/CECB/2016
3	Contract Labour (Regulation and Abolition) Act, 1970	Ashoka Buildcon (Durg) Ltd. has obtained amendments in Contract Labour Licence vide licence no. RP-54 (287)/2012-ALC dated 15th November, 2016
4	Licence to Work a Factory (Factories Rules 1962)	Licence to work a factory was Granted to Ashoka Buildcon Limited dated 15th January 2016 vide letter no. CG-08-394-3/RND-309-3/0/2m (i)/A/3659-1271
5	Lifting Machine, chain Ropes Licence under sub section 1 a (iii) of section 29 of Chhattisgarh factories Act & Rule, 1962	Lifting Machine, chain Ropes Licence under sub section 1 a (iii) of section 29 of Chhattisgarh factories Act & Rule, 1962 was granted to Ashoka Buildcon Limited dated 11th April 2016.
6	Land Use Conversion	The Land Use Conversion Certificate was obtained for Tappa Camp Office on 17 th December, 2013
7	Permission for installation of DG Set at Tappa Camp office	Clearance by Electrical Inspectorate for installation of 380 KVA DG Set at Tappa Camp Office was obtained vide dated 23 rd January, 2016
8	NOC from Gram Panchayat	NOC from Gram Panchayat was obtained for Tappa Camp office vide letter no. 72/A-2/12-13 dated 27th November, 2013
9	Application for the Batching plant	ASC Infraprojects made application for consent to establishment in 22 nd Dec-2016 to CECB.

3. Compliance to Fund's Environment and Social Action Plan (ESAP)

The status of compliance against Fund's Environment and Social Action Plan (ESAP) is given below in **Table 3-1**

Table 3-1: Compliance to Fund's Environment and Social Action Plan (ESAP)

Item	Deliverable	Completion Date	Compliance Status
1	AHDL shall commit to the Fund to establish, implement and maintain Environment & Social Management Systems and Procedures for managing environment, health, safety and social performance in accordance with the elements of ISO 14001 & OHSAS 18001 for AHDL and AHBL within one year of operationalisation. In the interim, ABL shall manage EHSS impacts as per its ISO 14001 certified environmental management system.	Before signing.	Complied

2	AHDL shall incorporate ILO objectives in its HR policy and procedures.	Before signing and not later than March 2009	Complied
3	AHDL shall submit copy of forest clearance / approval once obtained and address concerns, if any, to the satisfaction of the Fund	Within a week from the date of obtaining the same	Complied
4	<p>AHDL shall undertake a supplementary study to evaluate</p> <ul style="list-style-type: none"> - environmental impact assessment both for construction and operation phases, in accordance with the Funds PS 1, PS3, PS4 and PS6 requirements & General EHS Guidelines dated April 30, 2007 issued by IFC and based on the outcome of the supplementary impact assessment, develop and implement mitigation plans for identified impacts during both construction and operation phases, which are consistent with the Fund PS 1, 3, 4 and 6 requirements - align RAP and entitlement framework to include non-titleholders getting affected as per the TOR specified and draw plans to address and mitigate livelihood issues emerging from such displacement so that the same is consistent with PS 5 requirement. 	<p>Engagement of consultant before disbursement</p> <p>Completion of Study/Development of mitigation plans – within six (6) months from the first disbursement</p>	Complied
5	AHDL shall explain the computation of replacement value for different assets including land and ensure that the same shall comply with the PS 5 requirements	Before disbursement	Complied
6	AHDL shall develop community engagement plan on health and safety	Within six (6) months of signing	Complied

4. Compliance Status with respect to IFC PS

This section details the compliance of the project with respect to requirements under IFC Sustainability Framework and applicable national and local regulations. The observations made during the Site visit, details of observations, gaps and recommendations identified are discussed in the below sections.

4.1 Performance Standard (PS) 1: Assessment and Management of Social & Environmental Risks and Impacts

4.1.1 Environment and Social Management System

Requirement: *The client, will conduct environmental and social assessment of the project, and establish and maintain an ESMS appropriate to the nature and scale of the project and take measures for mitigation of the identified environmental and social risks and impacts. The ESMS will incorporate the following elements: (i) policy; (ii) 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.*

Observation:

- Ashoka Concessions Limited (ACL), the parent company of AHDL, is an ISO Certified organization. ACL has developed an Integrated Management System (IMS) Manual (ACL/IMS L-1) covering ISO 9001: 2015 (QMS), ISO 14001:2015 (EMS) and OHSAS 18001:2007 (OHSAS) requirements, which is applicable to all its subsidiaries including SPVs such as AHDL, and all engaged sub-contractors for implementation at project site. AHDL has documented procedures for management of various EHS&S issues along with responsibilities, monitoring plan, review and audit mechanism as given below:
 - Health, Safety and Environmental (HSE) procedure manual (DOC/ ABL/ HSE / DPM) dated Date 30th July 2016
 - Standard Operating Procedure (SOP) for ESMP- (ACL/HSE&S/ESMP-SOP/01 dated 16th January, 2013
 - Environmental and Social Management Plan (ACL-ESMP/L-2), (Version 02 dated 2nd February, 2015)
 - Guidelines for Traffic Management Plan (ACL/HSE&S/ESMP/ GTMP/01)
 - PPE Matrix for Road and Bridge construction workers (ACL/HSE&S/ESMP/PPE Matrix/01)
 - HSE Work Instruction (ACL /IMS/HSE/01)
 - Emergency Response Plan (ACL/HSE&S/ERP/01)
 - Tree Plantation Guideline for National Highway Projects (ACL/HSE&S/ESMP-TPGNHP/01)
 - Guideline for Grievance Redressal Mechanism for SPV/EPC (ACL/HSE&S/ESMP-GGRM/01)
 - Guideline for Disposal of Construction Waste (ACL/HSE&S/ESMP/GDCW/01)
 - Environment Monitoring Plan (ACL/HSE&S/ESMP/GEMP/01)
 - Guideline for Tool Box (ACL/HSE&S/TOOL BOX TALK/01)
- The Standard Operating Procedure for ESMP- (ACL/HSE&S/ESMP-SOP/01 dated 16th January, 2013 addresses the impacts from pre-construction, construction and operation phase and ensures effective management of the potential impacts through implementation of mitigation measures along with detailed roles and responsibilities for implementation. The ESSMSM (ACL/ESSMSM L-2) (Version 02 dated 2nd February, 2015) comprises of Quality, Environment, Health, Safety objectives; Environmental Monitoring Plan along with frequency of monitoring environmental parameters and an Environmental Management Plan (EMP) along with targets, roles and responsibilities for effective implementation.
- The EPC contractor for the project, ABL has developed and implemented the requirements of its Health, Safety and Environmental procedure manual (DOC/ ABL/ HSE / DPM dated Date 30th July 2016) comprising of QHSE Policy, Risk and Hazard Assessment, Legal Register, Accident Reporting Procedure, and Work Permit System.
- AHDL monitors the implementation of the Environmental and Social Compliance based on the Environmental and Social Action Plan (ESAP) for monitoring adherence of the organization to the IFC Performance Standards 2006.

Gaps:

- None

Recommendations:

- None

4.1.2 Policy

Requirement: *The client will establish an overarching Environmental and Social policy defining the environmental and social objectives to achieve sound environmental and social performance. It should include a framework for the environmental and social assessment and management process, and should be in consistent with the applicable laws and legislations at State and National level and the principles of the Performance Standards.*

Observation: The Environment, Health, and Safety Policy of ABL signed by Chairman dated 1st August, 2013 in English & Hindi language was observed to be displayed at Thakurtola Toll Plaza and Tappa Camp office. It comprises of company's commitment to continual improvement of quality, environmental, occupational health and safety management system performance; prevention of pollution, injury and ill health; compliance with all applicable legal norms; and consultation with all concerned stakeholders.

Gaps:

- None

Recommendations:

- None

4.1.3 Identification of Risks and Impacts

Requirement: *The client will establish and maintain a process for identifying the environmental and social risks and impacts of the project. The scope of the risks and impacts identification process will be consistent with good international industry practice, and will determine the appropriate and relevant methods and assessment tools. 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. The risks and impacts identification process will consider the emissions of greenhouse gases, the relevant risks associated with a changing climate and the adaptation opportunities, and potential transboundary effects, such as pollution of air, or use or pollution of international waterways.*

Observation:

- The Environmental Impact Assessment (EIA) study conducted for the project identified the environmental and social risks for the project during operation phase and the mitigation measures proposed to ameliorate such impacts.
- The risks identified in the EIA report include impacts on noise levels and impacts on air quality during operations and hazardous waste generation due to DG Set operations at Toll Plaza and Tappa Camp.
- Supplementary gap assessment studies pertaining to EIA, Land and RAP were undertaken by Ashoka by hiring M/s Nimbolkar & Associates.
- ABL has prepared a Greenhouse Gas Emission Inventory according to which 1050.97 Tons/ year emissions are generated during O&M phase from direct emissions from operations of DG Set, heavy machinery and batching plant at Tappa Camp office and Thakurtola Toll Plaza. Around 351.34 Tons/year emission is generated due to indirect emissions from electricity consumption and transportation emissions. ABL has obtained a certificate of verification from International Standards Certifications (ISC) under ISO 14064.1:2006- Greenhouse Gases Part I & Part II in 2013 for compliance with the standards of verification.

- AHDL's Hazard Identification and Risk Estimation Control Procedure (HIRA), maintained as a part of Risk Register for identification and control of potential hazards associated with the work activities was reviewed during the document review. It includes risk estimation for fire/explosion, fall hazard, accidents due to traffic movement, road accidents, snake bites, electrical shock, slip/trip due to poor illumination, civil unrest, handling hazardous chemicals, dust inhalation and elevator failure.

Gaps

- None

Recommendations:

- None

4.1.4 Management Programs

Requirement: *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.*

Observation: AHDL has established an Environmental and Social Management and Monitoring Plan (ESMMP) to establish and maintain an integrated environment and social management programs. It covers significant environmental and social risk and impacts on employees, contractors and community health and safety.

The Environmental and Social Management Plan comprises of implementation guidelines, targets, and responsibility for implementation of the following environmental, health, safety and social measures:

- Pollution Management Plan
- Community Health and Safety Management Plan
- Biodiversity Conservation Plan

The environmental monitoring plan framework includes the following components:

- Ambient Air Quality Monitoring
- Ambient Noise Monitoring
- Water Quality Monitoring
- Tree Plantation Monitoring

The environmental monitoring program developed by AHDL covering construction, and operation phases of the Project defines suggested frequency of monitoring of various environmental features. The Air Quality and Noise level monitoring is being conducted on quarterly basis.

