

Environmental Monitoring Report

Bi-annual Report
December 2015

AZE: Second Road Network Development Investment Program – Project 1

Prepared by AzerRoadService OJSC (Ministry of Transport) for the Asian Development Bank.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

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Bi-annual Environmental Monitoring Report

December 2015

Republic of Azerbaijan:
Second Road Network Programme, Tranche 1:
Construction Supervision for the Alat-Astara Motorway –
Masalli to Jalilabad Intersection

(Financed by the Asian Development Bank)

Report 3: 1st July – 30th December, 2015

ADB Loan – 2921-AZE-SC-IRD-MR

Prepared by **Azer Road Service OJC (Ministry of Transport)** for the Asian Development Bank (ADB).

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CURRENCY EQUIVALENTS

(As of 30 December 2015)

Currency Unit	–	Azerbaijan New Manat (AZN)
AZN 1.00	=	USD 0.63
USD 1.00	=	AZN 1.56

ABBREVIATIONS

ADB	–	Asian Development Bank
ARS	–	Azerbaijan Road Service
AZN	–	Azerbaijan New Manat
BOD	–	Biological Oxygen Demand
EIA	–	Environmental Impact Assessment
EMP	–	Environmental Management Plan
EPM	–	Environmental Protection Manager
EPP	–	Environmental Protection Plan
GRM	–	Grievance Redress Mechanism
IPC	–	Interim Payment Certificate
MENR	–	Ministry of Ecology and Natural Resources
PIU	–	Project Implementation Unit
PMC	–	Project Management Consultant
PPE	–	Personal Protective Equipment
SSEMP	–	Site-Specific Environmental Management Plan
STD	–	Sexually Transmitted Disease
ADB	–	Asian Development Bank
ARS	–	Azerbaijan Road Service
EIA	–	Environmental Impact Assessment
EMP	–	Environmental Management Plan
EPM	–	Environmental Protection Manager
EPP	–	Environmental Protection Plan
GRM	–	Grievance Redress Mechanism
MENR	–	Ministry of Ecology and Natural Resources
PIU	–	Project Implementation Unit
PPE	–	Personal Protective Equipment
SSEMP	–	Site-Specific Environmental Management Plan

WEIGHTS AND MEASURES

m	–	Metre
km	–	Kilometre

TABLE OF CONTENTS

I. INTRODUCTION.....	4
A. Introduction to Project.....	4
B. Objectives of Biannual Environmental Reporting	5
C. Methodology.....	5
D. Construction Activities and Project Progress during previous six months	5
E. Project organization and environmental management team.....	6
F. Relationships with Contractors, owner, lender, etc.....	6
II. ENVIRONMENTAL MONITORING	7
A. Status.....	7
B. Results.....	7
C. Action.....	9
III. ENVIRONMENTAL MANAGEMENT	10
A. Status.....	10
B. Documents	10
C. Inspections and Audits	11
D. Non-Compliance and Corrective Actions	11
E. Training.....	22
F. Community Meetings and Grievances	23
G. Emerging Issues	27
H. Conclusions.....	27
IV. ANNEXES	29
ANNEX A: SEMP STATUS.....	29
ANNEX B: PERMITS	30
ANNEX C: LIST OF PERSONS CONSULTED	32
ANNEX D: CONSULTATION PHOTOS	39
ANNEX E: NOISE MONITORING RESULTS.....	40
ANNEX F: LETTER TO CONTRACTOR (21/10/2015).....	51
ANNEX G: LETTER TO CONTRACTOR (17/12/2015)	52

I. INTRODUCTION

A. Introduction to Project

1. The Contract, which comprises sections 3B & 3C of the Alat-Astara Motorway (M3), commences at the Jalilabad Interchange (Km 110+700 – the end of Section 3A) and runs in a generally southerly direction ending just South East of Masalli City (Km 142+800). It forms part of the important road connection from Baku to the Iranian border (at Astara).
2. The Executing Agency for the project is the Azeri Road Service (ARS) Open Joint Stock Company.
3. An Environmental Impact Assessment (EIA) was carried out for the project in 2007. The EIA report was approved by ARS and ADB, and has served as a basis for the development of the specification and contract documents, and for the preparation and pricing of the Contractor Environmental Management Plan (EMP).
4. The Engineer appointed by ARS is IRD Engineering LLC. The construction contract for both Sections is Kolin Construction, Inc.
5. This report is the third bi-annual report covering the period 1st July, 2015 to 30th December, 2015.
6. Key milestones relating to mobilisation are summarised below:
 - Overall Contract agreement: 912 days (30 Months) – 02 September 2016.
 - The Engineer mobilised on 14th January 2014.
 - Contract Agreement: 11th December 2013.
 - Notice to Commence was issued on 5th March 2015.
 - Earthworks began on March, 2015.

B. Objectives of Biannual Environmental Reporting

7. The purpose of the Bi-annual Environmental Monitoring Reports is to provide a summary of the key issues relating to environmental management over the past six months. The summary includes an update on overall project progress, the status of Site Environmental Management Plan (SEMP) implementation, any progress made with environmental management, environmental monitoring results, and other relevant issues such as non-compliance and corrective actions, and monitoring of the Grievance Redress Mechanism (GRM).

8. The Reports are prepared by ARS and are intended to inform ADB and any other interested parties of the status of environmental management of the project.

C. Methodology

9. The Biannual Environmental Monitoring Reports are prepared by reviewing and extracting key information from a number of sources, as follows:

- Contractors' Quarterly Health, Safety and Environment (HSE) Reports;
- Contractors' Grievance Registers;
- Engineer's Environmental Health and Safety Managers field reports;
- Any relevant instrumented monitoring results;
- Reports from the Contractors on training and public consultation; and
- Site visits made by the Engineers International Environmental Specialist.

D. Construction Activities and Project Progress during previous six months

10. The Progress of the Project during the last six months is shown by **Table 1** below:

Table 1: Progress of the Section B Contractor During the last Six Months

Item	Progress (%)
Bridge Progress	88.0
Pipe Culvert Progress	82.8
Box Culvert Progress	100
Road Work Progress (removal of topsoil)	133.6
Road Work Progress (Embankment)	48.3
Road Work Progress (Capping)	0.8
Physical Progress	43.29
Financial Progress	51.28

E. Project organization and environmental management team

11. The Contractors EHS team comprises:
 - a) Vugar Mammadov HSE Manager – responsible for the overall management of HSE issues for the Contractor.
 - b) Vasif Selimov HSE officer - Responsible for organisation of daily inspections, reporting, inspection of Camp and plants area, accident investigation, training arrangements, assist in Community meetings arrangements, writing requests for PPE and other HSE provisions.
 - c) Vusal Zeynalov HSE inspector - Daily inspections of site construction activities, project vehicles, conducting toolbox training, assist in training and Community meeting arrangements. Coordination of flagman and reporting of unsafe conditions.
 - d) Elkhan Valehov HSE inspector - Daily inspections of site construction activities, project vehicles, conducting toolbox training, assist Community meeting arrangements and reporting of unsafe conditions.
12. The Engineers EHS team comprises:
 - a) Xalid Mammadov Environmental and Health and Safety Manager (EHSM) – Responsible for the weekly checks of the Contractors activities and reporting to the Team Leader.
 - b) Nick Skinner International Environmental Specialist (IES) – Responsible for periodic site visits and preparation of the bi-annual environmental reports on behalf of the Engineer.

F. Relationships with Contractors, owner, lender, etc.

13. The relationships between contractors, Engineer, Owner, and Lender are considered normal working relationships.
14. At the working level, communication with regards to environmental issues remains good.

II. ENVIRONMENTAL MONITORING

A. Status

15. **General** - According to the SEMP and the Contractors contract, the Contractor is responsible for instrumental monitoring of air quality and noise. There is no contractual requirement for the Contractor to undertake instrumental water quality monitoring. There is however the obligation for regular visual inspections of site drainage for signs of pollution by the Contractor.
16. **Air Quality Monitoring** - The previous Bi-annual Environmental Monitoring Report noted that no air quality monitoring had been undertaken to date due to the fact that few construction activities have begun and that air quality monitoring was required only once per year, at locations to be specified by the Engineer. However, the previous Bi-annual report did indicate that air quality monitoring should be undertaken during the next reporting period, i.e. this reporting period. Site visits by the Engineers IES in September, 2015 noted that the air quality monitoring had still not been undertaken and that it should be undertaken as soon as possible so that the Contractor could present the results to the Engineer no later than the 9th October, 2015. During a site visit by the Engineers IES in early December, 2015, the Contractor was again informed that he had not undertaken any air quality monitoring. The Contractor subsequently undertook the air quality monitoring in December, 2015.
17. **Noise Monitoring** - Regarding noise, the Contractor is obliged to undertake yearly noise monitoring at the request of the Employer and after complaints from the public. No complaints from the public regarding noise have been received to date nor any request for monitoring from the Employer. However, the Contractor did undertake noise monitoring during this reporting period, and the results are presented in **Table 2** below.
18. **Water Quality Monitoring** – During a site visit in December, 2015, the Engineers IES requested that the Contractor undertake pH testing of the drainage system within the Contractors camp to determine if concrete sludge (from poor site management) was having a negative impact on pH levels. The Contractor undertook pH testing within the camp in December, 2015 and the results are presented below under **Table 3**.
19. **Additional Monitoring** - In addition, the ADBs environmental specialists made a visit to the site in September 2015. They recommended that air quality monitoring and noise monitoring should be undertaken on a bi-monthly basis throughout the contract period. The Contractor was requested to provide cost estimates to the ADB for approval before monitoring could commence on this basis. The Contractor has not yet prepared the cost estimate.

