



DASU HYDROPOWER CONSULTANTS

Dasu Hydropower Project

Joint Venture of



DOLSAR
ENGINEERING

With sub-consultants



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Contract No: DHP-CSA01

Our Ref. No: DHC/Dasu/WAPDA/GEN/zic/23- 576

Date: 06th June, 2023

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General Manager/ Project Director,
Dasu Hydropower Project,
WAPDA Office Dasu, Kohistan

Subject: Dasu HPP –33rd ENVIRONMENTAL PROGRESS REPORT FOR THE PERIOD FROM JANUARY TO MARCH 2023

Please find enclosed 33rd Environmental progress report for the period from January to March 2023. This report is submitted for your further necessary action please.

Sincerely Yours,


Project Manager
Dasu Hydropower Consultants

Encl: As above

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PAKISTAN WATER AND POWER DEVELOPMENT AUTHORITY

Dasu Hydropower Project

Environmental Quarterly Progress Report

Report Number: 33

Reporting Period: January to March 2023

May 2023

Project Management Unit & Dasu Hydropower Consultants

ACRONYMS

CEAP	Construction Environmental Action Plan
CGGC	China Gezhouba Group Co. Ltd.
DHC	Dasu Hydropower Consultants
DHP	Dasu Hydropower Project
DHP-I	Dasu Hydropower project Stage-1
DO	Dissolved oxygen
ECP	Environmental codes of practice
EOT	Extension of time
ESA	Environmental and Social Assessment
ESHS	Environment Social Health and Safety
ISM	Implementation Support Mission
MW	Main works
NEQS	National Environmental quality standards
PC-02	Project Colony-Phase-2
pH	Power of hydrogen and Hydroxyl Ion
PMU	Project Management Unit
ROW	Right of Way
WAPDA	Water and power development authority
WTEIR	Walkthrough Environmental Inspection Report

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Executive Summary

This report presents the progress of the environmental performance of the Stage-I implementation of the Dasu Hydropower Project (DHP or the Project) from January to March 2023 and activities conducted during the period by the Project Management Unit (PMU) of the Pakistan Water and Power Development Authority (WAPDA or the Employer) and Construction Supervision Consultant (Dasu Hydropower Consultant or DHC or the Engineer). This quarterly progress report has been prepared to meet the World Bank-approved Environmental and Social Assessment (ESA) requirements of DHP. The progress on Occupational health and safety (OHS) and Social performance of the Project are covered under separate reports.

i. Key Construction Activities

Details of various contracts in the Stage-I of DHP (DHP-I) and a summary of major construction activities conducted under each contract during the reporting period are given in the below table.

Table ES1: Details of major construction activities carried out in DHP during the current quarter

S. No.	Contract Name	Contractor	Major Activities During This Quarter
A.	Main Works Contracts		
1	MW-01: Main Hydraulic Structure, Spillway, Low Level Outlets, River Diversion and Hydraulic Steel Structures	China Ghezouba Group Company Limited (CGGC)	<p>Preparatory Works Contractor Camp in Kass area is under construction i.e., - Stone Masonry for Retaining Wall-74% 1# Batching Plant and 1# Crushing Plant at Uchar Area - Fencing Wall- 59% - Construction of Generator's house- 95% - Installation of generator system for power supply started on March 20, 2023 and works are on-going in the month of March. Additional Measures for Security Enhancement - The Contractor has worked on establishing of security measures i.e. Installation of watch tower at Uchar and Barseen, installation of Prefabricated Cabins with accessories at Barseen, Uchar, CR9 & Chuchang Area and fixing of blind sheet along CR2 & CR9.</p> <p>Diversion Tunnel A Underground excavation for Diversion Tunnel No. A was started on August 9th, 2019 and completed on March 7, 2023. 712,768m³/ 712,768m³ (100%). Concrete Work of Diversion and Adit Tunnels Diversion Tunnel A 1) Inlet Structure Works (Outside) - 17,940m³ / 18,200m³ (98.57%) completed till end of March, 2023. The concreting works before the river diversion is completed at the Inlet Structure Outside 2) Inlet Lining Works (Inside) - Concrete Works: 10,444m³ / 10,444m³ (100%) completed on March 18, 2023. 3) Invert Levelling Concrete (C20) - L/S- 1,427m / 1,524m (97%) - R/S- 1,524m/1,524m (100%) 4) 1m Invert Structural Concrete (A25) - L/S- 1,296m / 1,411.55m (92%) - R/S- 1,387m/1,411.55m (98%)</p> <p>Diversion Tunnel B Underground excavation for Diversion Tunnel No. B was started on May 30th, 2019 and completed on January 28, 2023. 623,515m³/ 623,515m³ (100%). 1) Inlet Structure Works (Outside) - 17,941m³/ 21,600m³ (83%) completed till end of March, 2023. No concrete observed during the month of March, 2023. Invert Levelling Concrete (C20) - L/S- 1,309m / 1,309m (100%) - R/S- 1,309m/1,309m (100%) Started on January 24, 2021 and completed on January 29, 2023. 1m Invert Structural Concrete (A25) - L/S- 1,163.52m / 1,163.52m (100%) - R/S- 1,163.52m/1,163.52m (100%) Started on April 26, 2022 and completed on February 3, 2023. Outlet Structure Works - Concrete Works: 1829.20m³/ 1829.20m³ (100%) started on May 7, 2021 and completed on May 9, 2022. - Additional Concrete: Additional concrete at DT.B outlet wall started on January 16,2023 and completed on Jan 28, 2023. Total Quantity poured was 358 / 358m³ (100%). Adit Plug Concrete</p>

