



Environmental and Social Quarterly Monitoring Report

Project Number: 43903 (Loan 2722)
March 2013

PAKISTAN: Uch-II Power Project Environmental and Social Development Quarterly Monitoring Report (Q1 2013)

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Asian Development Bank

ENVIRONMENTAL AND SOCIAL MONITORING REPORT

Q1 - 2013

A	Project/Business Name and Summary Information	
	Development of 404 MW Gas Fired Combined Cycle Power Plant by Uch-II Power (Private) Limited	
(i)	<i>Location of project/business</i>	Dera Murad Jamali, Baluchistan, Pakistan
(ii)	<i>Nature</i>	Construction, commissioning and operation of gas fired combined cycle power plant
(iii)	<i>Scale/size</i>	404 MW (ISO Gross Rating) 2 Gas Turbines x 01 Steam Turbine
(iv)	<i>Date of construction/operation commencement</i>	Construction activities commenced in July 2011. Based on current rate of progress Project COD is expected by end of December 2013
(v)	<i>Name, designation and signature of person responsible for preparing/reviewing the report</i>	Fida Muhammad Khan, Manager HSE Uch-II / Babar Saeed Khan, Deputy General Manager Construction Uch-II
B	Relevant Environmental Permits or Compliance Certificates	
(i)	<i>Summary of permit conditions & media(s) covered</i>	"No Objection Certificate issued by BEPA"
(ii)	<i>Issue by which government Agency</i>	Baluchistan Environmental Protection Agency (BEPA)
(iii)	<i>Issuance date and duration of validity</i>	December 9, 2010 (Extension required before Operational Phase)
(iv)	<i>Renewal requirements</i>	None
C	Incidents of Violations or Non-Compliance	
(i)	<i>Recorded date and responsible agencies</i>	None in Q1-2013
(ii)	<i>Nature of non-compliance</i>	No reportable incident to authorities recorded during Q1-2013.
(iii)	<i>Violation or non-compliance based on what environmental standards and regulations</i>	N/A
(iv)	<i>Recorded dates and authorities</i>	During Q1-2013, EHS related observations of minor nature recorded during routine site monitoring. Log with corrective actions attached as Appendix A.
(v)	<i>Media or community reactions (if any)</i>	None in Q1-2013
(vi)	<i>Corrective actions, deadlines, identification of responsible parties</i>	Short term corrective actions identified thru regular site walks. Please refer to Appendix-A.
	<i>(a) short-term: remedial action</i>	Please refer to Appendix-A.
	<i>(b) long-term: preventative measures</i>	None in Q1-2013
D	Incidents of Environmental and Safety Accidents	
(i)	<i>Incident recorded dates and responsible agencies,</i>	None in Q1-2013
(ii)	<i>Scale of damage and injury (if any)</i>	None in Q1-2013
(iii)	<i>Authorities in charge of investigation/recording</i>	EPC contractors site management and HSE team is responsible for reporting and investigating the incidents
(iv)	<i>Media or community reactions (if any)</i>	None in Q1-2013
(v)	<i>Corrective actions, deadlines, identification of responsible parties</i>	None in Q1-2013
	<i>(a) short-term: remedial action</i>	None in Q1-2013
	<i>(b) long-term: preventative measures</i>	None in Q1-2013
E	Labour Relations and Conditions	
(i)	<i>Nature of labour dispute or grievance</i>	None reported by EPC in Q1-2013
(ii)	<i>Legal requirements, Permit conditions and renewal requirements</i>	None in Q1-2013
(iii)	<i>Authorities in charge of investigation/recording</i>	EPC contractor responsible for managing its labour relations and conditions