B. Results

20. **Air Quality** – Air quality monitoring was undertaken at ten locations on the 19th and 20th December, 2015 – however the results were not presented to the Engineer until 4th January, 2016 and there appear to be some inconsistencies with the results. As such additional clarifications are required with the Contractor regarding the results. Once the clarifications have been provided to the Engineer by the Contractor an addendum to this report will be made and submitted to ARS and ADB for review.
21. **Noise Monitoring** - Noise monitoring was undertaken on the 11th and 12th November, 2015 at locations specified by the Engineer. The noise monitoring results are presented below in **Table 2** and in full as **Appendix E**.
22. No elevated noise levels above the standards were recorded.

Table 2: Noise Monitoring Results

#	Time & Date	Location	Result (LAeq (DB))	Compliance
1	12.11.15 09.08	Kolin Camp – Dormitory nearest rock crushing plant	53	✓
2	12.11.15 09.32	Workshop nearest the rock crushing plant	59.7	✓
3	12.11.15 08.45	Nearest office to the rock crushing plant	55.9	✓
4	11.11.15 16.40	Nearest house in Chakhirli village close to Bridge #21	52.1	✓
5	11.11.15 17.45	Nearest house in Semitkhan village close to Bridge #26	50.3	✓
6	11.11.15 18.15	Nearest house in Semitkhan village close to Bridge #27	49.4	✓
7	11.11.15 13.40	Restaurant close to bridge #19	53.6	✓
<p>Standard: Azerbaijan Presidential Decree on Noise and Vibration pollution norms with the negative effects on Health and Environment N 796 (08 July 2008).</p> <p>Noise Levels: Accepted noise levels in this Presidential Decree for Residential areas, clinics, Hospitals, Rest areas, Educational centers and libraries: Daytime: 55dB to 70dB Night time: 45 dB to 60 dB.</p>				

23. Water Quality Monitoring - Monitoring of pH was undertaken at three locations within the Contractors camp during December, 2015. The monitoring results presented below in **Table 3** show that pH levels range from 6.2 to 5.8 which indicates that the water is acidic (The United States Department of Agriculture Natural Resources Conservation Service state that pH between 5.6 and 6.0 is 'Moderately Acid'). This suggests that concrete sludge is not affecting the water quality (concrete has high alkaline levels). However, the reason for the relatively high acidity of the drainage water needs to be investigated further. It is possible that pollution from other camp activities (i.e. the maintenance yard) is resulting in the acidic water.

Table 3: Construction Camp pH Levels

#	Location	pH
1	Internal drainage in Project Camp close to the Concrete Batching Plant	5.9
2	Irrigation Canal near the Security Gate of the Camp	6.2
3	Irrigation Canal near the Back gate of the Camp	5.8

C. Action

24. **Noise** - No further actions required for noise.

25. **Air Quality** - Once clarifications regarding the air quality results have been received they will be forwarded to the ARS and ADB as part of an addendum to this report.

26. **Water Quality** - It is possible that the Contractors activities are causing pollution (and the relatively high acid levels) within the camps surface drainage water. Additional water quality monitoring is required to assess this issue further. The Contractor will be instructed by the Engineer of the locations and parameters for further monitoring during January, 2016.

III. ENVIRONMENTAL MANAGEMENT

A. Status

27. An increase in activity at the Contractors camp and his work sites and the on-set of colder, wetter weather, has led to a gradual deterioration of environmental conditions, specifically at the camp itself. This coupled with a general lack of observational monitoring and corrective actions by the Contractor has led the Engineer to submit two letters to the Contractors warning him of his non-compliance with his contract (see **Appendix F & G**).

28. Two site visits have been made by the Engineers International Environmental Specialist during the reporting period after continuous non-compliance was noted by the Engineers Environmental Manager during the early part of this reporting period. The International Environmental Specialist initially made a site visit during September, 2015 along with the ADB and during this visit numerous non-compliance issues were noted by both the Engineer and the ADB (They are laid out in **Tables 4 & 5** in **Section D** below). After the September site visit the Contractor was given a list of the non-compliance items along with corrective actions and completion dates. However, a follow-up visit by the International Specialist (December, 2015), and weekly monitoring reports by the Engineers Environmental Manager, revealed that the Contractor had still not completed many of the items noted in September. Discussions were held with the Contractor regarding this issue in December and new target dates were set for completion of the outstanding activities, some of which were completed by the end of this reporting period, and some of which are still in-progress or open.

29. Notwithstanding the above, there have been no significant accidents during the reporting period involving the public or workers.

B. Documents

30. Part of the Contractors environmental obligations is the production Quarterly Environmental, Health and Safety Reports based on the findings of regular site inspections, community meetings, training programs, etc. The Contractors EHS Manager, Vugar Mammadov, is responsible for this and all other environmental management issues relating to the contract. The following summarizes the findings of the Quarterly Environmental, Health and Safety Report which was prepared in September, 2015:

- a) According to the report, there is no specific hazardous waste landfill in the region. Accordingly, although waste is separated by type at the Contractors camp, it all ends up in the same landfill at Masalli.
- b) The report also states that 'The issue regarding the waste water in Vehicle washing and concrete washout area reservoirs requested by ADB is solved.' However, as noted under **Tables 4 & 5** this was clearly not the case in September.
- c) According to the report, PPE is provided for each employee working at the Project. However, almost none of the Contractors staff wear any kind of PPE, including the Contractors management.
- d) According to the report Fire Fighting (FF) Equipment is provided for all buildings and FF sets are put outside. Again, this is not always the case, in fact one sand box outside of the maintenance yard was still empty three months after it was noted by the ADB in September. In addition, the report shows a photo of fire fighting equipment next to the vehicle fuelling area, however, this was removed in December.
- e) The report also stated that waste water from the vehicle wash pits is collected daily by the municipality – there was no sign of this during the site visit in December. In

addition, even if the water is being collected daily by the municipality, there is no suitable disposal location for this waste.

31. As noted in the previous Bi-Annual Report, the Engineer has now started to complete the bi-weekly EHS checklists instead of the Contractor. All checklists are now completed on time by the Engineers EHSM and submitted to the Team Leader and IES for review every two weeks. The Contractor is still supposed to conduct his own daily and weekly checks, but given the condition of the site at present this is considered unlikely to be occurring on a regular basis. In addition, the Contractor is supposed to be completing 'brief' monthly reports for the Engineer. According to his contract these should be three to four pages in length. The Contractor has, at the end of December, 2015, produced his first monthly report. This report, and subsequent monthly reports will be reviewed by the Engineer over the course of the next reporting period.

32. The SEMP has been approved by the Engineer along with its thirteen supplemental plans and method statements. **Annex A** provides a list of the plans and documents which form the SEMP.

33. The Contractor is responsible for obtaining and maintaining a number of environmental, health and safety permits. **Annex B** provides an overview of the current status of these permits. It is noted that two waste management contracts will expire at the end of the reporting period and that they should be renewed as soon as possible to ensure that they do not expire.

C. Inspections and Audits

34. The Engineers EHSM conducts site visits over a period of two days on a weekly basis.

35. As noted above, the Engineer's IES also made two site visits to all construction areas and the Contractors camp during the reporting period; on the 7th to 15th September and 1st to 10th December, 2015.

36. The Executing Agency has made a number of *ad hoc* visits to site as required.

D. Non-Compliance and Corrective Actions

37. The Contractors camp was inspected along with a portion of the Project road twice during the reporting period, on the 8th - 14th September and on the 1st to the 9th December, 2015 by the Engineers IES. He was accompanied during the site visits by the Engineers EHSM and the Contractors EHS Team. The ADB accompanied the team during the September visit (14th September).