Maintenance Management: The procedure includes routine maintenance, periodic maintenance, work instructions for road maintenance, emergency maintenance and other maintenance which includes illumination, highway signs and road markings, landscaping, safety barriers and pedestrian guard rail. The Road maintenance inventory for metal beam anti crash barrier, Routine Maintenance Plan, Monthly Inspection Report-Road signages, Periodic Maintenance Plan, Pedestrian Railing, Junctions and Median openings for October, 2016 were provided for review and noted to be followed on site.

Road Asset Management: The procedure on Road Asset Management is in place which has laid down procedures to ensure maximum availability and efficient utilisation of the road asset. It also includes the measures suggested for protection of the ROW encroachments and other unauthorized activities. Managing of rest areas, bus bays, bus parking areas and other facilities for highway users including the buildings and plaza facilities are the responsibility of the AHDL. AHDL is to list the encroachments with a description, location and extent of each encroachment, draw up a method statement and programme for the removal of the accesses or encroachment by NHAI.

Traffic Management: ABL has formulated a procedure on Traffic Management, as per which the Project corridor is to be monitored on 24X7 hours basis by patrolling team for elements relating to any new encroachments within the ROW, unauthorized construction on road asset or entrance connections, unauthorized structures and inference with drainage systems within the ROW etc. An ambulance van equipped with a stretcher, first aid box, Cardio Pulmonary Resuscitation (CPR) and Oxygen Cylinder has been deployed at the site to attend to any emergencies arising out of road accidents, as per the said procedure.

Gaps:

- None

Recommendations:

- None

4.1.5 Organizational Capacity and Competency

Requirement: *The client, in collaboration with appropriate and relevant third parties, will establish, maintain, and strengthen as necessary an organizational structure that defines roles, responsibilities, and authority to implement the ESMS. The 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.*

Observation: As per the organizational structure of AHDL, ADHL shall directly recruit a Toll Operations Manager who will be responsible for coordination, discussion and liaison with NHAI. The Toll Operations Manager shall be responsible for overall maintenance of the project by directly monitoring and guiding the maintenance works being planned. The Plaza Manager reports to HO Project Coordinator who further reports to Toll Operation Department Head. The Accounts Officer (1), H.R. Officer (1), Assistant Incident Management (ICMG) In-charge (1), Shift In-charge (4), IT Engineer (1), Electrician (3), HSE Officer (1), Store Assistant (1) and Auditor (1) reports to the Assistant Plaza Manager.

The ICMG In-charge is responsible for supervising Emergency Response Team which comprises of Control Room Officers (2), Paramedical Staff (7), Hydra Operations (3), Patrolling Supervisors (3) and Helpers (11). The Shift In-charge is further assisted by Supervisors (15), Cashier (3), Toll Collector (40), Security Supervisor (1), Security Guard (19) and Gunman (03).

The HSE Officer is responsible for imparting safety training as per Safety calendar prepared in coordination with Corporate HSE Team, preparing EHS MIS Reports comprising details of training, drills, Incident Reports, Accident Reporting, Legal Matrix, Monthly HSE Minutes of Meeting, Memorandum issued for violation of safety norms, Tool Box Talks and Risk Assessment. The attendance records of trainings, Tool Box Talks and EHS Committee meeting was available for review. The HSE Officer is also responsible for issuing Memorandum in case of violation of Safety measures, Incident Reporting and implementation of Environmental and Social Management Plan measures as identified in ESAP.

The HR officer is responsible for conducting community consultations, undertaking Corporate Social Responsibility (CSR) initiatives and addressing Grievance related issues for the employees and the communities residing in the adjoining areas

Gaps:

- None

Recommendations:

- None

4.1.6 Emergency Preparedness and Response

Requirement : *The ESMS will establish and maintain an emergency preparedness and response system so that the client, in collaboration with appropriate and relevant third parties, 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 be periodically reviewed and revised, as necessary, to reflect changing conditions.*

Observation:

- The Emergency Response Plan (ERP) prepared comprises of an organisation structure for Response Management Team with delegated roles and responsibilities of Fire Fighting team, Rescue team and First Aid Team. It covers accidents due to heavy machinery, fire and explosion due to fuelling station and Store, Chemical Spill, Road Accidents, Robbery and natural hazards like earthquake, landslides and flood etc. The Reporting and alerting procedures and equipment to be handled in emergency situations have been detailed out in ERP.
- The Patrolling team comprising of eleven (11) personnel who are responsible for traversing the road stretch, round the clock and preparation of Patrolling Vehicle Inspection Report on daily basis. The Control Room office receives call in case of emergency and conveys the information to Paramedical staff that further informs police and sends Ambulance to the location of the accident.
- It was observed that the Emergency contact numbers have been displayed at multiple locations along the road alignment.
- A high mast light was observed only at Toll Plaza. The illumination arrangements were observed to be in patches only near Rajnandgaon town. Reportedly, AHDL has not provided illumination arrangement as it not a part of Concessionaire Agreement signed with NHAI.
- The records for Accident/ Incident Investigation, trainings, Fire Fighting team, First Aid Team, First Aid training Attendance sheet are reviewed during the audit. The Accident Investigation Register comprising of details of accident, location (chainage), recording fatal, grievous, minor and non-injured cases, no. of animals killed during accident and safety measures provided for addressing the Accident Investigations is periodically updated and maintained. .
- The Personal Protection Equipment (PPE) inventory is maintained which comprises of records for Safety Belt, Helmets, Reflective Jackets, Safety Shoes, and Gloves. Further, it was informed that ACL/AHDL monitors usage of PPE by all contractors engaged at Site as per PPE Management Procedures

Gaps:

- None

Recommendations:

- None

4.1.7 Monitoring and Review

Requirement: *The client will establish 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. 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.*

Observation:

- The Environmental, Social and Safety Management Plan (ESMMP) prepared by the Company provides a framework for environmental and social management of the project in operation phase along with dedicated roles and responsibilities and frequency of monitoring.
- The EHS Committee comprising of representatives from ACL is responsible for ensuring environmental and social effectiveness at Site through EHS Audit System, Monthly Environmental Progress Reporting for ensuring environmental compliance w.r.t. ESAP and ESSMP. The EHS Committee Meeting proceedings are maintained to implement Corrective Action Plan identified based on findings and a target date for implementation of the measures. The findings which remain unaddressed are discussed in the next EHS Committee Meeting for closure of the identified issues. There is an existing mechanism for Internal EHS audit to be conducted by ACL's EHS committee and submission to the management for approval and supervision. The Internal Audit Summary Report dated 16th June, 2016 was available for review which comprises findings related to conformances and non-conformances and action plan for

closure of identified issues within a fortnight. The Internal Audit team includes Toll Administration and Incident Management Team, HR & Admin Team, Information Technology, and IT team at Toll Plaza and Store, Plant and Machinery, and QCA Lab team at Tappa Camp office.

- Ambient air quality monitoring for evaluation of PM2.5, PM10, SO2 and NOX levels at Tappa Camp and Thakurtola Toll Plaza and noise monitoring is carried out on quarterly basis by a NABL accredited laboratory.
- The Health, Safety and Environment Code of Conduct for Contractors of Ashoka Concessions Limited dated 8th August, 2014 is being adhered by AHDL for providing General Safety Guidelines for Contractors, adherence of EHS norms by engaged contractors and for providing Safety Code of Conduct to Contractors, guidelines on PPE adherence, and Transport and Road Safety, Road Diversion Safety Management.
- As per Health, Safety and Environment Work Instructions (Doc No. ABL/FR/CO/DO/PR/HSE10 dated 4th January, 2014; HSE alerts are required to be issued in case of HSE non-compliance and a record for Root cause investigations, recommendations, implementation and Action Plan needs to be maintained.
- It was observed that the Contract Agreement signed with M/s. ASC Infratech vide work order no. 161 dated 10.06.2016, requires the Contractor to abide by EHS norms and labour laws. It was reported that the due to non-compliance of the Contract condition regarding periodic EHS Performance reporting, monitoring and assessment record keeping for the subcontractors engaged on monthly basis, an HSE Memo has been issued to M/s. ASC engaged at +km 342.00 on 14th December, 2016 for unsafe work practice and no use of PPE.

Gaps:

- Although the EHS Performance reporting, monitoring and assessment record keeping for the engaged subcontractors is undertaken, there is no periodic updation of these records.

Recommendations:

AHDL needs to update sub-contractor's EHS Performance reporting, monitoring and assessment on monthly basis and conduct internal audits at frequent intervals.

4.1.8 Stakeholder Engagement

Requirement: *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. Where applicable, the Stakeholder Engagement Plan will include differentiated measures to allow the effective participation of those identified as disadvantaged or vulnerable.*

When the stakeholder engagement process depends substantially on community representatives, the client will make every reasonable effort to verify that such persons do in fact represent the views of Affected Communities and that they can be relied upon to faithfully communicate the results of consultations to their constituents.

Observation:

- ABL has formulated a Department Procedure Manual (DOC/ABL/HSE/DPM or WI dated 30 July 2016) with a procedure for effective communication with the project stakeholders.
- AHDL undertakes various activities at site for engaging nearby communities such as organizing camp for Navratri festival and arrange feast for devotees every year, construction of a pedestrian joining Mata Bamleshwari temple Dongargarh with toll road, organizing Road safety week, National Safety Day, Anti-tobacco day and World environment day at site with community and conduct awareness program, which also includes the participation of nearby communities.
- The corporate office allocates and approves funds for such activities.

Gaps

- Records (such as photographic evidences) are not being maintained for the community engagement activities undertaken at site.

Recommendations

- Company to organise periodic public awareness programs on road safety on priority for the current year and maintain the related records.

4.1.9 External Communications and Grievance Mechanism

Requirement : *External Communication: 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.*

Grievance Mechanism for Affected Communities: Where there are Affected Communities, the client will establish a grievance mechanism to receive and facilitate resolution of Affected Communities' concerns and grievances about the client's environmental and social performance.