(iv)	<i>Media or community reactions (if any)</i>	None in Q1-2013
(v)	<i>Corrective actions, deadlines, identification of responsible parties</i>	N/A
(vi)	<i>Labour relations and living conditions for construction labour force</i>	<p>No Labor related issues recorded during Q1-2013. Majority of labour residing at site in dormitories with satisfactory living conditions. Basic Medical facility with a qualified Doctor and nurse also available at site.</p> <p>EPC contractor's labour policies are in compliance with ILO core labour standards.</p> <p>EPC contractor use to revisit payrolls of labour as per requirement of Government policies (GOP minimum wages applicable in each cadre and local market). EPC workers also insured (group life insurance) as per national law.</p> <p>As per contractor's procedure "Camp and Security Management" In-charge Personal & Administration dept. at project site is responsible for maintenance of working and living conditions at site. Regular housekeeping inspections, hygiene inspections for messing facilities, toilet facilities in labour housing compound are performed by site HSE team.</p> <p>A mechanism for registering of complaints is available for labour. Workers complaint register and complaint drop boxes available at site and camp. No labour union exists at project site.</p>
F	Environmental Capacity	
(i)	<i>Staff capacities in environmental management (as relevant)</i>	Please find the EHS Organogram indicating Uch-II, Owners Engineer and EPC team attached as Appendix B. Uch-II HSE Manager and HSE Officer are already at site whereas HSE Engineer has not been engaged, yet. Hiring of HSE engineer is in progress and expected to be completed by June 2013.
(ii)	<i>Degree of awareness of: (i) environmental management, (ii) health and safety, (iii) environmental laws and regulations</i>	Relevant EPC, OE and Uch-II staff aware about the Project EMP & H&S Mgt plan and all other Environmental applicable & relevant Laws and regulations.
(iii)	<i>Training programs carried out</i>	<p>EPC contractor carrying out regular site HSE induction as per their procedure for its entire staff as well as subcontractors..</p> <p>Specific in house trainings regarding environmental awareness, HAZMAT, work at height protocols, confined space entry, heavy lifting, manual handling, fire fighting, first aid, hot work, safe driving, scaffolding protocols, JSA / RA, radiography safety and other relevant topics carried out by EPC Health & Safety management team. Altogether a total of 1487 workers trained on different EHS topics in Q1-2013.</p> <p>General hygiene and health awareness is already incorporated in site HSE induction training, however, EPC contractor has now prepared a separate presentation on HIV/AIDS/STD and awareness sessions shall be conducted with all site work forces, accordingly.</p> <p>Appendix C (<i>EPC In house Training Statistics Q1- 2013</i>)</p>
(iv)	<i>Needs assessment of environmental management capacity (as relevant)</i>	EPC, EHS staff capacity monitored regularly for effective implementation of EHS Program. Project EHS Organogram attached as Appendix B.
(v)	<i>Compliance audits carried out</i>	<p>Uch-II third party mid project HSE audit performed in first week of January-2013. No major non-conformances were observed.</p> <p>Uch-II first biannual HSE audit FY-2013 performed in March-2013. Appendix D (Corrective Action Plan Matrix) EMP March-2013 Biannual Audit - updated May 2013)</p>
G	Stakeholder Consultation/CSR Activities	
(i)	<i>Details of consultations, if any, with local communities, nongovernmental organizations, civil society groups, and other stakeholders, including affected people</i>	None has been conducted in Q1-2013

(ii)	Describe efforts to promote community relations and local development for inhabitants of the project area.	Local manpower employed in project by EPC contractor and subsequently trained unskilled workers. No migration / movement of communities residing in the vicinity of project site. No CSR activity reported by EPC contractor for Q1, 2013.	
(iii)	Project procedures for (a) hiring and (b) acquisition of goods and services	EPC labour hiring procedure in place. Historical data of the labor hired in construction activities is presented in attached Appendix-G.	
(iv)	Provide List of grievances and status of grievance resolution	None in Q-1 2013. Grievance redress mechanism and LPU & GRTG available and in place.	
H	Issues, Status of Implementation of Mitigating Measures in the Environmental and Social Management Plan and Compliance with Environmental Qualities and Standards (national and international, as relevant) and Environmental and Social Requirements		
	Parameter	Issue	Status
1	Air	None	Dust monitoring and suppression with water sprinkling on-going on the vehicles movement tracks / roads both on & offsite.
2	Water (surface and ground water)	None	Overall compliance with EMP (as applicable against specific parameters) in place. Attached is Appendix E, indicating waste water analysis and water consumption record Q1-2013. The higher value of COD (chemical oxygen demand) in March-2013 is attributed to relative higher organic compounds / pollutants in the laundry effluents due to the increased use of detergents. Dilution of the laundry effluent is increased to control the COD before effluent disposal.
3	Waste generation and management	None	Waste generated at site is being collected, segregated and quantified. Construction site sewage water disposal arranged to DMJ municipal area. Attached is Appendix E indicating waste generation record for Q1-2013.
4	Noise and vibration	None	EPC contractor monitoring ambient & occupational noise levels on monthly basis. Attached is Appendix E indicating occupational and ambient noise monitoring results.
5	Occupational health and safety	None	Monitoring of Health & Safety Key performance Indicators done by EPC. Site medical center / officer maintaining workers health records for Reported cases.
6	Community safety and security	None	Community safety and security are ensured at project site through effective implementation of mitigation measures proposed by project environmental management plan. The mitigation measures include; development of traffic management plan to minimize disturbances to local communities, established a grievance redress management system to handle and resolve any community complaints that arise during construction and operation phase, limiting the non-local staff within the boundary wall of power plant to avoid project workforce and community interaction. EPC contractors SOP for security arrangements is also in place.
7	CO ₂ emissions by the Project		1019.7 tons of CO ₂ for site Diesel Gens sets and vehicular CO ₂ emissions for construction site reported during Q-1 2013 by EPC contractor. Calculations based upon total Diesel fuel used for the same purpose by EPC and its subcontractors.