38. During the early part of the September visit, the Engineer and the Contractor worked together to remedy some of the immediate issues around the camp, including:

- a. Concrete Batching Plant – A substantial amount of dust was being generated at the concrete batching plant during September. Three sources of dust were identified, firstly a gap between the weigh hoppers and the conveyor belts, secondly at the top of the plant where the conveyor unloads and thirdly the ramp up to the weigh hoppers. The Contractor immediately enclosed the first two sources of dust, however, he did not address the issue of dust from the ramp.
- b. Waste Management – The Contractor set about tidying up around all bridge sites along the road. This included the removal of waste from river banks.

39. However, a number of outstanding issues were identified that would require additional time to fix. The site visit by the ADB confirmed all of these non-compliance issues and identified some additional items, all of which are summarised by **Tables 4 & 5** below along with their current status.

Table 4: Non-compliance Items Noted by ADB September 2015

Item	ADB Comment	Action	Responsibility	Schedule	IRD Comment (December 2015)	December 2015 Follow-up
1. Vehicle Fueling Area	a. Holes are located in the bund of the fuelling area. The current status of the holes will not prevent a major leak escaping from these areas.	Holes in the fuelling area bund need to be filled properly.	Kolin HSE Team	09/10/15	Holes have been filled	CLOSED - None required
	b. There were no fire safety measures in this area, including fire extinguishers and warning signs.	Fire extinguishers and safety signs need (e.g. no smoking) to be placed in the fuelling area, especially around the fuel pump.	Kolin HSE Team	09/10/15	Fire safety measures were placed in the area by Kolin, then promptly removed.	CLOSED - Fire safety measures have been placed back in the fuelling area.
	c. The fuelling area is too small.	The concrete hard-standing area needs to be increased in size and a small curved bund located around the edge of the filling area. The curved bund will allow vehicles to drive into the fuelling area but will also ensure that spills and leaks of fuel do not migrate from this area. As was done in Sabirabad camp, a sludge tank should be provided to accommodate oily water run-off from this area.	1. IRD will provide Kolin with drawings providing potential solutions for these items. 2. Kolin shall then rehabilitate the area.	1. IRD to provide designs by 09/10/15 2. Kolin to rehabilitate area by 16/10/15	1. IRD have provided the designs to Kolin.	CLOSED - The fuelling area has been constructed. The Engineer will continue to monitor the area.

2. Instrumental Monitoring	a. Noise monitoring should be undertaken at selected locations on a bi-monthly basis. In addition, air quality monitoring should be undertaken at the same time intervals instead of annually.	As per ADB comment	<p>1. Kolin will provide quotes for the monitoring costs and provide them to ADB.</p> <p>2. Upon approval of costs by ADB, monitoring shall commence.</p> <p>3. IRD to specify locations for monitoring</p> <p>4. Notwithstanding the above, the first air quality monitoring must be undertaken by the first week of October.</p>	<p>1. Kolin to provide quotes by 09/10/15</p> <p>2. IRD to specify locations by 09/10/15</p> <p>3. First air quality monitoring by 16/10/15</p> <p>4. Air quality results provided to IRD by 19/10/15</p>	<p>1. Noise monitoring completed and results satisfactory.</p> <p>2. No air quality monitoring has been undertaken.</p> <p>3. No quote for additional monitoring has been provided by Kolin</p>	<p>IN-PROGRESS</p> <p>1. Clarifications regarding the results of the air quality monitoring are required from the Contractor.</p> <p>IN-PROGRESS</p> <p>2. Kolin to provide quotes IRD by 21/12/15</p>
3. Monthly Reports	a. Kolin have to prepare and submit monthly reports to the Engineer. They have not been doing this, or preparing any form of weekly or daily checklists.	ADB stated that each day the Contractors environmental specialist should be inspecting the camp and the entire road for any non-conformance. Weekly checklists should then be completed and monthly reports prepared and submitted to IRD.	<p>1. Kolin HSE Team to undertake daily inspections</p> <p>2. Weekly Checklists to be completed by Kolin HSE Team and submitted to IRD</p> <p>3. Monthly reports completed by Kolin HSE Team and submitted to IRD.</p>	<p>1. First weekly checklist to be submitted by 09/10/15</p> <p>2. First monthly report to be submitted by 30/10/15</p>	<p>1. No monthly reports have been received to date.</p>	<p>IN-PROGRESS</p> <p>1. The first monthly report has been prepared (Submitted 4th Jan, 2016) and will be reviewed by the Engineer.</p>
4. Training	a. The ADB will work with Kolin and IRD to improve training, especially in waste management and health and safety.	ADB local env specialist will make visits to Kolin camp to help improve the training program.	ADB and Kolin to discuss a program	TBD.	No comment	OPEN
	b. There need to be more on-site training in issues	More toolbox training on site is	1. Kolin HSE Team to	Toolbox training to	Training sessions are on-	IN-PROGRESS

	such as PPE, etc.	required and should be delivered on a regular basis by the Kolin HSE Team environmental specialist.	provide regular toolbox training and to keep a record of these activities. 2. IRD to regularly monitor the toolbox training to ensure Kolin HSE team is doing the training.	be provided on a daily basis.	going, although it appears there is no tool-box training.	1. According to Kolin HSE Team a number of toolbox trainings were undertaken in the last week of December, however, the Engineer will continue to monitor this situation to ensure the Contractor continues with the training.
5. Maintenance Yard	a. Waste storage needs to be improved.	1. More waste containers need to be provided. 2. Waste containers need to be emptied on a regular basis to ensure they are not overflowing.	1. Kolin to provide more waste containers. 2. IRD to monitor waste storage to ensure waste containers are not overflowing.	1. Waste containers provided by 09/10/15	More and better quality waste containers should be provided. The area outside the maintenance yard is still overflowing with waste.	IN-PROGRESS 1. Kolin stated that they would order more waste containers for this area – However, to date the only evidence of additional waste containers are some empty 200 liter oil drums outside the yard. The Contractor was specifically requested to ensure larger bins were put in this area to accommodate the high volumes of waste generated in this area.
	b. No spill prevention measures are provided in the maintenance yard.	1. Spill kits need to be provided in the yard. 2. Training in the use of spill kits needs to be provided.	1. Kolin to install spill kits. 2. Kolin HSE team to provide training in the use of spill kits	1. Spill kits installed by 16/10/15 2. Training provided by 21/10/15	No kits installed.	IN-PROGRESS 1. Kolin have ordered 5 spill kits, but have yet to be delivered.

	c. Storage of fuel should be in suitable containers, not used water bottles.	Fuel shall not be stored in used water bottles	Kolin to remove all water bottles for fuel storage and replace with appropriate containers.	Bottles replaced by 09/10/15	Water bottles not observed in the maintenance area, but can still be noted on-site.	IN-PROGRESS 1. 20 liter fuel cans ordered for use in the maintenance yard, but still note delivered.
	d. The new concreted maintenance area needs to be covered to prevent rain water run-off from this area entering the drainage network.	Roof to be constructed over the new concreted maintenance area.	Kolin Maintenance Yard Manager	Roof constructed by 16/10/15	Roof completed	CLOSED
	e. Another oil changing pit is required adjacent to the existing pit. All remaining areas around the maintenance yard should be gravelled to stop the area become a mud bath during the autumn and winter.	1. Construction of a new oil changing pit adjacent to the existing pit. 2. Gravel to be placed across maintenance yard.	Kolin Maintenance Yard Manager	1. Oil change pit constructed by 09/10/15 2. Area gravelled by 09/10/15	No pit constructed and no gravel laid. However, no additional pit is warranted now the additional maintenance yard is complete. Gravel is still required.	IN-PROGRESS 1. Gravel not laid around the whole area.
	f. More fire extinguishers are required in this area	Placement of more fire extinguishers in the maintenance area.	Kolin Maintenance Yard Manager	Items fitted by 09/10/15	Only one fire extinguisher in the area.	IN-PROGRESS 1. Five additional fire extinguishers have been ordered, but still not delivered.
	g. Sand boxes must contain sand.	Ensure sand is in the sand boxes.	Kolin Maintenance Yard Manager	Items fitted by 09/10/15	No sand in the sand boxes.	CLOSED 1. Sand now in the sand box.
6. Vehicle Washing Area	a. Waste water is not running off into the wash pit.	Concrete lips should be provided around the whole wash bay to ensure that run-off enters the wash pit, not areas adjacent to the wash pit.	Kolin HSE Team	09/10/15	No improvements to the wash pit have been made. Recommendations have been provided by IRD to Kolin to improve this area to an acceptable	IN-PROGRESS 1. Kolin have laid more concrete with bunding, but monitoring of the area is still required by the Engineer to ensure it functions correctly.