Observation:

- As reported, ABL has established an external & internal communication procedure under Department Procedure Manual (DOC/ABL/HSE/DPM or WI dated 30 July 2016) prepared at corporate level.
- ABL at corporate level has formulated a manual on Environment, Safety and Social Management System (ACL/HSE&S/ESMP-GGRM) wherein, ABL directs all its SPV's, EPC contractors and Sub-contractors to develop Grievance Redressal Mechanism and Public Consultation and Disclosure Plan under Management Programs and Plans. The manual further guides all its SPV's to establish Grievance redressal cell (GRC) at all project offices, the cell must have representative from company, SPV, sub-contractor and local administration.
- It was observed during the assessment that, all grievances at site are handled in accordance with the Grievance Redressal Mechanism (GRM) as mandated in the ACL/ESSMS manual. AHDL management has also formed a Grievance redressal cell (GRC) at site to ensure addressal of grievances.
- The grievance records maintained as grievance redressal registers and customer complaint records were reviewed at site. The grievance record contains information such as date, time, name of employee, location, grievance identified date, nature of grievance, preliminary action taken, present status of the grievance (i.e., resolved or pending) and signature of the HR/Administrative/SPV/Toll plaza representative.
- Monthly record (December 2016) of Grievance Redressal Mechanism (GRM) was reviewed during the audit, It is observed that the GRM adapted at site covers direct employees, labour force engaged through the contractors/ sub-contractor and road user/ public .
- It was reported by AHDL management at toll plaza that, no formal consultations with the local communities and with the affected persons have been held till date by AHDL.
- Not required since it has been completed before the DPR.

Gaps

None

Recommendations

None

4.1.10 Ongoing Reporting to Affected Communities

Requirement: *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. If the management program results in material changes in or additions to the mitigation measures or actions described in the Action Plans on issues of concern to the Affected Communities, the updated relevant mitigation measures or actions will be communicated to them. The frequency of these reports will be proportionate to the concerns of Affected Communities but not less than annually.*

Observation: It was observed that, AHDL has conducted various community engagement activities which are listed under Section 4.1.8 above.

Gaps:

- None

Recommendations:

- None

4.2 Performance Standard (PS) 2: Labour and Working Conditions

4.2.1 Human Resources Management Policy and Policies

Performance Standard 2 recognizes that the pursuit of economic growth through employment creation and income generation should be accompanied by protection of the fundamental rights of workers. For any business, the workforce is a valuable asset, and a sound worker-management relationship is a key ingredient in the sustainability of a company. Failure to establish and foster a sound worker-management relationship can undermine worker commitment and retention, and can jeopardize a project. Conversely, through a constructive worker-management relationship, and by treating the workers fairly and providing them with safe and healthy working conditions, clients may create tangible benefits, such as enhancement of the efficiency and productivity of their operations.

Requirement: *Performance Standard 2 asserts that the client will adopt and implement Human Resource Policies and Procedures appropriate to the nature of the workers and the business activities in which client is involved. The policy and procedures covers aspect like non-discrimination and equal opportunity on the grounds of personal characteristics, retrenchment, working relationships, child labour, forced labour and retrenchment.*

Observation:

- ABL has developed HR Policy and HR procedure Manual (Doc No /ACL/HRD/DPM) which define general procedures and instruction for the direct employees of ABL. The Policy is extended to all SPV's including AHDL. HR Policy covers aspects like recruitment, job responsibility, leave policy, leave encashment, policy for Third party workers; Payment of advance; Attendance; Induction; Reimbursement; Med-claim; Retirement process; Prevention of Sexual harassment at work force policy; Child labour employment; Promotion; Performance appraisal system; Grievance handling procedures; Provident fund, bonus; Gratuity and Service award etc.
- AHDL has a dedicated HR manager at corporate level who is responsible for overseeing compliance with human resources and labour related regulatory requirements. Reportedly all employees were informed of their working hours, salaries, leaves and other benefits at the time of employment through induction program. All employees have been covered under general insurance & EPF (Employees Provident Fund) schemes.
- The appointment letter of employee includes term of employment, leave provision, duty timing, duties, allowances, Grades and corresponding designation/position, obligation and termination/ separation clauses. A sample copy of appointment letter of site staff was verified at the time of site visit. Terms of employment include wages and benefits, group medical insurance and leave for illness or holiday have been specified in procedure for Human Resource manual.

- AHDL has entitled all its employees with house rent allowance, conveyance allowances, medical allowances, system allowance, leave travel allowance and special allowance. Leave card is allotted to all employees.
- Reportedly any grievance raised by employee at site is reported to HR manager, who tries to resolve it at site only. However, in case required, the matter is escalated to the corporate office. Grievances raised by employee are handled as per procedure set under GRM and is recorded. The site grievance redressal committee meets on monthly basis to discuss any grievances reported, the minutes of which were verified.

Gaps

- None

Recommendations

- None

4.2.2 Working Condition and Term of Employment

Requirement: *As per Performance Standard 2, the project is required to provide reasonable working conditions and terms of employment to its staff and where accommodation services are provided to the workers, project is required to put in place and implement policies on the quality and management of the accommodation and provision of basic services*

Observation:

- Around 287 staff are engaged at Toll office and Camp office out of which nearly 173 are direct employees of AHDL and 114 other staff engaged through one of the subsidiaries of Ashoka group; ATR Infratech Pvt. Ltd., (ATR). ATR has signed a contract with ABL for supplying the skilled manpower and labour to undertake work related to maintenance of road such as Painting, Repairing and Cleaning of road; Watering of plants, Grass cutting and Stone fixing, etc.
- AHDL through work order 161, (dated 10th June 2016) has engaged ASC Infratech Pvt. Ltd. for carrying out design and engineering of construction of Flyover (+Km 341.00 to +343.000) at Rajnandgaon in the additional scope of work given by NHAI. However, Contract License of M/s ASC Infratech Pvt. Ltd. was not made available for review during the site assessment.
- It was noted that the Contract Labour License dated 25th May 2016 obtained by M/s Ashoka Highways (Durg) Limited was revised on 16th Nov 2016 to increase the worker's strength from 200 to 400. As reported by the AHDL representative the Contract Labour License was revised mainly to accommodate nearly 92 contracted labours of ASC Infra and sub-contractors which are engaged in the flyover construction site at Chainage +km 342.00 and/or are likely to be engaged in other works of AHDL.

Terms of Employment:

- Reportedly management employees work in 8 hour shift, with lunch break. Whereas, security personnel deputed at toll plaza and Toll Collectors work in three (3) 8-hourly shifts throughout the day, for six (6) days a week on rotational basis.
- AHDL has tie up with M/S Reliance Insurance Company for employees which provide group medical cover of INR 40 lakh and group accidental cover of INR 4 lakh to all the employees.
- Muster rolls register with details on age and gender of all employees are maintained at the on toll plaza and camp office.
- The attendance registers of the employees and PF records of the employees at Toll plaza office were verified during the site assessment and found to be regularly maintained.
- It was observed that, the details on date of distribution of wages with current rate of minimum wages duly signed by, Labour Commissioner were displayed at the entrance of the Toll and Camp office.

Workers Living Condition:

- The Labour camp management plan formulated under ACL/ESSMS manual cover details on facilities to be provided in the labour camp set up by ABL or by its SPV's.
- ABL at corporate level has a formulated manual on Environment, Safety and Social Management System (ACL/HSE&S/ESMP-GGRM) wherein, ABL directs all its SPV's, EPC contractors and Sub-contractors to develop Grievance Redressal Mechanism and Public Consultation and Disclosure Plan under Management Programs and Plans. The manual further guides all its SPV's to establish Grievance redressal cell (GRC) at all project offices, the cell must have representative from company, SPV, sub-contractor and local administration.
- There were two dormitories at toll plaza office, each accommodating nearly 15 employees. These dormitories are maintained by AHDL to accommodate toll employees working in toll plaza. It is observed that, AHDL also runs a community kitchen for toll employees. Reportedly, there are six toilets at toll plaza office out of which two are attached to each dormitory and other four; two for male employees and two female employees are in main office. The toilets provided in the main office of the toll plaza are also open for the commuters.
- Domestic water needs at Toll office and Camp office are met through bore well located at respective sites. Water for drinking purpose is sourced from bore well and is treated through RO facility of 15 litres capacity installed at respective kitchens at Toll office and Camp office.
- Complying with the condition of its Work order from ABL, M/S ASC Infra has setup a labour camp on nine (9) acres of land at Rajnandgaon for labour engaged in construction activity of flyover. Rooms were well ventilated and provided with bunk beds having mosquito nets. The labour camp accommodates about 80 construction labours, security guards, drivers and cooks. ASC also runs a community kitchen canteen at labour camp. Reportedly the water used for drinking purpose at labour camp are sourced from bore well located within the labour camp.
- Also, the other labour camp set-up by M/s HR Piles, sub-contractor engaged by ASC Infra for piling work was observed at flyover construction site. The camp was temporary accommodation made of tin sheds with bunk beds to accommodate nearly twelve (12) labours. The temporary accommodation was set-up on the old road which was blocked for flyover construction; the adjacent parallel road was functional at the time of site assessment. The labours were observed to be using kerosene stoves for preparing food. The drinking water is sourced through the borewell installed by the Company. Also, as the said accommodation is adjacent to the divider of operational road and not properly barricaded, the labours residing at there are more prone to road accidents especially during the night time.
- No fire extinguishers were observed to be installed at labour camps.
- Reportedly there were ten (10) numbers of toilets provided in the labour camp of which none was found to be functional and in use.

Gaps

- Inadequate sanitation facilities at construction site and labour camps. Labour engaged in construction of flyover practise open defecation.
- Inadequate drainage around the labour camp.
- No fire extinguishers provided at the labour camp.

Recommendations

- ABL to define appropriate workforce accommodation standards to the contractor. AHDL to ensure that contractors are required to adhere to these standards.
- AHDL to ensure that open defecation should be strictly discouraged at site. Portable or mobile Urinal/toilet facility to be provided to all labour camp by the respective subcontractors engaged in construction. Dysfunctional toilets to be repaired immediately and toilet needs to be cleaned on regular basis. Adequate drainage system should be provided at the labour camp for preventing accumulation of wastewater.
- AHDL to ensure that ASC provides proper drainage system to avoid water logging.
- Fire extinguishers to be provided in the labour camp.

- Labour camp needs to be cleared of any litter, tall grasses. Fogging should be done periodically to prevent mosquito breeding.

4.2.3 Working's Organization

Requirement: *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' 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.*

Observation:

As reported by the site management of AHDL, no employees engaged by them are member(s) of any association or union. However, as informed by the Company representatives, the Company does not restrict or discourage the formation and registration of association or union.

Gaps:

None

- None.