			Assumptions used in total calculating CO2 emissions provided in Appendix F.
8	Environmental and Social Management Plan, including IFC E&S Action Plan (September 29, 2010)		Project H&S plan and EMP implementation and monitoring in place by EPC contractor. Attached Appendix H summarizes the compliance status of mitigation measures for E&S plan (Ref Appendix A Table 4-1 of EIA) ESAP Update: OGDCL and NTDC's EIA has been completed. OGDCL has obtained NOC from BEPA.
I	Summary Assessment of Client Performance and Recommendations		
<p>Gas Turbine auxiliaries' civil works has been completed and currently piping work and inlet filters structure alignment is in progress. HRSG(s) pressure drums have been installed and module casing horizontal welds and stack installation is in progress. Steam turbine is on track with placement and position of lower casing and rotor completed. Service Fire, Dmin, and Potable water storage tanks mechanical erection has been completed in the period under review.</p> <p>Since the inception of Uch-II project, EPC successfully completed a total of five million man hours without Lost Time Incident in March 2013. Uch-II third party mid project HSE audit performed in first week of January-2013 and no major non-conformances were observed. A few minor observations and improvement points were suggested. Audit report shared with EPC contractors for close out of suggested corrective actions. Uch-II HSE team carried out a comprehensive "Confined Space Protocols" training session with EPC Contractor's engineering and supervisory staff. EPC Contractor was asked to develop Standard operating procedure for "working near water", "confined space entry" and "PTW system procedure" to be used during commissioning stage. HSE trainings provided to workers and supervisory staff as per training plan. HSE site monitoring, joint safety walks, hygiene and housekeeping inspections carried out as per plan.</p> <p>EPC contractors' activities were closely monitored by Uch-II HSE management to ensure compliance with Project EMP and H&S procedures. No significant safety incidents occurred during the period under review.</p> <p>No other significant Environmental & Social issues to report.</p>			