					standard, however, Kolin stated that they will use their own designs to remedy the issue	
	b. Kolin do not know where the waste sludge from the wash pit is dumped.	Kolin should confirm where the waste from the wash pit actually goes.	Kolin HSE Team	09/10/15	No information provided. However, it is assumed that all waste goes to Masalli Municipality dump.	CLOSED 1. Unless ADB request further clarification of this issue.
7. Waste Management	a. The are no records of waste collection (types and volumes) from the site.	Kolin shall keep and up to date record of waste volumes and types leaving the site and report these findings in the monthly report to IRD.	Kolin HSE Team	Volumes reported in the first monthly report (October)	No records provided	IN-PROGRESS 1. Kolin have provided data for September, October and November which is presented in their December monthly report.
	b. Kolin do not know where their hazardous waste is disposed of.	The licensed waste Contractor should confirm with Kolin where all hazardous waste is disposed of.	Kolin HSE Team to inform IRD	09/10/15	No information provided. However, it is assumed that all waste goes to Masalli Municipality dump.	CLOSED 1. Unless ADB request further clarification of this issue.
8. Health and Safety	a. No harnesses were being used by workers working at heights on bridges.	Harnesses should be used at all areas where working at height is undertaken, e.g. bridges.	1. Kolin to ensure workers are provided with the right equipment at these sites. 2. Kolin HSE Team to provide training to workers.	09/10/15	Harnesses are still not used by workers.	OPEN 1. Kolin must provide harnesses for workers and training in their use.
9. Concrete batching	a. The drying pit for sludge and water from concrete batching yard is too small and water does not evaporate quickly	A larger drying pit for the concrete wash out from the mixers should be constructed next to the	1. IRD will provide potential solutions for a larger pit.	1. IRD to provide potential solutions by	The pit needs to be expanded along with the area for washing out the trucks – truck	IN-PROGRESS 1. Kolin have laid more concrete in the area to divert was water to the

	enough from the pit.	batching yard.	2. Kolin to construct the pit.	09/10/15 2. Kolin to construct pit by 16/10/15	washing out is occurring across the site. IRD have provided Kolin with potential solutions to this issue.	washout pits. The Engineer will monitor the use of this area to ensure it functions correctly.
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Table 5: Non-compliance Items Noted by the Engineer, September 2015

Item	IRD Comment	Action	Responsibility	Schedule	IRD Comment (December 2015)	Kolin Follow-up
1. Bunding	a. The fuel storage next to the generators close to the rock crushing area should be bunded.	Construct bunds for these fuel tanks	Kolin HSE Team	09/10/15	Area not yet bunded.	IN-PROGRESS 1. Kolin have installed possibly the worst, and most pointless bund in this location. This needs to be constructed as instructed by the Engineer.
	b. Plasticizers at the concrete batching area should be kept in bunded areas.	Construct bunds for the plasticizers	Kolin HSE Team	09/10/15	Area not yet bunded.	IN-PROGRESS 1. Kolin have constructed another pointless bund that is in no way capable of containing any spill, or leak.
2. Concrete wash Out	a. Concrete mixers are being washed out at construction sites.	Specific wash out pits should be provided at the site areas where concrete pouring is occurring. The	1. IRD will provided a specification for these pits to Kolin. 2. Kolin to construct pits according to IRD design.	1. Designs by 09/10/15 2. Pits constructed by 16/10/15	No concrete washing out at the sites observed.	CLOSED
3. Concrete Batching	a. Dust from the ramp up to the aggregate bins is blowing over the	A fence needs to be constructed on the ramp and	Kolin to construct	09/10/15	Fence not yet constructed.	IN-PROGRESS 1. Kolin have

	construction camp.	around the aggregate bins to reduce impacts of wind blown dust on the accommodation and office blocks.	fence			installed a fence, but it is made from nylon, as such it may not be very durable. The Engineer will monitor the suitability of this material for its purpose.
4. Rock crushing	a. Materials falling from conveyor belts is a safety hazard.	Signs should be placed to prevent workers walking under conveyor belts.	Kolin HSE Team	09/10/15	Signs not provided.	IN-PROGRESS 1. Kolin have installed signs, but they are a long way from the conveyor belts.
	b. High levels of dust are being generated at the rock crushing plant.	The water sprinkling system should be operational.	Kolin HSE Team	09/10/15	Water spraying is occurring at the top end on the rock crusher, however, significant amounts of dust are still occurring throughout the crushing plant, especially where fine materials are being produced.	OPEN 1. Kolin need to prepare a plan to deal with the dust issue.
5. Asphalt plant	a. Dust from conveyor belts	Conveyors need to be covered	Kolin HSE Team	20/12/15	Asphalt plant is not anticipated to be operational until April, 2015	OPEN
	b. Spills and leaks from liquids.	Bunding needs to be placed around all liquid storage areas of the plant.	Kolin HSE Team	20/12/15	Asphalt plant is not anticipated to be operational until April, 2015	OPEN
6. Maintenance yard	a. spills and leaks of fuel and liquids from the new maintenance yard into a drainage ditch.	Bunding needs to be placed around the new maintenance yard area.	Kolin HSE Team	20/12/15	No comment	OPEN 1. No bunding yet constructed.

40. At the conclusion of the September visit, the Contractor was given both of the tables above, and asked to complete the tasks by the dates specified in the fifth column. However, the

Engineers EHSM, through his weekly EHS checklists, noted that the Engineer continued to ignore the recommendations laid out in the tables through October and November. In December, the Engineers IES made several site visits which confirmed the finding of the EHSM, i.e. that the Contractor had completed on a small fraction of the tasks required, and in fact the camp was in worse condition than in September. The following outlines a summary of the key issues identified in December.

41. Bunding – Several areas of the site require bunds to control spills and leaks of hazardous liquids. The areas include; the vehicle fuelling area, the new maintenance yard and a fuel storage tank close to the rock crushing plant. The Contractor was informed of these items and was given a completion date of the end of the reporting period (30/12/15) to complete the required works. However, there is still no bunding in the maintenance yard, and the other two bunds (for the fuel tank close to the main generator and the concrete plasticisers) are so poorly designed and constructed that they are almost worthless. The Engineers IES gave clear and specific instructions to the Contractors HSE Team on this issue, but they clearly do not understand what they requirements for bunding are.

42. Oil Spills/Leaks – Several small spills and leaks of oils were noted across the site (see **Figure 1**). There are several reasons for the spills/leaks; firstly, undertaking vehicle maintenance in the wrong areas, i.e. not in the maintenance yard. Secondly, leaking of oil from old, and poorly maintained vehicles. And thirdly, lack of awareness of workers regarding the handling and management of hazardous liquids. All of these issues have simple remedies, however the Contractor and his HSE staff seem to be unwilling, or unable to manage these issues. The third issue, lack of worker awareness, should really be dealt with by improving staff training. It appears that many staff have either a very basic, or no understanding at all, of issues such as management of hazardous waste. This results in situations where staff in the maintenance yard are pouring, and spilling, large quantities of oil directly onto bare soils (see **Figure 2**). The simple way to deal with this issue is tool-box training by the Contractors HSE team. During two weeks on site in December the Engineers International Environmental Specialist did not, even once, see any kind of tool-box training by the Contractors HSE team, in fact they were never spotted around the site except when requested by the Engineer. This is completely unacceptable and the Contractor has been warned regarding this matter. The Contractor did send the Engineer some limited documentation as proof that some toolbox training had been undertaken in the last week of December, 2015. The Engineers EHSM will continue to monitor the Engineers HSE team to see if these trainings continue into the next reporting period, or if they were just a passing fad to placate the Engineer.

43. Re-fuelling – Despite requests in September for this area to be improved, the vehicle re-fuelling area was actually in a worse state during Decembers inspections. The Engineer furnished the Contractor with plans to upgrade this area into something suitable. The main requirement was the extension of the concrete hardstanding, construction of a sump for oil and grease run off and the construction of a bund (in the form of a 10cm lip) around the hardstanding to capture spills and leaks whilst allowing vehicles to enter the site to re-fuel. The Contractor has, at the end of December, completed these works, but they will now need to be monitored by the Engineers EHSM to ensure that this area is used, and functions correctly. The hardstanding in this area also needs to be cleaned regularly to prevent the build up of mud in the bund (which will eventually flow into the sump). Finally, it was noted that there was still no fire fighting equipment in this area despite comments to the contrary from the Contractor. It appears that the Contractor thought he could simply place the equipment in this area, take a photo and use it as evidence in his quarterly report that he had completed his task before removing the fire fighting equipment to another location. This sort of behaviour is not only un-professional, it is dangerous and quite frankly embarrassing. The Contractor appears to have no shame in these kinds of matters.