4.2.4 Non-Discrimination and Equal Opportunity

Requirement: *As per Performance Standard 2, client shall not make employment decisions based on personal characteristics unrelated to inherent job requirements. The client is required to base the employment relationship on the principle of equal opportunity and fair treatment, and will not discriminate with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices. The client is to take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to women.*

Observation:

As understood during discussions with company representative, ABL is an equal opportunity employer and does not discriminate in hiring on the basis of religion, region, or gender. Reportedly, no incidents of discrimination were reported at Toll plaza and Camp office by management representative as well as employees interviewed during the time of the site assessment.

However, the HR procedure does not cover any clause or statement pertaining to non-discrimination and equal opportunity among workforce.

Gaps

- None

Recommendations

- None

4.2.5 Grievance Mechanism

Requirement: *As per Performance Standard 2, the project is required to provide a grievance mechanism for workers to raise workplace concerns. The mechanism should involve an appropriate level of management and address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned, without any retribution. The mechanism should also allow for anonymous complaints to be raised and addressed.*

Observation:

Reportedly, the grievance redressal mechanism procedure involves addressing grievances at Site by HR Manager. However, in case required, the matter is escalated to the corporate office. Grievances raised by employee are handled as per procedure set under GRM and is recorded. The site grievance redressal committee meets on monthly basis to discuss any grievances reported, the minutes of which were verified.

Gaps:

- None

Recommendations:

- None

4.2.6 Child and Forced Labour

Requirement: *The client will not employ children in any manner that is economically exploitative, or is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. 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.*

The client will not employ forced labour, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. The client will not employ trafficked persons.

Observation:

- During discussion held with AHDL site management, it was reported that there are no workers below 18 years of age presently employed at the site. As reported by contractors, background verification of labour is done before appointing any worker on site. It was also reported that the ID card of the workers are checked for verification of the age proof and same was shown as proof during the assessment.
- As per ABL's HR Policy, the company is committed to International Labour Organization (ILO) core objectives in addressing labour working conditions and prohibits employment of child labour across its activities and by its contractors"

Gaps:

- None

Recommendations:

- None

4.2.7 Occupational Health and Safety

Requirement : *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 specific threats to women.*

Observation:

- It was observed that Ashoka Buildcon Limited has an Online Accident and Reporting analysis Software which is being implemented at AHDL for recording accidents, identification of hot spots, classification on the basis of age, collision type, weather type, vehicle type, sex, time, safety device, alcohol/drugs usage, age profile, local condition, and maximum accidental chainage. The records were available for review and noted in order.
- Further, AHDL maintains manual records for Accident/Incident Reporting and a copy of road safety accident compliance report was present at the site and was reviewed.
- A copy of accident data report for the year 2016 maintained on site was available for review, the details of accidents occurred during August, 2016 have been provided in Table 4-1. The Incident Management Register is maintained as per NHAI letter no. NHAI/CM/Inc. Man/2011 dated 30th June, 2011 which comprises of details of number of accident cases reported, accident cases attended, details on injured

shifted to hospitals, help provided by patrolling vehicles and Tow Away vehicles, number of vehicles painted in stripes as per approved colour scheme, vehicles fitted with GPS, details on reflective signages with emergency contact numbers, details on places where emergency contact numbers have been displayed.

- It was also noted that adequate safety measures like towing of damaged vehicles from the carriageway to safe location, shifting of injured people to the nearest hospitals, first aid treatment to injured person, information of accidents to the nearby police station and temporary traffic diversion by use of traffic safety equipment have been undertaken by AHDL.
- Adequate accident safety measures are recorded and maintained by AHDL on site which was available for review.

Table 4-1: Details of accidental data in the year of 2016 maintained at site

Sr. No.	Date	Accident Location	Nature of Accident	Classification of accident	Vehicle Responsible	No. of affected persons					Help provided by ambulance / private vehicle
						Fatal	Grievous	Minor	Non injured	No. of animal killed, if any	
1	04.08.16	331+200	Overtuning	Minor injured	Truck	Nil	Nil	1	Nil	Nil	AHDL Ambulance
2	05.08.16	325+200	Rear end collision	Fatal	Bike	1	Nil	Nil	Nil	Nil	AHDL Ambulance
3	09.08.16	366+000	Overtuning	Fatal	Bike	1	1	Nil	Nil	Nil	AHDL Ambulance
4	13.08.16	369+000	Overtuning	Fatal	Truck	1	Nil	2	Nil	Nil	AHDL Ambulance/ Patrolling
5	18.08.16	328+400	Right turn collision	Minor injured	Bike	Nil	Nil	2	Nil	Nil	AHDL Ambulance/ AHDL Hydra
6	29.08.2016	327+800	Overtuning	Grievous injury	Bike/Bus	Nil	1	Nil	Nil	Nil	AHDL Ambulance

Source: Thakurtola Toll plaza

- It was observed during the site assessment that round the clock highway patrolling is being done by two (02) patrolling vehicles permanently stationed at Tappa Camp office and Thakurtola Toll Plaza for security and safety of the project and to prevent the unauthorized encroachment/obstruction in the entire stretch of the road.
- The patrolling team inspection report, report prepared by Incident Management Team for handling incident/emergency situations, and accident safety measures on monthly basis are recorded and maintained by AHDL on site which was available for review.
- A tow away crane for lifting damaged vehicles from the accident location is permanently stationed at Tappa Camp.
- One (01) ambulance services equipped with stretcher, first aid medicines, Cardio-Pulmonary Resuscitation (CPR) and Oxygen Cylinder, mobile communication, medical attendant have been deployed and observed to be stationed at Thakurtola toll plaza site office and Tappa Camp office to attend to any emergencies arising out of road accidents.
- It was observed that one (01) first aid box is being kept at the Toll Plaza and one (01) at Tappa camp office.
- It was further noted that personal records of employees including medical reports and fitness certificates were made available for review. Health check-up every year were carried on yearly basis and records were maintained by Tappa camp office and toll plaza. The health check-up records of Health camp organized by District Administration, Rajnandgaon (Chhatisgarh) dated 20th August, 2015 was made available for review

- The Group Medclaim Insurance applicable to all employees covers life insurance of all the employees from 28th February, 2016 till 27th February, 2017
- The records for drinking water quality on quarterly basis at Tappa Camp Office and Thakurtola Toll Plaza are also maintained. Further, water quality testing reports for borewell water used for drinking purposes at +km 342.00 by M/s. ASC Infra are maintained were reviewed.
- It was observed that there is lack of proper illumination at Tappa Camp office wherein Hot Mix Plant is operational even at night leading to a risk of safety of workers.
- It was observed that emergency contacts numbers (of police station, fire station and hospital) were displayed at toll plaza and Tappa camp office.
- As reported by the Site Management, tool box talks are conducted regularly twice in a week and briefings regarding workers/road users safety are provided. Register with details pertaining to tools issued on daily basis was observed to be maintained at the Toll Plaza.
- It was reported that there are eleven (11) fire extinguishers of CO₂ type (2) and DCP type (9) are kept at toll plaza site office. Fire extinguishers were placed at the entrance corridor of the main toll plaza building was observed to be valid. AHDL toll plaza site office undertakes monthly inspection of fire extinguishers at site and maintains records of the same. A layout plan displaying the toll plaza office and other facilities were displayed at the entrance of Toll Plaza office.
- Attendance records relating to Mock Drills, Trainings on Emergency Preparedness and Response and Fire Extinguishers Demo have been maintained on site. The attendance sheet for training imparted to workers of M/s. LINNHOF on Welding Work Safety in December, 2016 for adherence of PPE measures was available for review.
- The site reportedly has two (02) first aid boxes with medical provisions for employees.
- The No Accident Certificate of M/s. ASC Infratech dated 30th December, 2016 was available for review according to which no accidents have been reported from 1st August, 2016 till 30th November, 2016 at +km 342.00.
- The Protective Personnel Equipment (PPE) inventory for PPE's issued at Site and the records for PPE's issued and available in stock has been maintained on site however, it was observed that there are behavioral issues related to use of PPE's by the workers engaged by M/s. ASC at chainage +342.00 and M/s. LINNHOF at Tappa Camp office. During the Site visit, PPE related issues were observed only at
- The construction works at chainage +342.00 were observed to be conducted without use of PPE's by the workers at Site such as safety helmets, safety shoes. The welding works was only observed to be carried out using Goggles. Further, Hot Mix Plant at the Tappa Camp Office was observed to be operational during late evening and all the workers from M/s. LINNHOF were observed to be working without use of PPE such as safety shoes, safety helmets, goggles and gloves
- The certificate for inspection of all lifting machines, chain ropes and lifting tackles under sub-section 1(a) (iii) of Section 29 of M.P. and Chhatisgarh Factory Rules, 1962 as per Test Certificate No. RKP/CP/ABL/16-17/101 dated 2nd October, 2016 shows that the lifting machinery/ropes/chains/lifting tackles are in proper working condition and the Certificate is valid uptill 1st October, 2017 or any repair.
- During site assessment, flyover joining work was observed to be carried out over a stretch of 700-800 m at chainage +km 342.00, wherein hydra is being used. The cracks in lifting tools and tackles, cracks in rope slings, cuts in electrical wires were observed at only this location. Further, no proper barricading of the excavated zones and warning signages were displayed which could pose a danger for life and safety due to open excavated pits, and electrocution risk and not maintaining daily inspection monitoring reports of lifting tackles
- During the site assessment, two (2) uncovered underground water tanks were observed at the labour camp maintained by M/s. ASC at +km 342.00. Reportedly the capacity of tanks is 15,000 litres and 5,000 litres and the water from the tanks is being used in Batching plant to meet the domestic

needs of nearly 80 labourers residing in the labour camp. The uncovered water tank could pose a fall hazard especially during the night to the labour living in the camp and labour engaged in Batching plant.

- It was noted that monthly inspection checklist of road safety has been maintained at Toll plaza and Tappa camp office and was available for review.
- It was observed on the basis of review of HSE Memorandum Register for December, 2016 that HSE Memo has been issued to M/s. ASC engaged at +km 342.00 on 14th December, 2016 for carrying out electrical and welding works without safety measures, conducting works without PPE and height works without safety belts. The issues identified were observed as closed in the Closure Report of December, 2016 supported with photographs.
- Records related to Tool Box training related to Electrical Safety, PPE Matrix, Welding Work Safety, Work with moving equipment, Electrical Safety, Concrete works and Crane Safety, dated 14th and 15th December, 2016 were verified.