Uch-II Site Monitoring Summary Q1-2013
Corrective Actions

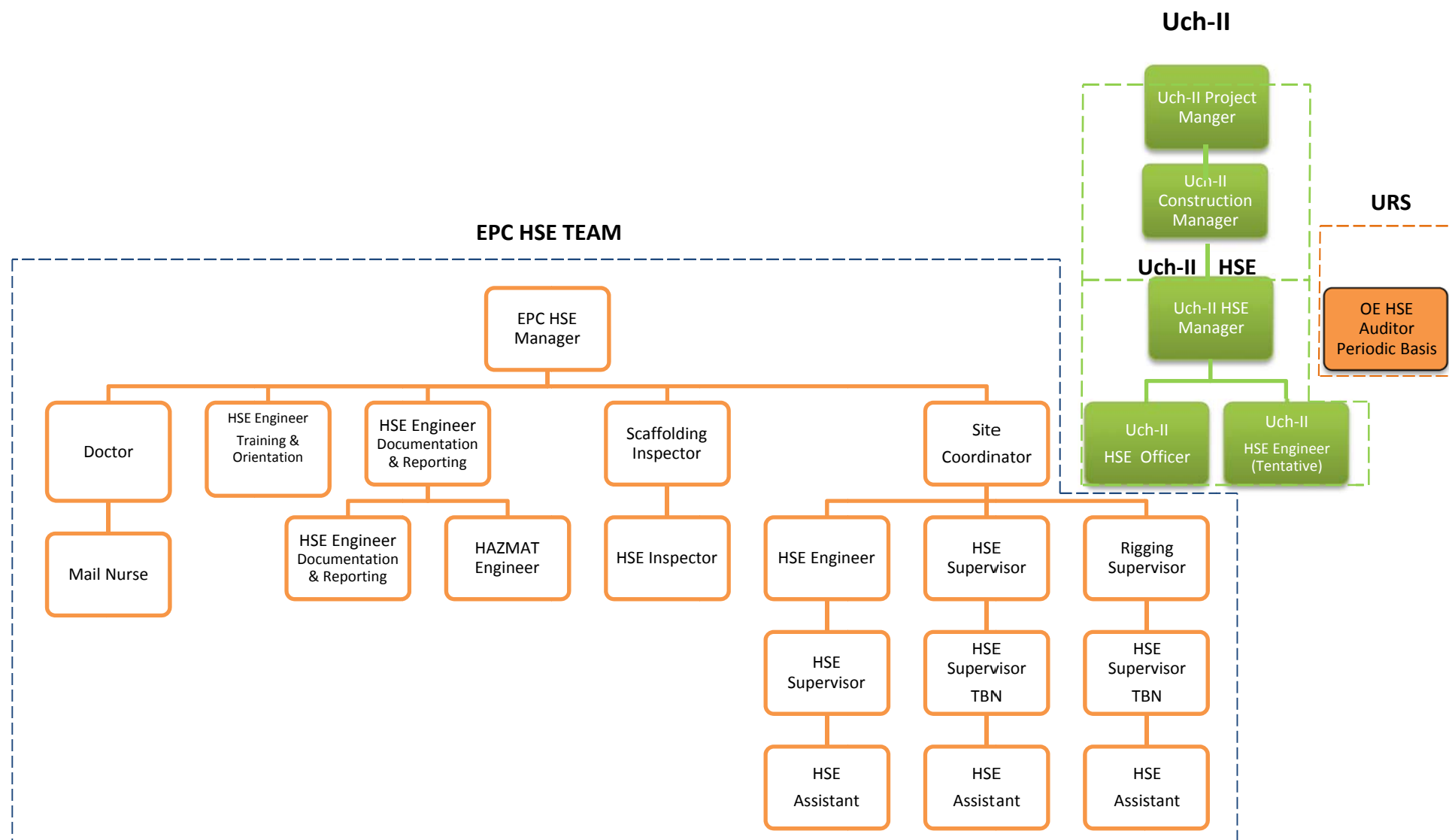
Appendix-A

Monitoring Conducted by	HSE Uch-II
Corrective Actions By	EPC Descon

S. No	Findings	Corrective Actions
1	A fork lifter observed carrying scaffold pipes without warning lights and horn <ul style="list-style-type: none"> Transport hazard Unsafe practice and strike hazard 	Issue addressed to E&P dept. for maintenance of fork lifter and work supervisor is advised to use flatbed truck for such transportation
2	Domestic waste (kitchen/food waste) thrown out near Hyundai mess <ul style="list-style-type: none"> Non-compliance of waste management plan 	Hyundai is communicated to clear the area and to organize the disposal of food waste at designated area
3	Oil seepage observed from air compressor standing at service water tank area <ul style="list-style-type: none"> Unsafe condition Soil contamination 	E&P team is notified to rectify the seepage fault of compressor
4	A scaffold platform found without green tag and was being used by workers to access cooling tower suction basin <ul style="list-style-type: none"> Unsafe condition Un-inspected scaffold 	Immediately called the Scaffold Incharge for inspection of platform and to ensure the availability of tag
5	Grinding work on a pipe spool was in progress at power island. A fire extinguisher placed nearby found empty / discharged <ul style="list-style-type: none"> Unsafe condition / Fire hazard 	Site HSE coordinator is informed to replace the empty extinguisher with healthy one and advised to ensure the same at all hot job locations
6	PPEs non-compliance by a contractor driver at power island observed. He was found without wearing safety shoes and hard hat <ul style="list-style-type: none"> PPEs non compliance 	Area Incharge and site HSE coordinator is notified and advised to ensure strict PPEs compliance by subcontractors
7	At water treatment area, a trench observed without having fall barriers around <ul style="list-style-type: none"> Unsafe condition Fall hazard 	Hard barriers around the trench arranged by area supervisor
8	A single plank was used over cable trays for crossing purpose posing fall hazard <ul style="list-style-type: none"> Unsafe condition Fall hazard 	Recommended area supervisor to provide double plank for safe crossing
9	A dumper was engaged at GT area for unloading soil. However, no bank was available with dumper <ul style="list-style-type: none"> Unsafe practice 	Counseling with dumper operator carried out and advised to ensure the availability of bank man for safe movement of heavy vehicle