Figure 1: Oil leaks from old, poorly maintained vehicles



Figure 2: Worker, without any PPE, spilling oil around the maintenance yard, adjacent to a drainage ditch.

44. Maintenance Yard – Again, despite requests in September to improve the conditions in the maintenance yard, the conditions were still not acceptable in December. Waste management was poor, no spill kits had been installed, the gravel around the yard had not been laid (as specifically requested by the ADB), there was a lack of fire extinguishers and there were no sand in sand-boxes. All of these issues were discussed with the Contractor in December's visit, after which he has placed an order for new waste containers, fuel storage containers and spill kits. He also agreed to make sure gravel was laid around the yard by 21/12/15. In addition, two new maintenance areas have been constructed next to the existing maintenance yard. The Contractor has been informed that both of these areas should have suitable drainage and bunding to collect and spills and leaks of hazardous liquids. By the end of December, only sand had been placed in the sand boxes and none of the other tasks had been completed and none of the ordered items received.

45. Vehicle Washing – The vehicle washing area turned into a mud-pit with the onset of winter. One of the main issues with this area, as identified in previous reports, is that it is too small for any vehicle other than a pick-up to use. Consequently many larger vehicles use the washing equipment adjacent to the existing concrete wash bay, thereby turning this area into a pit of mud (see **Figure 3**). Several designs were proposed to the Contractor to improve this area, but he stated during the December visit that he will upgrade this area with his own designs in order to make it suitable for the larger vehicles. By the end of December the Contractor had increased the area of hardstanding, but monitoring of the functionality of the new pit needs to be undertaken by the Engineers EHSM during January. The Contractor was also told to ensure that the sludge pit is

emptied on a regular basis to ensure that the sludge pit operates effectively. Regarding the waste sludge, the Contractor has reported that the sludge is collected and disposed of by the Municipality. This does not eliminate the issue of pollution as it is known that the municipality does not have any separate area within their landfill for hazardous waste. In fact, this is the situation in this southern region of Azerbaijan where there are no hazardous waste landfills.

46. Concrete Batching Plant – The concrete batching plant is functioning, if only one mixer at a time uses the plant. However, there are usually multiple mixers in this area, some of which are being washed out simultaneously. Often the vehicles are washed out outside of the appropriate area which is resulting in concrete sludge being spread around the area outside of the batching plant. Discussions were held with the Contractor about this issue and new designs were prepared by the Engineer to increase the size of the wash-out pit and improve the wash-out pit so that it can store a greater volume of sludge. Bunding around the wash-out pit was also recommended to prevent mud and sludge site run-off entering the wash-out pit. The Contractor attempted to improve this area according to the designs provided by the end of December, 2015, however as with the vehicle washing area, monitoring of the functionality of this area by the Engineers EHSM will be needed during January 2016. In addition, new bunding was requested to be placed in the Plant area to secure the 1000 liter IBCs that currently contain concrete plasticizer. However, the newly constructed bunds are completely inappropriate for the size of containers. It seems strange that the Contractors HSE team do not seem to know how to construct a bund given their expertise in HSE issues. The Contractor was also reminded in December that he was supposed to install a fence along the ramp up to the weigh-hoppers to reduce dust impacts from westerly winds. He has now completed this task, but the fence is constructed of nylon and this may not be very durable. Accordingly the Engineers EHSM will continue to monitor the fence to ensure it is fit for purpose.

47. Rock Crushing Plant – Water spraying is occurring at the crushing plant, but only where the main loading area to the crusher. Observations of the plant identified multiple areas where dust is being created as the rock is gradually ground down into smaller pieces (see **Figure 4**). The Contractors camp is located more than two kilometres from any settlement, or house, and as such dust impacts from the plant to residents is not a factor. However, the dust does blow over the camp when the wind is blowing in a westerly direction. Accordingly, it was recommended to the Contractor that watering additional portions of the plant would be beneficial for the health of his staff who live and work at the camp.

48. Health and safety – This is a reoccurring issue which the Contractor seems completely unable to control. Almost none of his staff wear PPE, despite constant reminders from the Engineer. One of the main safety issues on the site is the lack of harnesses used working at bridge sites and the poor quality of the ladders which are cobbled together from bits of scrap wood and nails. In one instance it was noted that some workers were actually climbing a rope to access one bridge site as the ladder was too short to reach the top of the bridge. HSE Tool-box training is a must and will help improve the workers understanding of the need for PPE. However, the Contractors HSE team have to be proactive on this issue.



Figure 3: Truck unable to fit on the vehicle washing bay.



Figure 4: Dust from rock-crushing plant

49. Waste Management – Good waste management is still patchy across the site. This, could be improved with tool-box training and better waste storage containers. The Contractor was informed of this issue and has now ordered new waste containers for the maintenance yard.

E. Training

50. During the present reporting period several EHS training sessions were undertaken as outlined in **Table 6**. However, it is recommended that the Engineers EHSM attend future training sessions to assess the quality and suitability of these activities. It was noted, from the Contractors own Quarterly EHS Report that the training session ‘Use of chemicals (Control of Substances Hazardous to Health)’ on the 25th July, 2015 was attended only by the cleaning and laundry ladies from the Contractors camp due to the fact the Contractors HSE team were concerned about the use of ‘Domestos’ during toilet cleaning.

51. In addition, the Contractors HSE team were not performing any tool-box training. This would be beneficial in areas such as waste management and PPE, where the Contractors staff obviously have no idea of what this means. The Engineer has proposed to develop a series of Tool-box trainings which can be implemented by the Engineer and the Contractor during the next reporting period.

Table 6: Training Sessions

Type of Training	Date	No. of Participants
Use of chemicals (Control of Substances Hazardous to Health)	25.07.2015	6

Use of chemicals (Control of Substances Hazardous to Health)	26.07.2015	21
Snake bites prevention and First Aid	14.08.2015	13
Heat Stress	14.08.2015	12
Oil Spill clean-up	29.09.2015	7
Working at Height	30.09.2015	12
Toolbox Talk Training	19.12.2015	15
Risk Assessment	19.12.2015	10

F. Community Meetings and Grievances

52. During the present reporting period public meetings were held on the following dates and locations.

- Station Takla, Masalli District – 29th July, 2015 (18 Participants)
- Seybetin Village, Masalli District – 29th August, 2015 (10 Participants)
- Kazimabad Village, Jalilabad District – 30th September, 2015 (7 participants)
- Serchuvar village, Masalli District – 28th December, 2015 (25 participants)

53. The list of participants is provided in **Annex C**, and photos of one of the meetings are shown in **Annex D**.

54. A summary of all grievances to date and how they were resolved is provided in **Table 7** below.

Table 7: Grievance Register

No	Location	Date Received	How grievance was received	Plaintiff	Description of the issues/complaints	Notes, undertaken actions	Status
1	Takla Station	29.07.15	Meeting	Abbasov Agababa	We want a crossing for our cars and animals under the Bridge 17	Your request will be addressed to the Supervision Company IRD and Azerroadservice OSJ.	In-progress
2	Takla Station	29.07.15	Meeting	Kalbiyev Shahn	Due to the movement of trucks which work within the project damage the Chakhiri-Takla road. We kindly ask you to rehabilitate these damages.	If the existing damages were caused by Kolin trucks, it will be restored. We do restoration of roads in each affected by construction village.	Solved
3	Takla Station	29.07.15	Meeting	Hasanov Nizami	There is a dust in service road passing from Masalli Station.	The intensity of watering will be increased as much as we can on the mentioned part of the Service road.	Solved
4	Takla Station	29.07.15	Meeting	Hasanov Nizami	We want an animal crossing for our animals somewhere close to the Bridge 19.	Your request will be addressed to the Supervision Company IRD and Azerroadservice OSJ.	In-progress
5	Seybatin Village	29.08.2015	Meeting	Abiyev Sahib	We would like to get an information about Rehabilitation of Khocavar and other roads	Some of the roads which we use may get damaged during the work. The roads are restored while the works is in process and will be reestablished after work finishes.	Solved

No	Location	Date Received	How grievance was received	Plaintiff	Description of the issues/complaints	Notes, undertaken actions	Status
6	Seybatin Village	29.08.2015	Meeting	Huseyno Gambar	Last year a truck drove to our street wrongly and damaged the roads.	The road was reestablished and chief of village municipality was satisfied with the condition of the road.	Solved
7	Seybatin Village	29.08.2015	Meeting	Niftullaev Mirza	The fast movement of trucks disturbs us. What is the mitigation measure for this?	We have a speed limit for our trucks 30 km/hour. Pls. inform us about truck numbers driving faster when you observe it. We will take strong disciplinary measures.	Solved
8	Seybatin Village	29.08.2015	Meeting	Valiyev Vuqar	The road in front of Seybetin mosque was settled down.	Today, the mentioned area will be monitored and the problem will be solved.	In-progress
9	Kazimabad Village	30.09.15	Meeting	Jabbarov Araz	We have a 120 Ha of land parcel at the left side of Goytepe river. We would like to have an access to our lands, probably under the bridge constructed on Goytapa river.	Let's have a visit to the Goytapa river bridge and discuss it right on the place. The issue was discussed with local community at the site near Goytepe river bridge N17. The easiest way of solution of the access problem for Kazimabad community is foreseen to be under the Goytapa river bridge N17. It is cost and time beneficial to widen the bridge pile area about 4 meters rather than to construct new cross (box culvert 4x 2.5 m) This proposal was discussed with Kolin Project manager and agreed that with the instruction of supervision company IRD it can be implemented. IRD company	Solved

Second Bi-annual environmental monitoring report for the Alat-Astara Motorway

Masalli to Jalilabad Intersection.