Gap:

- Few labour engaged by M/s. ASC at chainage +342.00 and workers from M/s. LINNHOF engaged at Tappa Camp were observed to be not wearing PPE's.
- No record keeping for inspection of lifting machines, chain ropes and lifting tackles by the engaged sub-contractor, M/s. ASC at +342.00.
- Uncovered water tank could pose a fall hazard at chainage +342.00 especially during the night to the labour living in the camp and labour engaged in Batching plan

Recommendation:

- Proper use of PPE's such as safety helmets, safety shoes, goggles, and gloves needs to be carried out at +km 342.00 and Tappa Camp office
- AHDL needs to ensure that all the sub-contractors engaged are adhering to EHS norms and maintaining records for inspection PPE Compliance inspections.
- The sub-contractors engaged should maintain daily safety inspection reports including that of lifting tools and tackles and submit the same to HSE officer, AHDL. Further, AHDL needs to ensure that all non-conformances observed should be resolved within a timeframe of fifteen (15) days
- Water tanks at +km 342.00 needs to be covered and proper barricading of the area needs to be carried out by M/s. ASC. Further, arrangements for illumination needs to be provided near water tank in the Labour camp

4.2.8 Workers Engaged by Third Party

Requirement: *The client will establish policies and procedures for managing and monitoring the performance of third party performers and that the workers have access to grievance mechanism.*

Observation:

- ABL has engaged a subcontract labour M/s. ASC Infratech for flyover construction works. As per the Work order, ASC Infra is obliged to comply with The Contract Labour (Regulation and Abolition) Act, 1970 The Minimum Wages Act, 1948 The Workmen's Compensation Act, 1923. The Contractor Supervisor of M/S ASC Infra informed that minimum wages and overtime are paid to the workers at site as per the applicable minimum wages set by government. However, no documents specifying the terms and conditions of employment of the contracted labour w.r.t wages, benefits, hours of work and overtime were shared for review during the site assessment.
- As per the contractual obligations, ASC infra is required to submit a monthly statement of deposit PF slip/ challans (of the contracted labour) to ABL however, no related documents were available for review. Therefore, it was understood during the assessment that, though AHDL/ABL management has procedures in place for monitoring contractor's performance with respect to adherence to compliance of

contractual obligations and regulatory requirements of Minimum Wages Act, Employees State Insurance Act and Child Labour Act but, it is not being followed by AHDL management.

Gap:

- Monthly statement of deposit PF slip/challans are not maintained at site office for review.
- Procedures to monitoring contractor's performance are not adequately followed by AHDL

Recommendations

- Records of monthly statement of deposit PF slip/challans are also to be maintained by AHDL management.
- AHDL to develop a formal contractor management plan with documented procedures and ensure its execution. It is also to be ensured that, the contractors and sub-contractors are apprised of the contractor management plan and the procedures.

4.3 Performance Standard (PS) 3: Resource Efficiency and Pollution Prevention

4.3.1 Resource Efficiency

Requirement : *As per Performance Standard-3, the project is required to 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 focus on areas that are considered core business activities. Such measures shall integrate the principles of cleaner production into product design and production processes with the objective of conserving raw materials, energy, and water.*

Observation:

- **Permission for Water Extraction:** It was observed that two (2) underground bore-wells are being used by AHDL for water abstraction at Thakurtola toll plaza office and Tappa Camp Office. Reportedly, AHDL has filed an application in CGWA for consumption of borewell water for meeting water requirements.

It was observed that one (1) borewell is in use at chainage +342.00 by M/s. ASC for operating RMC Unit and for catering drinking and domestic water requirements. Further, AHDL has filed an application in Public Health Engineering Department, Rajnandgaon (Chhatisgarh) vide letter no. AHDL/NH-06/TOLL/2016/08 vide letter dated 23rd November, 2016 for seeking permission related to borewell at +km 342.00 and has obtained consent from PHED vide letter dated 28th November, 2016 for undertaking construction works without any prior approval.

It was observed that ASC has obtained approval from Gram Panchayat on 5th December, 2016 for use of borewell for meeting drinking water requirements and for operating RMC Plant.
- **Water Consumption:** It was observed that the water abstracted from borewell at Toll Plaza office is used for meeting domestic and drinking water requirements.

Further, water abstracted from borewell at Tappa Camp Office is used for operating Hot Mix Plant and for meeting domestic and drinking water requirements and also used for water sprinkling of median and avenue plantation for the entire road stretch. The daily water consumption at Thakurtola Toll Plaza and Tappa Camp Office is around 41000 litres/day which includes 4000 litres/day at Tappa Camp office, 2000 litres/day at Toll Plaza and 35000 litres/ day for Median and Avenue plantation

However, the records are manually maintained and water meters have not been installed for estimating water requirement at Toll Plaza office and Tappa Camp Office and at chainage +342.00
- **Greenhouse Gas (GHG) emission inventory:** During this desktop assessment, records pertaining to CO2 emission generation have been scrutinized for year 2016. AHDL maintains monthly inventory of its GHG emissions from toll plaza area and from its other O&M activities. Approximately 1057.9 tonnes and 351.3 tonnes of CO2 equivalent were generated in year 2016 from direct fuel burning and indirect energy consumption respectively.

Gap:

- No provisions for installation of water meters for estimating water drawl quantities

Recommendation:

- The Water meters needs to be installed for estimating water consumption at Thakurtola Toll Plaza and Tappa Camp office

4.3.2 Pollution Prevention

Requirement: *As per Performance Standard-3, the client is required to 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-routine, and accidental circumstances with the potential for local, and impacts. Where historical pollution such as land or ground water contamination exists, the client will seek to determine whether it is responsible for mitigation measures.*

Observation:

- **Waste Collection:** During the site assessment, it was observed that dedicated trash bins (one for wet waste and other for dry waste) have been kept at Toll plaza location. Monthly records for paper waste/wood waste, plastic waste, kitchen waste and used oil/lubricant waste are maintained along with records for waste disposal, location of storage and action plan for handling waste as per ABL/FR/CO/DO/PR/HSE/06 dated 4th January, 2014.
- **Waste Management:** It was reported that hazardous waste handling and management for the generation of used oil/ waste oil from D.G set maintenance, which is considered Hazardous as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 is being carried out by M/s. Plus Lubricants which is authorized for handling Used Oil as per Consent received from Maharashtra Pollution Control Board vide Consent No. BO/MPCB/RO/ (HO)/Kalyan/COR/B4545. The quantitative estimates of Used Oil generation on monthly basis are maintained by AHDL at Toll plaza office.
- **Pollution Monitoring:** The quarterly monitoring on Air Quality and Noise levels at Tappa Camp office and Toll Plaza is carried out and records are being maintained at Toll Plaza office. Results of the monitoring have been carried out on dated 21st June, 2016 and report was verified during site visit.
- AHDL has obtained Consent for operating HMP Plant under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and under Section 25, 26 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 715-716/RO/TS/CECB/2016 dated 3rd June, 2016.
- M/s. ASC Infra has submitted an application to the Regional Officer (RO), CECB vide letter dated 28th December, 2016 for obtaining permission and operating Concrete Mix Plant at +km 342.00 however, the approval is pending.
- The records for Electrical Inspectorate inspections for 82.5 kVA DG Set installed at +km 342.00 vide letter dated 30th December, 2016 was also available for review.
- The Pollution under Control Certificate (PUC) of the hired vehicles, used at site was verified at the time of site visit.
- As reported by site management no chemical pesticides are used for the plantation along the road stretch. Organic manure is being used for maintaining the plants.

Gap:

- None

Recommendation:

- None

4.4 Performance Standard (PS) 4: Community Health Safety and Security

4.4.1 Community Health and Safety

Requirement: The client will evaluate the risks and impacts to the health and safety of the affected communities during the project lifecycle and will establish preventive and control measures consistent with good international industry practice 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 favour the avoidance of risks and impacts over minimization

Observation:

- As observed during the site assessment, communities reside about 150 m - 600 m from the operational road asset. The guidelines and standards set down by the Indian Road Congress (IRC) and Ministry of Road Transport and Highways (MoRTH) are used by AHDL for maintenance and operation of the road asset.
- M/s. ASC Infra has submitted an application to the Regional Officer (RO), CECB vide letter dated 28th December, 2016 for obtaining permission and operating Concrete Mix Plant at +km 342.00 however, the approval is still pending.
- It was observed that fifty four (54) major junction, five (5) minor junction, ten (10) pedestrian underpasses and 18.90 km length service road have been provided for the safe passage of people residing within the vicinity of the operational road asset.
- During the site assessment, it was observed that warning signs, mandatory signs, informative signs, direction signs and hazard markers were displayed to serve all road users and communities residing adjacent to the road asset. It was also observed that ramble and pedestrian marking arrow have been marked at bus bays and truck lay bay location.
- The road signages on shoulder and median displayed includes reflective boards for Road Closed Signs, Caution Signs, and Slow Signs. It was observed that a Road-Side Inspection Report on Warning signages is prepared on monthly basis. Further, daily patrolling inspections are being conducted however during Site Visit, it was observed that inadequate and faulty road signages have been displayed near Rajnandgaon-Tappa camp office which could pose a danger for road accidents. Also, improper barricading was observed along the flyover near Somani village at chainage +km 328.500 and no display of warning signages on speed breaker and speed limits near Thakurtola Toll Plaza at chainage +km 331.5-+km 332.00 was observed which can lead to fatal accidents.
- Two (02) ambulance services equipped with stretcher, first aid medicines, CPR, Oxygen cylinders, mobile communication and a medical attendant have been deployed and observed to be stationed at toll plaza office and Tappa Camp office to attend to any emergencies arising out of road accidents.
- AHDL has developed and maintained a procedure for community grievance redressal mechanism. It was also noted that records of community Grievances Redressal and corrective action was available for review.

Gap:

- Inadequate barricading at the new construction site at chainage 342 + km chainage and lack of proper display of warning signages.

Recommendation:

- It is recommended that barricading at chainage +km 342 km to be carried out.

4.4.2 Security

Requirement: As per Performance Standard 4, AHDL is required to assess risks posed by its security arrangements to those within and outside the project site. In making such arrangements, AHDL will be guided by the principles of proportionality and good international practice in relation to hiring, rules of conduct, training, equipping, and monitoring of such workers, and by applicable law.

Observation:

As reported on site AHDL has deputed eighteen (18) security personnel through manpower supply M/s ATR Infratech. The security personnel includes one (1) head guard, fourteen (14) lane assistant and three (03) gunmen. Whereas, at labour camp and construction site ASC Infra has deputed eight (8) security personnel which includes; one (1) head guard and seven (7) guards.

There is one (1) gunman in each shift deputed at Toll Plaza. AHDL maintains records for the gun license of the engaged gunman (03 nos.). The gun license of the gunman present at the time of assessment was reviewed and verified.