S. No	Findings	Corrective Actions
10	At top platforms of HRSG, some openings found exposed since no gratings were placed over them <ul style="list-style-type: none"> Unsafe condition Fall hazard 	Issue addressed to piping supervisor and scaffold supervisor and hard barriers installed around pointed locations to eliminate risk of falling
11	A torn out mesh net installed around sand blasting yard was unable to restrict dust dispersion <ul style="list-style-type: none"> Unsafe condition Dust hazard 	Area supervisor and HSE team is notified. A proper tarpaulin cover around sand blasting yard has been installed to eliminate dust hazard
12	Crane was engaged in lifting works at power island whereas no barrication was in place to restrict unauthorized entry in the area <ul style="list-style-type: none"> Unsafe condition Non-compliance of heavy lift plan 	Lifting Incharge and site HSE coordinator is advised to ensure the barrication at all lifting locations
13	Unbounded waste material (debris, wood, plastic, iron rods etc.) observed at GT condenser area <ul style="list-style-type: none"> Housekeeping Issue 	Area supervisor is communicated to clear off the area and ensure the implementation of waste management procedure in his area

HSE Management Organization Structure



Uch-II	02 (Uch-II HSE Manager and HSE Officer are already at site whereas HSE Engineer has not been engaged, yet. Hiring of HSE engineer is in progress and expected to be completed by June 2013.)
EPC Total Strength	19
EPC Position Vacant	02
TBN	To be nominated

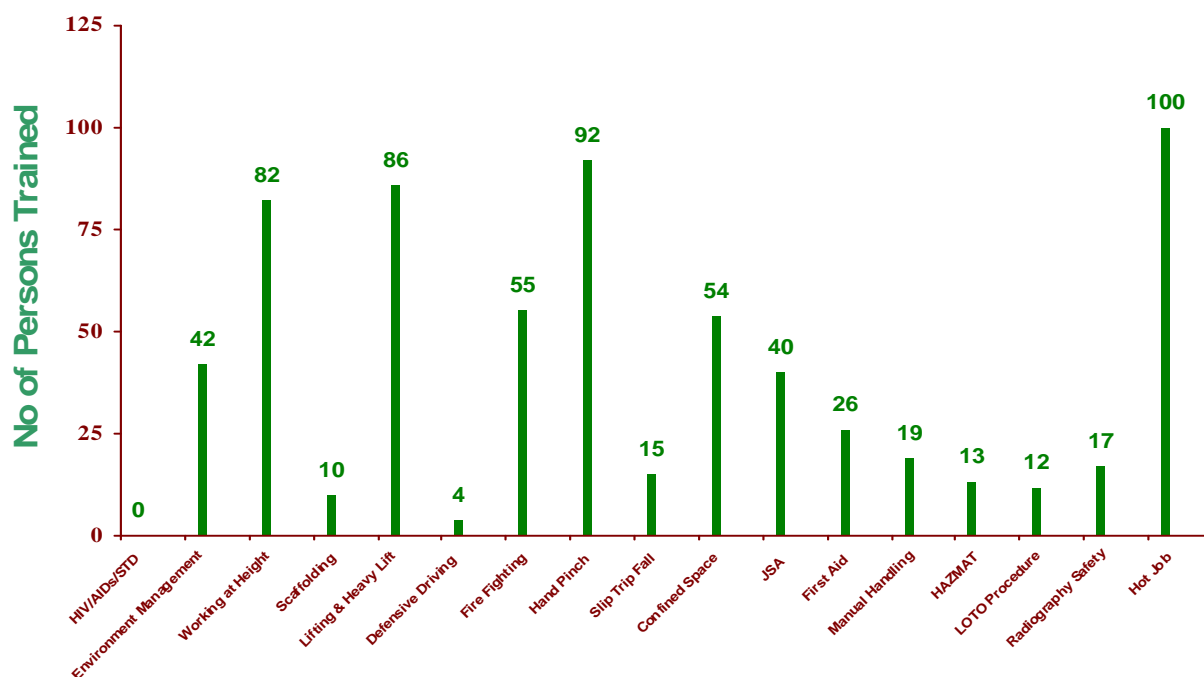
EPC (Descon) In house HSE Training Record