N o	Location	Date Received	How grievance was received	Plaintiff	Description of the issues/complaints	Notes, undertaken actions	Status
						confirmed that instruction about bridge pile area widening will be given to the Contractor.	

G. Emerging Issues

55. It is noted that the asphalt plant still requires certain environmental protection elements, such as bunding and screens on conveyor belts. The Contractor has indicated that the asphalt plant will not be operational until April, 2016. However, the Engineers EHSM has to monitor this issue closely to ensure that all environmental conditions have been put in place before the plant becomes operational.

H. Conclusions

56. Since the last reporting period the Contractors performance, from an environmental perspective have decreased considerably. In September the Engineer and the ADB gave the Contractor a number of tasks to complete by December. However, the fact that the Contractors camp was in a worse condition during Decembers site visit is testament to the miserable effort of the Contractor to maintain his camp in an environmentally sound fashion. A host of environmental management issues have been noted during Decembers site visit, the most significant of which are outlined below:

- Bunding – Bunding is absent, or entirely inadequate for use at several locations.
- Maintenance Area – The existing maintenance yard needs to have more fire fighting equipment, spill kits, waste containers and storage cans. Despite the Contractor informing the Engineer that they have been ordered, none are yet present in this area. Tool-box training should also be provided on a regular basis to the staff working in the maintenance yard so as to avoid the regular occurrence of spills and leaks of hazardous liquids on open ground and the poor management of waste materials.
- PPE – The application of PPE remains patchy across the Contractors camp and at work sites. To date, no serious accidents have been registered as a result of poor PPE application, however, this is no excuse not to use PPE as a serious accident could occur at anytime on the site, including a fall from height from bridges and the poor quality ladders.
- Dust – Significant levels of dust are occurring at the rock crushing plant. Although this does not impact upon any residential areas or sensitive receptors it does blow over the camp site, and can therefore affect the health of the Contractors, and Engineers staff. Accordingly, the Contractor has been asked to provide a solution to this issue.
- pH Levels – Testing of pH in the site drainage indicates elevated levels of acidity in the water – this may be a result of pollution of the water from vehicle maintenance activities. Further investigation of this issue will be undertaken in early 2016.

57. The Contractor and his HSE team have been informed of several of these issues multiple times and many are still outstanding from Septembers visit with the ADB. The Contractor has now been sent two letters by the Engineer outlining the necessary actions to remedy these issues along with completion dates.

58. The Contractor did make headway with several other items such as improvements to the concrete batching yard and the vehicle washing area, However, the suitability of several of these improvements needs to be closely monitored by the Engineer to ensure they are fit for purpose.

59. The contractor has to start submitting his monthly reports and start taking his training sessions more seriously, and that means not inviting cleaning ladies to HSE sessions relating to hazardous substances (domestos). The Engineers EHSM will now start to attend all of the proposed training sessions and community meetings held by the Contractor to ensure they include suitable numbers and types of participants and that the content of these sessions is

adequate. The Engineers EHSM will also help develop and follow the Contractors HSE specialists on trips across the camp and work site to review his tool-box training methods. A report on all of these sessions will be prepared by the Engineers EHSM and sent to the Engineers Team Leader and IES for review.

60. Finally, it is noted that although the Contractor is separating his hazardous waste from inert and non-hazardous waste this main be of little value. All waste materials collected by the municipality are disposed of at the same location, a landfill in Masalli. Although this site has not been inspected closely (it can be seen from the road), it is understood that it is an open, unlined dump where all waste types are disposed of. Consultations with staff from other road construction projects in this region indicate that this is a common problem and that the only available hazardous landfill site is located close to Baku.

IV. ANNEXES

ANNEX A: SEMP STATUS

Document Ref #	Item	Status
MJ-HSE-002	Site Environmental Management Plan	Approved by Engineer
MJ-HSE-005	Waste Management Plan	Approved by Engineer
MJ-HSE-007	Sewage management plan	Approved by Engineer
N/A	Health and Safety plan and Accident Book	Approved by Engineer
MJ-HSE-004	Soil management plan (including topsoil and vegetation)	Approved by Engineer
MJ-HSE-0012	Site drainage plan	Approved by Engineer
MJ-MS-014	Method statement on spillages	Approved by Engineer
MJ-MS-013	Statement on location of fuel storage, filling station and vehicle washing site	Approved by Engineer
MJ-HSE-001	Traffic management plan	Approved by Engineer
MJ-HSE-0010	Noise control plan	Approved by Engineer
MJ-HSE-009	Air pollution control plan	Approved by Engineer
MJ-HSE-008	Dust control plan	Approved by Engineer
MJ-HSE-0011	Cultural/archaeological find plan	Approved by Engineer

ANNEX B: PERMITS

Location	Permit / Permission	Date Obtained	Update / Action
Construction Camp	Land Acquisition Contract	19.03.2014	None for three years
	Land use Approval	08.04.2014	None (obtained once)
	Eco. Expertise Approval	17.04.2014	None (obtained once)
	Ecological Passport	17.04.2014	None for five years
	Contract for Waste disposal	01.01.2015	Update required 31.12.2015
	Contract-Sewage disposal	01.01.2015	Update required 31.12.2015
Concrete Plant	Eco. Expertise Approval	17.04.2014	None (obtained once)
	Ecological Passport	17.04.2014	None for three years
	Limits of Emissions to the Atmosphere	17.04.2014	None for three years
Asphalt Plant	Eco. Expertise Approval	17.04.2014	None (obtained once)
	Ecological Passport	17.04.2014	None for three years
	Limits of Emissions to the Atmosphere	17.04.2014	None for three years

Stone Crushing Plant	Eco. Expertise Approval	17.04.2014	None (obtained once)
	Ecological Passport	17.04.2014	None for three years
Borrow Pit	Land Acquisition	24.02.2014	None for five years
	Eco. Expertise Approval	09.04.2014	None (obtained once)
	Ecological Passport	09.04.2014	None for five years
	Limits of Emissions to the Atmosphere	09.04.2014	None for three years

ANNEX C: LIST OF PERSONS CONSULTED



CONSTRUCTION OF ALAT- ASTARA MOTORWAY MASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Seybatin				
TARİX (DATE): 29 /08/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin seria nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Vəliyev Rəşad	050-857-44-42		[Signature]
2.	Aliyev Səhib	051-710-44-14		[Signature]
3.	Cavad Cavadov	051-338-66-18		[Signature]
4.	Təzəcan Qadasov	050-684-54-00		[Signature]
5.	Heydər Həsənov	050 4646488		[Signature]
6.	Hidayət Hidayətova	050 790 87 32		[Signature]
7.	Pərvanə Pərvanə	050-450-94-81		[Signature]
8.	Zeynəlli Nəsim	050.64235-56		[Signature]
9.	Hüseyn Hüseynov	0503380111		[Signature]
10.	Kənan Kənanov	0552427161		[Signature]
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CONSTRUCTION OF ALAT- ASTARA MOTORWAYMASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Kazımabad				
TARİX (DATE): 30 /09/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin seria nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Caabənov Arəy Rəşid oğlu	050-32716-21		
2.	Küçənov Dikəy Kamal oğlu	051-404-22-99		
3.	Küçənov Arif Əlibala oğlu	050-775-38-12		
4.	Baqirov Rəşid Rəşid oğlu	050-464-22-99		
5.	Vələkov Elxan	STT Kolin		
6.	Vəzirov Əlimov	STT Kolin		
7.	Vəzirov Məmmədov	STT Kolin		
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CONSTRUCTION OF ALAT- ASTARA MOTORWAYMASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Muğan				
TARİX (DATE): 30 /10/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin serialı nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Fəxrullaq Həm	055-4170379	02707414	[Signature]
2.	Zəqulov Qəzənfər	0519470724	02705424	[Signature]
3.	Abbasov Asif	055-6409230		[Signature]
4.	Abasov Elcin	0505137741	07756117	[Signature]
5.	Rəhimov Mizzagə	0706512343		[Signature]
6.	Fikərov Qudrət	0516155828	14223941	[Signature]
7.	Əhmədov Həkim	0519360204	08977836	[Signature]
8.	Ağayev Əflən	0505547591	14200629	[Signature]
9.	Fikərov Vəqif		05706958	[Signature]
10.	Hüseynov Qulu		06162314	[Signature]
11.	Rəyev Əliyə		04488805	[Signature]
12.	Hüseynov Əlibabə		14815838	[Signature]
13.	Əbdulov Asif	0504029598		[Signature]
14.	Babayev Məstəzab	0507435756		[Signature]
15.				
16.				
17.				
18.				
19.				