As reported, security personnel deputed at toll plaza office works in three (3) 8-hourly shifts throughout the day, for six (6) days a week. However, security personnel deputed labour camp and construction site works in two (2) 12-hourly shifts throughout the day, for six (6) days a week.

The security staffs were provided with proper guard room at the toll plaza office and labour camp. Reportedly the guards at toll plaza office have access to drinking water and toilet in the main toll plaza office building however; same facilities were not provided to guards deputed at labour camp.

ABL has formulated a Security management plan under ACL/ESSMS manual wherein, duties and responsibilities; qualification and training requirements of the security personnel's too be deputed at site are described. Plan also provides detail instruction for Handling emergency situations as well as code of conduct to be maintained when dealing with public.

As informed by the security personnel, all guards are provided with instructions and objectives of their work. Security personnel were aware of their responsibilities and are prepared to respond in any emergency situation, they were provide with required training to handle site emergencies by the Security Agency before deputing them to site. They participate in the mock drills conducted by AHDL. Emergency numbers along with instructions for actions to be taken in case of emergencies have also been detailed to the security guards.

It is understood that, AHDL as well as ASC infra undertakes background verification of the all the security personnel's before deputing them to site. And, most of the security guards are recruited from nearby villages.

Gap

- Basic amenities like drinking water and sanitation facilities were not provided to security personnel engaged by ASC Infra at labour camp and flyover construction site.

Recommendations

- AHDL to ensure that formal training on appropriate conduct in dealing with community and visitors should be provided to all the security personnel and to be extended to security deputed at labour camp and construction site; records of such trainings are to be maintained.
- AHDL to ensure that, packaged or safe drinking water and toilet facility to be provided to the security personnel at labour camps and flyover construction site.

All training provided to the Toll Plaza security personnel's are to be extended to security personnel's engaged by ASC Infra at labour camp and flyover construction site

4.4.3 Emergency Preparedness and Response

Requirement: The client will assist and collaborate with the Affected Communities, local government agencies, and other relevant parties, in their preparations to respond effectively to emergencies, especially when their participation and collaboration are necessary to respond to such emergencies.

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

Observation:

AHDL has developed an on-site Emergency Response Plan. Emergency contact numbers were seen displayed at camp and toll plaza site office, and also at bus stops (in English language). Emergency Response and evacuation plan is displayed at toll plaza site office.

Fire drill and mock drills are undertaken at site as part of Emergency Response Plan. The Fire Extinguishers Servicing checklist dated 26th December, 2016 was available for review.

The Off-Site Disaster Management Plan has also been prepared for addressing the cases of Flood, Earthquake, Cyclone and Lightning along with contact details for Emergency Response situations.

Gap:

- None

Recommendation:

- None

4.5 Performance Standard (PS) 5: Land Acquisition and Involuntary Settlement

4.5.1 Land Acquisition and Resettlement

Requirement: *The Client will consider feasible alternative project designs to avoid or minimise physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.*

Observation:

- As per review of the RAP, the land acquired for the project comprised of 230 hectares in total, out of which 178 hectares was private land, 39 hectares was government, 3 hectares was community land owned by village communities. The land acquisition for the project commenced on 28th February 2008 and ended in 2009.
- A total of 1789 private land parcels from 45 villages have been acquired by the project. The details of compensation awarded along with the land acquired from each village have been provided below in **Table 3-2**.
- As per review of documents, no pending cases of arbitration were observed. It was observed that all the landowners have been compensated for the land parcels acquired for AHDL and its associated facilities.
- Encroachment: As per the site visit undertaken and interviews held with AHDL representative, it was noted that no encroachment (either temporary or physical) were observed along the entire road stretch. Hence it is concluded that the entire road asset is free of any types of structures on both sides.
- **Stakeholder Consultation:** As discussed during the limited interactions held with the community representatives, the community in general, does not have any major concerns related to the project.. No past instances of protests or civil action related to environmental impacts, land/ROW acquisition, labour working conditions, occupational health and safety and community health and safety have emerged during the operational stage of the road asset, have been reportedly.

Table 4-2: Compensation details for land acquisition

S.No.	Name of the Village	Total number of land owners and share holders	Total Land Acquired (sqm)	Total Compensation paid
1	Baputola	13	6068	603081.6
2	Chabuknala	7	8580	816057
3	Ghortalab	49	57831	5319449.3
4	Janakpur	32	26460	2295008.1
5	Majrajpur	55	49563	6771826.6
6	Nagarkohra	11	16024	3044428.2
7	Patekohra	24	23070	3934370
8	Rangitalab	92	15908	18476308.4
9	Ranitalab	23	10986	1612508.7
10	Sadak Banjari	12	12965	276486.1
11	Sadak Chirchari	52	27930	6011735.4
12	Banbhedi	14	14729	848970.1
13	Kohka	39	17549	4750631.6
14	Kopedeeh	40	22232	1333035
15	Malaidabri	8	1000	661782
16	Tappa	46	10204	3754880.8
17	Tendunala	6	3522	250826.4
18	Tumbibord	51	21216	15119632
19	Baghnadi	14	30553	3101505
20	Jhandatalab	47	72070	6762310.5
21	Kolihapuri	85	71578	9091612.2
22	Narayangarh	30	768	6991360.2
23	Rampur	63	35451	15292502.5
24	Ranitalab	37	23391	2329508.5
25	Tappa	31	27193	3521239.7
26	Uraidabri	182	143930	23680023.4
27	Anjora	47	17100	9850264.05
28	Barga	10	14939	2107617.6
29	Bhanpuri	40	33668	6365164.3
30	Dawada	36	13022	10493469.8
31	Indamara	1	1214	166925
32	Indawani	17	11857	1349020.2
33	Kouribhata	36	15634	64195468.7
34	Lakholi	45	15634	25624471.4
35	Manki	17	15385	2952631
36	Parrikala	25	10075	3614509.8

37	Pendri	48	3811	25786081.2
38	Rajanandgaon	121	2726	55820661.6
39	Riwagahan	9	9307	1544334
40	Somni	123	4972	28247333.4
41	Sundra	18	14014	4799949
42	Tedesara	64	25213	14573695.4
43	Thakurtola	27	24282	3076299.6
44	Thakula	37	11615	1876597.8
45	Torankatta	5	4937	730120.6
TOTAL		1789	1000176	409825693.8

Gap:

- None

Recommendation:

- None

4.6 Performance Standard (PS) 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Protection and Conservation of Biodiversity

Requirement: Performance Standard 6, recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and sustainably managing living natural resources are fundamental to sustainable development. The requirements set out in this Performance Standard have been guided by the Convention on Biological Diversity, which defines biodiversity as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.

Observation:

- As per the EIA Report, the project has insignificant impact on flora and fauna in the area. There are no major wildlife migration route or wetlands, no Wildlife Sanctuary or National Park located within 10km on either side of the highway throughout the entire stretch of the operating road asset. The site observation and consultations conducted with AHDL representatives along with review of maps confirms that the operated road asset does not pass through any critical natural habitat. The details of avenue and median plantation carried out by AHDL are given below in **Table 3-3**.

Table 4-3: Details of plantation

S. No.	Plantation	Unit	Quantity
1	Avenue Plantation	Nos	26000
2	Median Plantation	Nos	4715

- As per the details provided by AHDL, 26000 nos of plants have been planted on the avenue side and 4715 nos. plants on the median side.

Gap:

- None.

Recommendation:

- None.

4.7 Performance Standard (PS) 7: Indigenous Peoples

Requirement: *Recognizes that Indigenous Peoples, as social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population. In many cases, their economic, social, and legal status limits their capacity to defend their rights to, and interests in, lands and natural and cultural resources, and may restrict their ability to participate in and benefit from development.*

Observation:

- The Operating Road Asset does not pass through any scheduled area as observed during the site visit and consultations undertaken with site representatives.
- Also, as per RAP and EIA Reports prepared for the project, no land belonging to tribal population was acquired for the project and no impact due to loss of access to land or resources of tribal population was noted. Therefore, PS 7 on Indigenous Peoples does not get triggered in this case.

Gap:

- None

Recommendations:

- None

4.8 Performance Standard (PS) 8: Cultural Heritage

Requirement: Recognizes the importance of cultural heritage for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to ensure that clients protect cultural heritage in the course of their project activities.

Observation:

- As per the EIA Report prepared for the project, "There is no archaeologically important monument, arts and cultural site on either side of the project road within 7 km of ROW except Dongargarh, where, thousands of pilgrims visit every year. In addition, one important temple exists within ROW at km 353.015."
- It is noted that, the NHAI after extensive consultations with the local communities has satisfactorily relocated the impacted religious structures such as small shrines, temples etc. which were located within the Right of Way (ROW) of the project. However, at places where locals were not ready to relocate the structure, NHAI agreed to exclude such structures from ROW of the project by narrowing the width of ROW. Two such structure, which has been excluded from the ROW, a temple of Lord Ganesha build nearly Twenty Five years back at chainage + Km 385.000 and other a hundred (100) year old temple of lord Shiva at chainage + Km 353.000 were observed during the assessment. Therefore, currently no structures of cultural importance are falling under ROW of the project.
- Further, AHDL has constructed a pedestrian, joining Mata Bamleshwari temple Dongargarh with toll road as a community development initiative under Community Engagement Programs.
- It is observed that AHDL has documented list of all religious structures already relocated, existing under ROW and/or will fall under future expansion/ upgradation of highway and record of process of such relocation are also maintained and verified at the time of assessment.

Gap:

- None

Recommendations:

- None

5. Corrective Action Plan

The following **Table 5-1** provides a delineates the list of actions required to be undertaken to ensure closure of the gaps along with roles and responsibilities, identification of measures to be undertaken for closure of the issues and timelines for implementation.