Q-1 2013

Training Topics	Jan-13	Feb-13	Mar-13	Total
HSE induction	269	301	250	820
HIV / AIDs / STD				0
Environmental Management	11	10	21	42
Working at Height	68	4	10	82
Scaffolding	4		6	10
Lifting And Heavy Lift	18	4	64	86
Defensive Driving	1		3	4
Fire Fighting	11	28	16	55
Hand Pinch	34	13	45	92
Slip Trip Fall	8	7		15
Confined Spaces	26	28		54
JSA	40			40
First Aid		15	11	26
Manual Handling		7	12	19
HAZMAT	7	6		13
LOTO Procedure		12		12
Radiography Safety		17		17
Hot Job	55	26	19	100

Q-1 2013	1487
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* HIV/AIDs/STD orientation has been included in HSE training plan.



Trainings

Appendix D

Corrective Action Plan Matrix (EMP Biannual Audit March2013)

No	EMP Action Item	Responsibility	Planned Finish Date	Status 05 May 2013	Remarks	Next Target Date
1	Environment Management System					
1.1	<u>Environmental Policy Uch II Project Construction Site</u>					
	Environmental policy Uch-II is required to be signed by current site manager	EPC	25-04-2013	COMPL	Environmental policy is updated	Compliant
2	Environmental KPIs					
2.1	<u>HSE Inductions</u>					
	A mechanism to be established to ensure that all subcontractors of Hyundai & DIPL approaching at site for commissioning activities shall go thru safety induction program	EPC	05-05-2013	Action Awaited	A formal meeting with DIPL and Hyundai is planned by DCS to determine a mechanism	15-05-2013
3	Dust Control at Construction Site					
3.1	<u>Water Sprinkling at Site</u>					
	More regular water sprinkling is required at dusty locations and tracks to minimize dust dispersion	EPC	30-04-2013	COMPL	Water sprinkling performed twice a day (morning and evening)	Compliant
4	Equipment and Machinery / Vehicle Exhaust					
4.1	<u>Exhaust Emission Testing</u>					
	Third party emission testing of vehicles and construction machinery / equipment is due	EPC	10-05-2013	Action Awaited	Third party emission testing is in progress	20-05-2013
5	Solid Waste Management					
5.1	<u>Kitchen waste & Recyclable material</u>					
	EPC contractor to make arrangements for offsite disposal of waste through a certified waste contractor	EPC	10-05-2013	Action Awaited	Waste management issue has been taken on board and EPC contractor is making arrangements for offsite disposal of waste	20-05-2013
6	Machinery					
6.1	<u>Machinery Inspection</u>					
	In-house inspection of subcontractors' heavy machinery and cranes to be performed on monthly basis	EPC	10-05-2013	COMPL	Machinery inspection at E&P workshop is regularized on monthly basis	Compliant

7	Fuel and Chemical Handling					
7.1	<u>Storage Facility</u>					
	Paints and thinners to be stored at proper designated storage area with availability of fire detection system	EPC	10-05-2013	Action Awaited	Combustibles (paints / thinners) shifted to proper designated store. Provision of fire detection system is in progress	20-05-2013
7.2	<u>Safety Signage</u>					
	Safety signs / posters needs to be enhanced at fuel / chemical storage area	EPC	05-05-2013	COMPL	Safety signage is increased at storage facility	Compliant
8	Housekeeping					
8.1	<u>Waste Collection</u>					
	Regular collection of hazardous and non-hazardous waste generated to be ensured at work areas	EPC	05-05-2013	COMPL	Regular housekeeping on daily basis is ensured at site	Compliant