CONSTRUCTION OF ALAT- ASTARA MOTORWAYMASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Uzuntəpə				
TARİX (DATE): 27 /11/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin seria nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Atakişiyev Mehman	0513233333		[Signature]
2.	Xətullayev Zərif	0503481634		[Signature]
3.	MAMMADOV HƏSƏNƏLƏ			[Signature]
4.	Məmmədov Teyyub	050981-78-73	AZEN:14202541	[Signature]
5.	Əliyev Fəzil	055-966-42-04	AZEN:0850576	[Signature]
6.	Qatirov Yusif	070-540-0318		[Signature]
7.	Pələdov Elşən	050645-56-52		[Signature]
8.	Puqayanova Zərif	050782-68-65		[Signature]
9.	Qaradaşzadə Həsən	050204.95.25		[Signature]
10.	Nəzirov Məhəmməd	050527.31.35		[Signature]
11.	Cəfərov Həsən			[Signature]
12.	Vəliyev Elçən	0552904432		[Signature]
13.	Zeynəlov Vəiz	0554544403		[Signature]
14.				
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**İCMA GÖRÜŞÜ** (Community Meeting)

KƏNDİN ADI (VILLAGE) : Stansi Təklə				
TARİX (DATE): 29/07/2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin seria nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Fəxrəllayev Əkbər Nadiq	0507458139	080322166	[Signature]
2.	Tahirzadə Ceyhan	050 454-5485	08034096	[Signature]
3.	Kərimov Fəxrəddin	051-356-45-82	14088257	[Signature]
4.	Məmmədov Məhəbbət	055-376-84-84	09543983	[Signature]
5.	Kəlimov Bəyram	050-417-05-57	04121361	[Signature]
6.	Əhmədov Ağalov	091-464-40-13	03314660	[Signature]
7.	Nəziroğlu Fərid	0740 692-03-28	07562506	[Signature]
8.	Rəhimov Rəfiq	050-440-28-41	08942608	[Signature]
9.	Əliyev Fərid	055 226-29-23	08351526	[Signature]
10.	Bəyramov Elçin	055-376-4444	13120120	[Signature]
11.	Kəlimov Şahin	040-309-10-19	05171581	[Signature]
12.	Əhmədov Rəşad	055-966-69-00	05170233	[Signature]
13.	Əhmədov Orxan	055-646-00-15	09540539	[Signature]
14.	Cəfərov Şahin	040-651-8922	05079664	[Signature]
15.	Cəfərlı Muxəlis	050-864-29-23	06100491	[Signature]
16.	Əhmədov Tahir	040-603-9989		[Signature]
17.	Əhmədov Əkbər	040-600-40-35		[Signature]
18.	Əliyev Nəzər	050-358-16-00	14190210	[Signature]
19.				



CONSTRUCTION OF ALAT- ASTARA MOTORWAYMASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Xıl və Sərçuvar				
TARİX (DATE): 28 /12/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin serialı nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Əhmədov Vəzirov	050631-4143	08839 235	
2.	Muradov Zəhid	050-6150840		
3.	Ejəzadə Emin	050-677-44-80		
4.	Əbdülməlikov Rəşad	051-604-21-40	07728136	
5.	Əbdülməlikov Əlinur	0555588899	088 N 14715433	
6.	Əhmədov Vəqif	0504994793	088 06008342	
7.	Məmmədov Əli	050641088	15550359	
8.	Əbdülməlikov Fəzəlin	0503552531	14715503	
9.	Əgəyev Əhməd	0517576803	05123431	
10.	Məmmədov Bəhəddin	051-643-53-63		
11.	Hüseynov Gülmərim	0504502265		
12.	Əbdülməlikov Fəzəlin	0505047804		
13.	Məmmədov Bəhəddin	0519255111		
14.	Məmmədov Əhməd	0505514379		
15.	Əbdülməlikov Fəzəlin	050537051		
16.	Əbdülməlikov Rəşad	0504895787		
17.	Məmmədov Rəşad	0505190849		
18.	Əbdülməlikov Hüseyn	0506675602		
19.	Güləliyev Hüseyn	0505908717		



CONSTRUCTION OF ALAT- ASTARA MOTORWAYMASALLI TO JALILABAD INTERSECTION

(KM 142+890 to KM 110+700)

İCMA GÖRÜŞÜ (Community Meeting)

KƏNDİN ADI (VILLAGE) : Xıl və Sərçuvar				
TARİX (DATE): 28 /12/ 2015				
	ADI, SOYADI, ATASININ ADI	TELEFON NÖMRƏSİ	Şəxsiyyət vəsiqəsinin seria nömrəsi	İMZA
	Name, Surname, Father Name	Phone Number	Seriya NO	Signature
1.	Məmmədov Fəya	0505618905	09102289	
2.	Dadaşov İslam	0505997859	05170695	
3.	Dadaşov Əlibəy	051-429-19-24	05169506	
4.	Səmədoz Fəzruz	050-626-8035	09884538	
5.	Bəşirəz Səfər	050-683-44-13	15615010	
6.	Səmədo İbərdulla	051-385-35-22	09102355	
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				

ANNEX D: CONSULTATION PHOTOS



Community Meeting in Masalli district, Seybetin village



Community Meeting in Masalli district, Tekle village

ANNEX E: NOISE MONITORING RESULTS



ENVIRONMENTAL MEASUREMENTS

Measurement point: DORMITORY Test #: 9

Coordinates: N: 32° 38' 34.64"
E: 048° 45' 24.3"

Date: 12.11.2015 Wind direction: S/E

Time: 09:08 Temperature (°C): 13.8°C

Weather conditions: Sunny Pressure (kPa): _____

Wind speed (m/s): 2.30 m/s Humidity (%): _____

Equipment: Rion NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
12.11.15	09:09	12.11.15	09:10	12.11.15	09:25	12.11.15	09:27

Point description:
The Noise Dormitory to the Crashing Plant

Noise sources

- Moving and loading equipment in camp
- People Working in camp
- Concrete Batching Plant
- Crashing Plant
-
-
-
-
-
-

Field Observations:

Date/Time: _____

Comments: _____

Measurements:

Noise source #	LAeq (dB)	LAmax (dB)	LAmin (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	53	63.4	46.1	50	15 min.	
2						
3						

Monitoring Technician: Emil Avazov

ENVIRONMENTAL MEASUREMENTS

Measurement point: WORKSHOP Test #: 10
 Coordinates: N: 32° 58' 39.2"
 E: 048° 45' 20.7"
 Date: 12.11.2015 Wind direction: S/E
 Time: 09:32 Temperature (°C): 14.7°C
 Weather conditions: SUNNY Pressure (kPa):
 Wind speed (m/s): 1.3 m/s Humidity (%):
 Equipment: Pico NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
12.11.15	09:33	12.11.15	09:35	12.11.15	09:50	12.11.15	09:52

Point description:
The nearest workshop to the
Crushing Plant

Noise sources

- Moving and Loading equipment in camp
- People working in camp
- Concrete Batching Plant
- Stone Crushing Plant
-
-
-
-
-
-

Field Observations:

Date/Time: _____

Comments: _____

Measurements:

Noise source #	LA _{eq} (dB)	LA _{max} (dB)	LA _{min} (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	<u>59.7</u>	<u>64.3</u>	<u>44.8</u>	<u>50.2</u>	<u>15 min</u>	
2						
3						

Monitoring Technician: Emil Avazov 

ENVIRONMENTAL MEASUREMENTS

Measurement point: TRA office Test #: 8
 Coordinates: N: 32°52'33.2"
 E: 45°45'20.3"
 Date: 12.11.15 Wind direction: S1E
 Time: 08:45 Temperature (°C): 19.2°C
 Weather conditions: Sunny Pressure (kPa):
 Wind speed (m/s): 1.8 m/s Humidity (%):
 Equipment: Rion NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
12.11.15	08:46	12.11.15	08:48	12.11.15	09:07	12.11.15	09:09

Point description:
The nearest office (TRA office)
to the Crashing Plant.