Table 5-1: Corrective Action Plan

Item No.	Corrective Actions	Priority (Low/Med./High)	Responsibility	Estimated cost	Expected Deliverables (Report/Measurement)	Deadline (months)
1.	IFC Performance Standards					
1.1.	Record-keeping procedures pertaining to EHS performance reporting, monitoring and assessment for Sub-Contractors to be strengthened.	High	Project Head and HSE Officer-AHDL - Ensure and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> AHDL needs to strengthen on assessment of EHS Performance reporting, monitoring and assessment for all the contractors engaged on monthly basis and conduct audits on frequent intervals 	One (1) month
1.2.	Provision of proper Illumination Arrangements at ASC Infraprojects Sites	Medium	Project Head & ASC Infraprojects	Cost in providing illumination arrangements	<ul style="list-style-type: none"> Proper illumination arrangements needs to be provided at ASC Infraprojects Sites 	One (1) month
1.3.	Proper use of PPE's at +km 342.00 and ASC Infraprojects Sites	High	Project Head & ASC Infraprojects HSE Officer-AHDL- Ensure and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> Proper use of PPE's such as safety helmets, safety shoes, googles, and gloves needs to be carried out at +km 342.00 and Tappa Camp office AHDL needs to ensure that all the sub-contractors engaged are adhering to EHS norms and maintaining records for inspection PPE Compliance inspections. 	Fifteen (15) days
1.4.	Safety monitoring inspections at chainage +342.00 ASC Infraprojects Sites	High	HSE Officer-AHDL and Report to Corporate	Budget within existing resources	<ul style="list-style-type: none"> Water tanks at +km 342.00 needs to be covered and proper barricading of the area needs to be carried out by M/s. ASC. The sub-contractors engaged should maintain daily safety inspection reports including that of lifting tools and tackles and submit the same to HSE officer, AHDL. Further, AHDL needs to ensure that all non-conformances observed should be resolved within a timeframe of fifteen (15) days 	Fifteen (15) days
1.5.	Grievance reporting and communication	Medium	Project Head , Toll manager and site HRD & HSE Team	Budget within existing resources	<ul style="list-style-type: none"> ABL/AHDL is recommended to update all manual formulated at corporate to develop an external grievance reporting and communication system under current Grievance Redressal Mechanism. 	Two (2) month
1.6.	Strengthening Health and Safety arrangements at Labour Camp	High	Project Head Site HRD Team	Budget within existing resources	<ul style="list-style-type: none"> AHDL to ensure that the quality of drinking water supplied to direct and indirect workers meets the IS drinking water quality standards. AHDL to ensure that its sub-contractors provide portable/ mobile 	One (1) month

			Site HSE Team		<ul style="list-style-type: none"> urinal/ toilet facility at all labour camps. Dysfunctional toilets to be repaired immediately AHDL to ensure that, ASC provide washing and bathing areas for labour at labour camp and construct proper drains to avoid water logging. Fire extinguishers to be provided in the labour camp. 	
1.7.	Contractor's Management Plan	Medium	Project EQA Head and HR & Admin Head	Budget within existing resources	<ul style="list-style-type: none"> AHDL to develop a formal contractor management plan with documented procedures and ensure its execution at SPV level. It is also to be ensured that, the contractors and sub-contractors are apprised of the contractor management plan and the procedures. Records of monthly statement of deposit PF slip/challans are also to be maintained by AHDL management. 	One (1) month
1.8.	Contracted labour employment Terms	Medium	EQA & Contract Team Corporate HR & Admin	Budget within existing resources	<ul style="list-style-type: none"> AHDL to develop a formal contractor management plan with documented procedures and ensure its execution. 	One (1) month
2.	<i>EHS & Industry Sector Guidelines</i>					
2.1.	Strengthening safety practices along the road stretch	High	Patrolling Team Project Head & HSE Officer-AHDL/ Corporate HSE Team-ACL	Cost incurred in putting barricading and display of warning signages	<ul style="list-style-type: none"> Barricading along the flyover near Somani village at chainage +km 328.500 needs to be carried out Display of warning signages on speed breaker and speed limits near Thakutola Toll Plaza at chainage +km 331.5--+km 332.00 needs to be carried out Patrolling team needs to conduct inspections for ensuring display of warning signages, speed breaker and speed limits along the entire road stretch Monitoring inspections needs to be conducted by Patrolling Team and EHS officer deputed at Toll Plaza on monthly basis for ensuring display of warning signages. 	Two (2) months

Appendix A Document copies

A.1 Strip Plan for the Project

Way to Durg



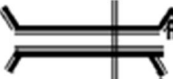
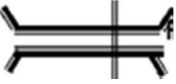

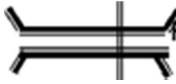
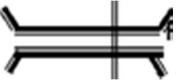
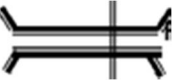


STRUCTURE LOCATION			RIGHT SIDE				
Major / Minor Bridges	Vehicular Underpass	Junctions and Toll Plaza	Service Roads	Type of pavement	Chainages	Type of pavement	Service Roads

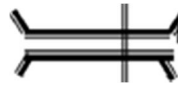
					322.400		
					323.000		
					324.000		
					325.000		
Tedesara Nalah 326.594					326.000		
					327.000		
Somani Nalah 327.418					328.000		
					329.000		
					330.000		
Thekua Bridge 331.25					331.000		
					332.000		
Thakur Tola Nalah 333.546					333.000		
					334.000		
					335.000		
					336.000		
					337.000		
					338.000		
					339.000		
					340.000		
					341.000		
					342.000		



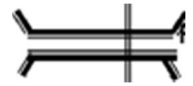
Thakur Tola Toll Plaza 335.500

			343.000	
			344.000	
			345.000	
			346.000	
Pendrekar Nalah 347.583			347.000	
			348.000	
			349.000	
			350.000	
			351.000	
Bhanpuri River 352.85			352.000	
			353.000	
			354.000	
			355.000	
			356.000	
Tumre Boar Nalah 357.955			357.000	
			358.000	
			359.000	
			360.000	
			361.000	
			362.000	
			363.000	
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			365.000	
			366.000	
			367.000	
			368.000	
			369.000	
			370.000	
			371.000	
Tendu Nalah 372.258			372.000	
			373.000	
			374.000	

Barka
Tola
Nalah
375.475



375.000



376.000

377.000

378.000

379.000

Jhura
River
380.21



380.000



Truck Parking
381.300

381.000

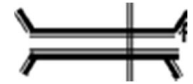
382.000

383.000

Baithak
Pulia
384.575



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Way to
Bhandara

A.2 List of documents reviewed

S.No.	List of Docs Reviewed
1.	Online Accident Reporting and Analysis Software
2.	HSE Performance Monitoring Reports (July-Sep, 2016)
3.	Amendments in Contract Labour Licence vide licence no. RP-54 (287)/2012-ALC dated 15 th November, 2016
4.	Manpower details at Thakurtola Toll Plaza and Tappa Camp office including manpower details of hired contractors
5.	Letter submitted to M/s. K&J Projects Pvt. Ltd. For detail of Encroachment within RoW vide letter no. ABL/NH-06/Durg/BOT/CS/I/962 dated 20 th Feb, 2016
6.	Provisional clearance by Electrical Inspectorate for installation of 40 KVA, 415 V DG Set at Thakurtola Toll Plaza vide dated 2 nd March, 2013
7.	Accident Records from 1 st April, 2013 till 31 st March, 2016
8.	Details on Hazardous waste generation including records and authorized vendor for handling Used Oil, Delivery Challan and Invoice for Approved Agency
9.	Sample copy of Internal Audit Summary Report dated 16 th June, 2016
10.	Comprehensive Gap Analysis Report of AHDL dated 25 th June, 2009
11.	EHS MIS Reports comprising details of Road Accidents, Monthly HSE Minutes of Meeting, Memo's issued, TBT and IDLH
12.	Water consumption records from Jan-Oct, 2016
13.	Environmental, Social and Safety Management Plan (ESSMP)
14.	Consent from Chhatisgarh Electricity Board for installation of 1700m, 33 KVA High voltage transmission line
15.	Land Use Conversion certificate for Tappa Camp office dated 17 th December, 2013
16.	Clearance by Electrical Inspectorate for installation of 380 KVA DG Set at Tappa Camp Office vide dated 23 rd January, 2016
17.	Work Order of M/s. Ashoka Buildcon Limited vide WO no. AHDL/ABL/Durg/NH-06/01 dated 3 rd March, 2014
18.	Work Order of M/s. ATR Infratechs vide WO no. ABL/BHDR/EQA/88 dated 1 st June, 2016
19.	Work Order of M/s. Linnhoff India Pvt. Ltd. vide WO no. ABL/PM/DURG/15-16/02 dated 25 th March, 2016
20.	Work Order of M/s. ASC Infratech Pvt. Ltd. vide WO no.161 dated 10 th June, 2016
21.	Work Order for Electrical Permission of 250 KVA DG Set issued to Kankane Electricals dated 24 th September, 2016
22.	Work Order of M/s. Tuljai Transport vide WO no. ABL/NH-06 Durg/EQA/203 1 st October, 2016
23.	Sample copy of Tool Box Talk records
24.	Concessionaire Agreement with NHAI dated 23 rd January, 2008
25.	Land Acquisition and Compensation details
26.	Environmental Management and Monitoring Plan
27.	Details on condition of Signboards during September, 2016
28.	Inventory of Junctions/Median openings, Pedestrian Guard Railing, BC Main Carriageway, Periodic Maintenance Plan, Warning Signages, Daily Monitoring Progress Reports
29.	CTO for manufacture of stone metal granted to M/s. ATR Infratechs vide letter no. MPCB/14/5589 dated 11 th June, 2014
30.	Inventory for Metal Beam Anti Crash Carrier
31.	Organizational Chart
32.	IMS Manual
33.	List of Contractors
34.	HSE Code of Conduct for Contractors
35.	Health Monitoring records dated 20 th August, 2015
36.	Training Report (Aug, 2016) and Training Calendar (2016-17)
37.	Emergency Response Plan, Emergency Evacuation Plan, details of Emergency Communication Response Team along with SOP for Incident Management
38.	CTO under Air and Water Act for operation of 2000 MT Stone/Asphalt Unit from Chhatisgarh Environment Conservation Board vide letter dated 3 rd June, 2016
39.	HSE Alerts and HSE Work Instructions

S.No.	List of Docs Reviewed
40.	Air, Water & Noise Testing Reports dated 31 st December, 2015 and 30 th June, 2016
41.	Community Engagement Plan (2014-15-16)
42.	QHSE Policy
43.	Factory Licence granted to Asoka Buildcon Limited on 15 th January, 2016 and valid till 31 st December, 2016
44.	Provisional Completion Certificate
45.	Detailed Project Report
46.	Punch List
47.	DPR and RAP Report
48.	Supplementary Environmental and Social Impact Assessment Report
49.	Details on Fire Extinguishers
50.	Fire Extinguisher Servicing Checklist dated 31 st August, 2016
51.	NOC from Gram Panchayat for Tappa Camp office
52.	Photographs on Safety Training and implementation of Safety culture
53.	Copy of Environmental Clearance vide letter no. 5-18/2007-IA.III dated 11 th June, 2007
54.	Incident Management Register of December, 2016
55.	EHSS Issues Closure Report along with Photographs (December, 2016)
	Electrical Inspectorate permission records dated 30 th December, 2016 for operating 82.5 kVA DG Set at + km 342.00
	Fire Extinguisher Servicing Checklist records (December, 2016)
	GHG emission records
	HSE Memorandum (December, 2016)
	HSE MIS Report (December, 2016)
	No Accident Certificate of M/s. ASC