Appendix-E

Uch-II Waste Generation Statistics

Waste Type	Unit	Jan-13	Feb-13	Mar-13
Used oil	Ltr	540	575	545
Metal	Tons	5	2	3
Paper/ Plastic/ Glass	Kg	1805	1858	1920
Empty Cement Bags	Tons	5.4	3.5	3.35
Food Waste	Tons	6.8	7.3	7.2
Waste Water	m ³	3745	3360	3968
Oil Filters & Oily Rags	Kg	19	20	210
Used Batteries	Nos	0	0	28
Old Tyres	Nos	0	0	13

Uch-II Waste Water Analysis

Parameters	NEQS Limit	Jan-13	Feb-13	Mar-13
pH	6--9	7.7	7.1	7.5
COD (ppm)	150	111	140	178
BOD (ppm)	80	50	68.6	53.7

Uch-II Water Consumption Record

Water Type	Unit	Jan-13	Feb-13	Mar-13
Raw Water	m ³	4811	3029	2520
Potable Water	m ³	2000	1919	3343
Total Consumption	m ³	6811	4948	5863

- The higher value of COD (chemical oxygen demand) in March-2013 is attributed to relative higher organic compounds / pollutants in the laundry effluents due to the increased use of detergents. Dilution of the laundry effluent is increased to control the COD before effluent disposal.

Ambient Noise Levels (Decibels)				
Location / Area	Unit	Jan-13	Feb-13	Mar-13
North East Corner	Decibels (dB)	58	46	47
North West Corner	dB	58	45	46
South East Corner	dB	45	50	49
South West Corner	dB	47	56	55

Occupational Noise Levels (Decibels)				
Location / Equipment	Unit	Jan-13	Feb-13	Mar-13
Air Compressor	Decibel (dB)	90	86	87
Power Grinder	dB	93.5	93	90
Dumper	dB	66.5	69	71
Tractor (HRSG Area)	dB	83.5	80	76
Transit Mixer	dB	89.5	75	82
Genset. (Fabrication workshop)	dB	85	82	83
Loader	dB	83	76	79
Excavator	dB	88	80	76
Mechanical Crane-1 (315 Ton)	dB	75	70	81
Scaffolding joint repair area	dB	69	-	-

Appendix-F

Diesel to CO₂ conversion Methodology

Standard diesel fuels generally contain around 87% carbon by weight, the rest being hydrogen and other very minor components. The amount of carbon in a liter of diesel fuel varies, but this only affects the total CO₂ production slightly.

- 1 liter of diesel typically weighs 0.83kg (the density is 830 kg/m³)
- about 87% of this is carbon, so one liter of diesel contains $0.83 \times 87\%$
= 0.722 kg of Carbon.
- Each atom of carbon weighs 12 atomic units. When it combines with two atoms of Oxygen in the combustion process it becomes CO₂, which weighs 44 atomic units.

The 0.722 kg of carbon in the original fuel then becomes $0.722 \times 44/12$
= 2.65 kg of CO₂.

- So 01 liter of diesel fuel produces about 2.65 kg of CO₂.

Actual diesel consumed at site in Q1, 2013 = 384802 liters

Total CO₂ produced = $384802 \times 2.65 = 1019725$ Kg

Equivalent Tons of CO₂ produced = 1019.7 tons

Appendix-G**Number of Workers Engaged in UCH II Construction Activities**

Q1-2012						Q2-2012				
	Local (Baluchistan Province)	Local (Rest of Pakistan)	Expatriate	Female Wokers	Total	Local (Baluchistan Province)	Local (Rest of Pakistan)	Expatriate	Female Wokers	Total
Skilled	8	616	17	0	641	12	703	17	0	732
Unskilled	71	35	0	0	106	102	99	0	0	201
Total	79	651	17	0	747	114	802	17	0	933

Q3-2012						Q4-2012				
	Local (Baluchistan Province)	Local (Rest of Pakistan)	Expatriate	Female Wokers	Total	Local (Baluchistan Province)	Local (Rest of Pakistan)	Expatriate	Female Wokers	Total
Skilled	19	648	17	0	684	27	942	17	0	986
Unskilled	130	138	0	0	268	157	290	0	0	447
Total	149	786	17	0	952	184	1232	17	0	1433