Noise sources

- Moving and loading Equipment Camp
- People working in camp
- Concrete Batching Plant
- Crashing Plant
-
-
-
-
-
-

Field Observations:

Date/ Time: _____

Comments: _____

Measurements:

Noise source #	LAeq (dB)	LAmax (dB)	Lamin (dB)	LA90 (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	55.9	62.2	45	47.9	15 min.	
2						
3						

Monitoring Technician: Emil Abozov 

ENVIRONMENTAL MEASUREMENTS

Measurement point: Charkhirkli village Test #: 4
 Coordinates: N: 32°05'47.0"
 E: 048°40'01.5"
 Date: 11.11.2015 Wind direction: SW
 Time: 16:40 Temperature (°C): 13.5°C
 Weather conditions: Sunny Pressure (kPa):
 Wind speed (m/s): 0.6 m/s Humidity (%):
 Equipment: Rion NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	16:42	11.11.15	16:45	11.11.15	17:00	11.11.15	17:03

Paint description:
The nearest house in Charkhirkli village to the construction activities at Bridge N 21

Noise sources

- The generator working nearby
- People around
- Vehicles moving on village road
- Construction activities at Bridge N 21
-
-
-
-
-
-

Field Observations:

Date/ Time: _____
 Comments: _____

Measurements:

Noise source #	LA _{eq} (dB)	LA _{max} (dB)	LA _{min} (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	52.1	69.6	33.7	50.4	15 min	
2						
3						

Monitoring Technician: Emil Avanzov 

ENVIRONMENTAL MEASUREMENTS

Measurement point: Semir Khan village Test #: 6
 Coordinates: N: 39°53'03.6"
E: 64°41'33.7"
 Date: 18.11.2015 Wind direction: SW
 Time: 17:45 Temperature (°C): 16°C
 Weather conditions: SUNNY Pressure (kPa):
 Wind speed (m/s): 0.14 m/s Humidity (%):
 Equipment: Rion NL-52
 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
18.11.15	17:47	18.11.15	17:30	18.11.15	18:05	18.11.15	18:08

Point description:
The nearest house to construction activities at Bridge N 26 in Semir Khan village

Noise sources
 1. People passing nearby
 2. Vehicles moving on the village road
 3. Construction Activities at Bridge N 26
 4.
 5.
 6.
 7.
 8.
 9.
 10.

Field Observations:
 Date/Time:
 Comments:

Measurements:

Noise source #	LA _{eq} (dB)	LA _{max} (dB)	LA _{min} (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	52.3	67.5	30.8	48.4	15 min.	
2						
3						

Monitoring Technician: Emil Avazov

ENVIRONMENTAL MEASUREMENTS

Measurement point: Small Samitkhan Village Test #: 7

Coordinates: N: 35° 02' 28.7"
E: 69° 41' 39.1"

Date: 11.11.2015 Wind direction: SW
Time: 18:15 Temperature (°C): 15.8°C

Weather conditions: sunny Pressure (kPa): _____
Wind speed (m/s): 0.12 m/s Humidity (%): _____

Equipment: Bion NL-52 Calibrator: NC-79

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	18:17	11.11.15	18:20	11.11.15	18:35	11.11.15	18:32

Point description:
The nearest house in Small Samitkhan village to the construction activities at Bridge N 27

- Noise sources
- People passing nearby
 - vehicles moving on village road
 - CONSTRUCTION ACTIVITIES AT BRIDGE N 27
 -
 -
 -
 -
 -
 -
 -

Field Observations:

Date/Time:	
Comments:	

Measurements:

Noise source #	LAeq (dB)	LAmax (dB)	Lamin (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	49.4	68.1	33.7	47.3	15 min.	
2						
3						

Monitoring Technician: Emil Avozov

ENVIRONMENTAL MEASUREMENTS

Measurement point: Station Terle Test #: 2

Coordinates: N: 38°06'33.2"
E: 048°34'05.4"

Date: 11.11.2015 Wind direction: SW
Time: 13:40 Temperature (°C): 23.4°C

Weather conditions: Sunny Pressure (kPa):
Wind speed (m/s): 0.2 m/s Humidity (%):

Equipment: Rion NL-52 Calibrator:

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	13:42	11.11.15	15:45	11.11.15	16:00	11.11.15	16:03

Point description:
The nearest exposed location - Shir-Shir RESTAURANT TO CONSTRUCTION ACTIVITIES AT BRIDGE N 19, STATION TERLE

Noise sources

- People passing nearby
- Vehicles moving on village road
- CONSTRUCTION ACTIVITIES AT BRIDGE N 19
-
-
-
-
-
-
-

Field Observations:

Date/ Time: _____

Comments: _____

Measurements:

Noise source #	LAeq (dB)	LAmax (dB)	Lamin (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	55.6	66.3	34.2	43.2	15 min	
2						
3						

Monitoring Technician: Enil Avazov

ENVIRONMENTAL MEASUREMENTS

Measurement point: Balatek village Test #: 5
 Coordinates: N: 39°04'32.9"
E 048°45'31.9"
 Date: 11.11.2015 Wind direction: SW
 Time: 17:15 Temperature (°C): 16.5°C
 Weather conditions: Sunny Pressure (kPa):
 Wind speed (m/s): 0.12 m/s Humidity (%):
 Equipment: Aion NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	17:17	11.11.15	17:20	11.11.15	17:35	11.11.15	17:35

Point description:
The Greenhouse nearest to construction activities at Bridge N 23 in Balatek village

Noise sources
 1. People working in the Greenhouse
 2. vehicles moving on the village road
 3. Construction activities at Bridge N23
 4.
 5.
 6.
 7.
 8.
 9.
 10.

Field Observations:

Date/ Time:
 Comments:

Measurements:

Noise source #	LAeq (dB)	LAmax (dB)	Lamin (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	48.6	63.8	33.1	48.7	15 min.	
2						
3						

Monitoring Technician: Enil Avazov

ENVIRONMENTAL MEASUREMENTS

Measurement point: Kazimabad village Test #: 3
 Coordinates: N: 35° 08' 03.8"
 E: 043° 38' 23.5"
 Date: 11.11.2015
 Time: 16:10
 Weather conditions: Sunny
 Wind speed (m/s): 0.3 m/s
 Wind direction: S/W
 Temperature (°C): 23.5
 Pressure (hPa):
 Humidity (%):
 Equipment: Rion NL-52
 Calibrator: NC-F4

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	16:12	11.11.15	16:15	11.11.15	16:30	11.11.15	16:33

Point description:
 The nearest house in Kazimabad village to construction activities at Bridge N 17

Noise sources:
 1. The animals nearby
 2. The people passing nearby
 3. Construction activities at Bridge N 17
 4.
 5.
 6.
 7.
 8.
 9.
 10.

Field Observations:
 Date/Time:
 Comments:

Measurements:

Noise source #	LAeq (dB)	LA90 (dB)	LAmin (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	50.5	62.7	35.9	49.7		
2						
3						

Monitoring Technician: Emil Anzor

ENVIRONMENTAL MEASUREMENTS

Measurement point: Uzuntapa School Test #: 1
 Coordinates: N: 38° 43' 22.2"
E: 046° 35' 06.2"
 Date: 11.11.2015 Wind direction: SW
 Time: 14:25 Temperature (°C): 18°C
 Weather conditions: Sunny Pressure (kPa):
 Wind speed (m/s): 4.8 m/s Humidity (%):
 Equipment: Rison NL-52 Calibrator: NC-74

Pre-measurement		Run 1 Start		Run 1 Finish		Post-measurement calibration	
Date	Time	Date	Time	Date	Time	Date	Time
11.11.15	14:25	11.11.15	14:26	11.11.15	14:41	11.11.15	14:43

Point description:
The school in Uzuntapa village is nearest to construction activities at Bridge N 16

Noise sources
 1. People passing nearby
 2. Vehicles moving on village road
 3. Animals nearby
 4. Construction activities at Bridge N 16
 5.
 6.
 7.
 8.
 9.
 10.

Field Observations:
 Date/Time:
 Comments:

Measurements:

Noise source #	LA _{eq} (dB)	LA _{max} (dB)	LA _{min} (dB)	LA90% (dB)	Duration of exposure	Comments (date, time, client requirements, etc.)
1	45.3	64.3	29.5	34.4	15 min.	
2						
3						

Monitoring Technician: Emil Anwarov 



1. Measurement in Balatekle village



2. Measurement in Chakhirli village