A.3 Photo Documentation

Photo No.1	Date: 23/10/2016	
Location of photo: Anjora Village		
Description: AHDL Starting Point Chainage +km 322.40		

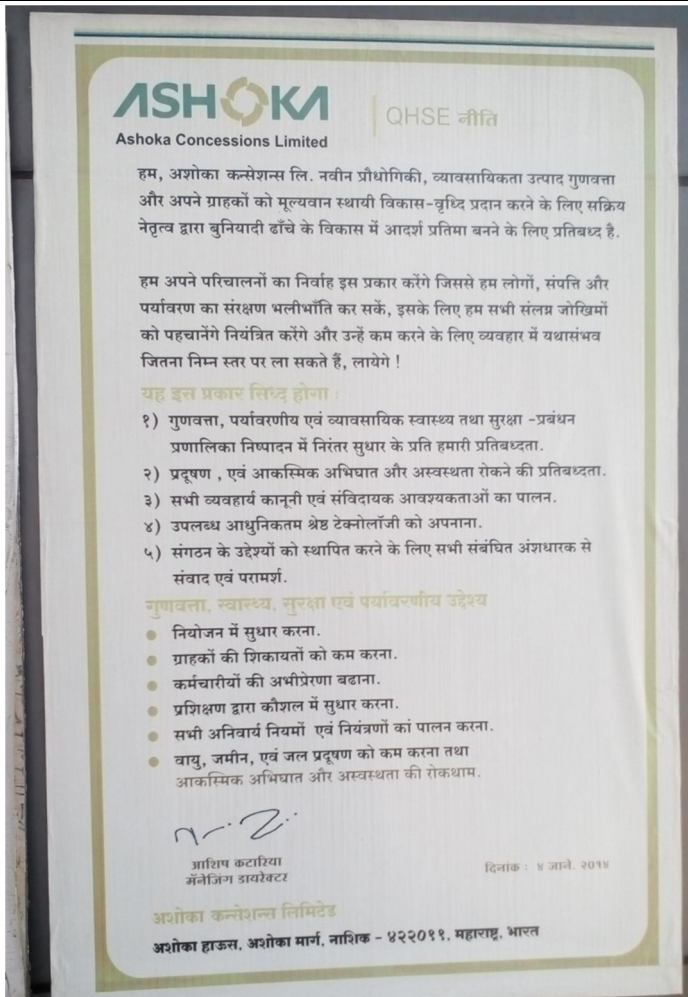
Photo No. 2	Date: 25/10/2016	
Location of Photo: Thakurtola Toll Plaza at chainage +km 331.5-+km 332.00		
Description: Display of QHSE Policy at Main gate of Thakurtola Toll Plaza office		

Photo No.3	Date: 25/10/2016	
Location of photo: Chainage +km 342.00		
Description: Workers were observed to be working without use of PPE's such as Safety Helmets, Safety shoes		


Photo No.4	Date: 25/10/2016	
Location of photo: Chainage +km 342.00		
Description: Borewell in operations by M/s. ASC Infratech		


Photo No.5	Date: 25/10/2016	
Location of photo: Chainage +km 342.00		
Description: Loose wires and electrical fittings		

Photo No.6	Date: 25/10/2016	
Location of photo: Chainage +km 342.00		
Description: No barricading along the road side where construction works are ongoing		


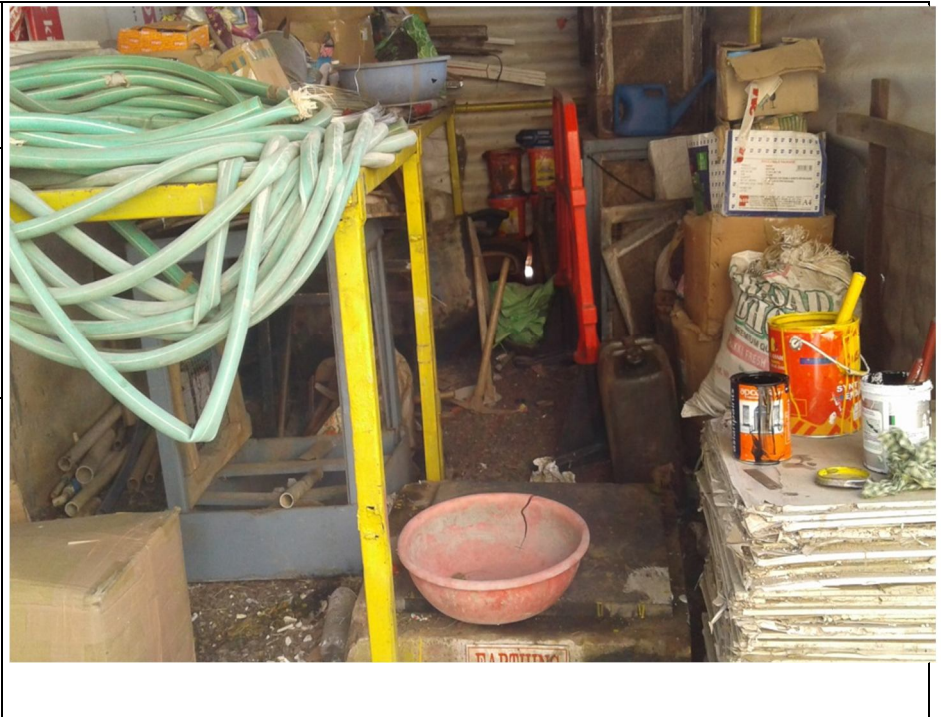
Photo No.7	Date: 25/10/2016	
Location of photo: Thakurtola Toll Plaza at chainage +km 331.5 - +km 332.00		
Description: Display of Emergency Evacuation Plan at Main Gate of Thakurtola Toll Plaza office		

Photo No.8	Date: 24/10/2016	
Location of photo: Thakurtola Toll Plaza at chainage +km 331.5 - +km 332.00		
Description: Mix store room at AHDL toll plaza. Oil cans is stored in storage area.		

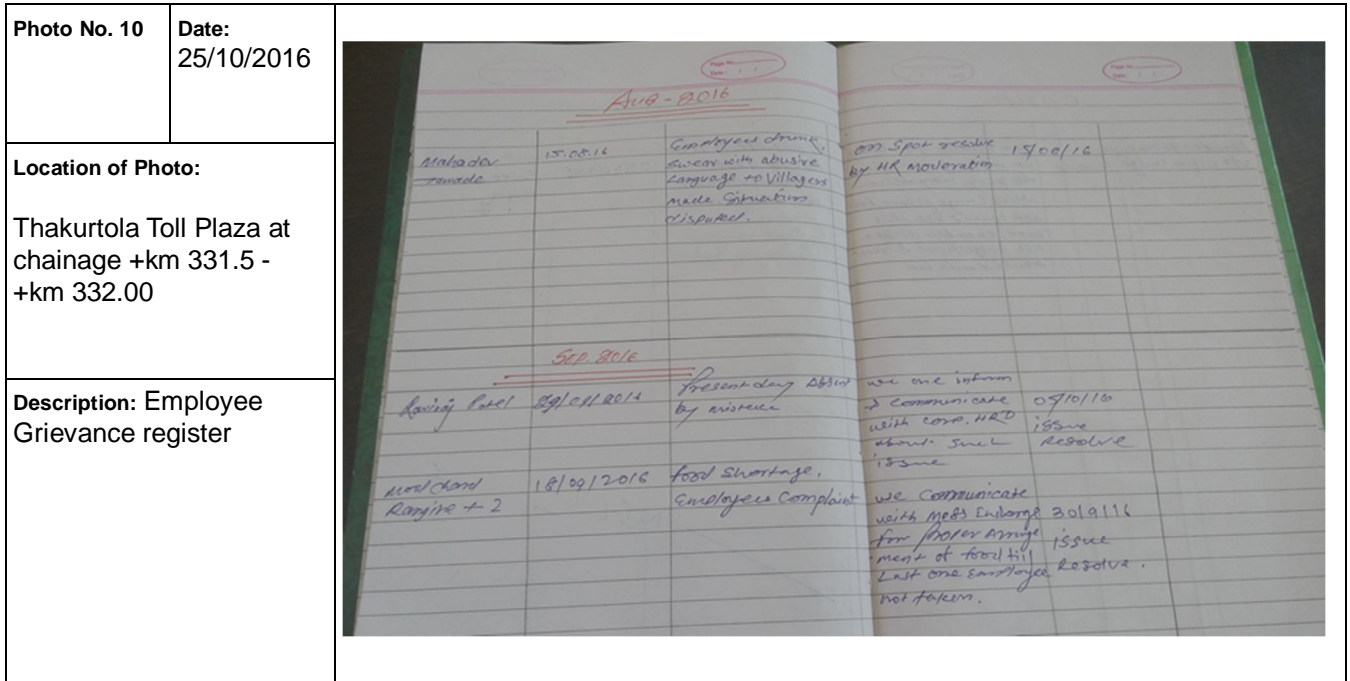


Photo No. 11	Date: 25/10/2016	
Location of photo: Bridge construction site at Chainage +Km 342.00		
Description: Labour camp set-up for accommodating labours of HR piles.		


Photo No. 12	Date: 25/10/2016	
Location of photo: Bridge construction site at Chainage +km 342.00		
Description: Facilities provided to labour at labour camp set-up for accommodating labours of HR piles.		

Photo No. 13	Date: 25/10/2016	
Location of photo: Labour Camp set-up by ASC at chainage + km 350.00		
Description: Batching Plant observed at labour camp during site visit		

Photo No. No.14	Date: 26/10/2016	
Location of photo: Labour Camp set-up by ASC at chainage + km 350.00		
Description: Open water tank of 10,000 litres capacity observed during site visit		

Photo No.15	Date: 26/10/2016	
Location of photo: Village Thakur Tola		
Description: Consultation held with marginal farmers at Village Thakur Tola		

Photo No. 16	Date: 26/10/2016	
Location of photo: Chainage + Km 353.015		
Description: 100 year old temple observed adjacent to road in Manki Village		

Photo No.17	Date: 24/10/2016	
Location of photo: Bag Nadi Village Chainage +km 405		
Description: End point of AHDL		