Q1-2013					
	Local (Baluchistan Province)	Local (Rest of Pakistan)	Expatriate	Female Wokers	Total
Skilled	34	1358	28	0	1420
Unskilled	177	377	0	0	554
Total	211	1735	28	0	1974

Compliance Status of EMP Control Measures Q1-2013

Appendix-H

Uch-II Project

Environmental / Social Impacts	Control & Mitigation Measures	Monitoring Frequency	Responsibility	Compliance Status
Construction Noise	<ul style="list-style-type: none"> - Regular maintenance of machinery to reduce construction noise - Use acoustic panels around high noise machines - Monthly monitoring of Uch-II ambient & occupational noise 	Monthly	EPC Contractor	Complied
Dust Emissions	<ul style="list-style-type: none"> - Daily monitoring of dust on roads and excavation areas - Water sprinkling at dusty areas / roads on daily basis - Use of dust masks by labor working in the dusty areas 	Daily	EPC Contractor	Complied
Land Use	<ul style="list-style-type: none"> - Land update kept minimum required and restricted to existing compound area and within existing water supply pipeline 		EPC Contractor / Uch-II	Complied
Water Sourcing	<ul style="list-style-type: none"> - Water consumption monitoring on monthly basis - Water conservation 	Monthly	EPC Contractor / Uch-II	Complied
Vehicles & Equipment Emissions Testing	<ul style="list-style-type: none"> - Periodic maintenance / tuning of all vehicles used during project - Third party emissions testing as per defined frequency 	Baseline when vehicle / equipment inducted in pool & subsequently after every year	EPC Contractor	Complied
Soil and Land Contamination	<ul style="list-style-type: none"> - Fuel, lubricants and chemical storage in covered bunded areas - Regular inspection of work areas and storage areas to detect any leakages/ spillage - Safe movement of chemicals and fuels - Spill emergency response procedure 	Daily	EPC Contractor	Complied
Drainage & Storm Water Run-off	<ul style="list-style-type: none"> - Provision of proper drainage system at camp area and site area - Provision of storm water drainage system at entire site - Provision of following drainage system for power plant and all drains will discharge into evaporation pond after required treatment 	Ongoing (throughout the project phase)	EPC Contractor / Uch-II	Complied

	<ul style="list-style-type: none"> Cooling Tower blow down, Demin plant regenerated waste water, Sanitary wastewater, Oily wastewater and Sludge from clarifiers 			
Camp Effluent	- Provision of proper septic tanks for construction camp effluents	Ongoing (throughout the project phase)	EPC Contractor	Complied
Hazardous & Non Hazardous Waste Management	<ul style="list-style-type: none"> Segregation of hazardous & non hazardous waste Waste storage at designated areas Waste quantification on monthly basis Non-hazardous waste disposal to proper landfill Hazardous waste disposal through approved waste contractor 	Monthly	EPC Contractor	Complied
Disturbance to Wild Life	<ul style="list-style-type: none"> Preying and hunting is prohibited at Uch-II site for all kind of animals and birds Any incident reported shall be investigated & controlled. 	Ongoing (throughout the project phase)	EPC Contractor / Uch-II	Complied
Community & Power Plant Workers Safety	<ul style="list-style-type: none"> Following traffic and heavy load movement plan Monitoring safety hazards arising from traffic nuisance Taking corrective actions to prevent reoccurrence. 	Ongoing (throughout the project phase)	EPC Contractor / Uch-II	Complied
Traffic Disturbance	<ul style="list-style-type: none"> Use of national highway for transportation Traffic rush hours avoided for transportation of heavy loads Follow speed limit rules 	Ongoing (throughout the project phase)	EPC Contractor	Complied
Local Employment Conflicts	- Providing employment to labors, & semi-skilled local population	Ongoing (throughout the project phase)	EPC Contractor	Complied
Archaeological & Cultural Resources	<ul style="list-style-type: none"> Monitoring excavation activities carefully Upon discovering any remains of archeological significance immediately informing Uch-II and preserving them 	Ongoing (throughout the project phase)	EPC Contractor / Uch-II	Complied
Project/Community Interface	<ul style="list-style-type: none"> Non local project staff house in construction camp within boundary of power plant Grievance handling procedure developed to handle community social & environmental complaints 	Ongoing (throughout the project phase)	EPC Contractor / Uch-II	Complied