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S. No.	Contract Name	Contractor	Major Activities During This Quarter
			<p>- Concrete Works: 891m³/ 1647m³ (54%) completed till end of March, 2023.</p> <p>Inlet Dyke Some Part of Inlet Dyke in front of Diversion Tunnel No. A was removed for making platform for the Construction of Inlet Structure Slab.</p> <p>- Inlet dyke in front of Diversion Tunnel No. B was removed from El. 788m to El. 776m. 4 No. of blasts carried out on January 31, 2023, 12th, 13th & 16th February, 2023 to remove DT.B Inlet Dyke.</p> <p>Diversion Tunnel Outlet dyke Construction Works- Outlet Dyke in front of DT.B was blasted on February 10, 2023. Demolishing of Diversion Tunnel Outlet Dyke for removal of water from Diversion Tunnel carried out during the month of September 2022</p> <p>Right Bank Bypass Tunnel on The Right Bank</p> <ul style="list-style-type: none"> • -1st U/G Blast at Inlet carried out on February 4, 2023 at Ch. 0+025m and progress up to • Ch. 0+118m (93m) till end of March, 2023. - 1st U/G Blast at outlet carried out on February 14, 2023 at Ch. 0+528m and progress up to Ch. 0+462m (66m) till end of March, 2023. • - Total underground excavation progress is 159m/ 503m (32%) till end of March, 2023. <p>Main Dam</p> <p>Right Bank Abutment (Siglo Area)</p> <ul style="list-style-type: none"> • - U/S Temporary Access Road Construction- 70% • - D/S Temporary Access Road Construction- 79% • - Excavation and support of Right Bank Cable crane Platform above El. 1065m- 75% • - Excavation and support of Right Bank Cable crane Platform slope El. 1065m to El.1050m- 72% • - Excavation and support of Right Bank Cable crane Platform slope El. 1050m to El. 1035m- 10% (Now El. 1047m) <p>Left Bank Abutment</p> <ul style="list-style-type: none"> • - Excavation of the second layer of CR5-2 Road (1032~1018)- 100% • - Left Bank Cable Crane Platform Excavation- 0% <p>Upstream Starter Dam Concrete Works</p> <ul style="list-style-type: none"> • - Concrete works of U/S Starter Dam started on March 8, 2023 and progress is 3,505.50m³/ 37,337 (9.40%) till end of March, 2023. <p>Cut-off Wall</p> <ul style="list-style-type: none"> • - Cut-off Wall Drilling started on December 24th, 2022 from the right side and remained • continued during the month of January-2023. Drilling progress achieved 2184m²/4,748.40m² (46%) till end of March 2023. • - Concrete pouring for Cut off wall started on January 17, 2023 and progress is -1438.50m³/ 4810m³ (30%) till end of March, 2023 • - Concrete pouring for the Guide wall of the Cut-off wall started on Dec 3rd, 2022-122m/122m (100%) completed till end of March, 2023 <p>Left Bank Traffic Diversion</p> <ul style="list-style-type: none"> • Tunnel • - Underground Excavation from • U/S started on April 1, 2021 and • progressed up to 1037m till end of • March, 2023. • - Underground Excavation from d/s started on December 15, 2022 and progressed up to Ch.1245 (120m) till end of March, 2023. • - Total U/G Excavation Progress 1,157m/1,365 (85%) <p>Upstream Starter Dam Concrete Works Concrete works of U/S Starter Dam started on March 8, 2023 and progress is 5090.50m³/37,337 (13.6%) till end of March, 2023.</p>
2	MW-02: Under Ground Power Complex, Tunnels and Hydraulic Steel Structure	CGGC	<p>Preparatory Works</p> <p>Surge Chamber Vault Access Tunnel</p> <ul style="list-style-type: none"> • Bench Excavation and Support of SCVAT #1 Gallery was in progress (current chainage 0+67 m (25 Jan. 2023)) • Bench Excavation and Support of SCVAT #2 Gallery was in Progress (Current chainage 0+026 m (25 Jan. 2023)) • The excavation and supporting works were suspended due to lack of ventilation system since January 2023. The bottom enlargement was in progress in March 2023 to secure additional space for ventilation system. <p>GIS Room Access Tunnel</p> <ul style="list-style-type: none"> • No activity in this month. • The excavation was commenced on 01 March 2020 and substantially completed in March 29, 2023 (113m in total 98.9% of the total length of 114.18 m) <p>Exhaust Tunnel Excavation and supporting works of the vertical shaft were commenced on 26th October 2022 and completed on 15th February 2023.</p>

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S. No.	Contract Name	Contractor	Major Activities During This Quarter
			<p>Exhaust Vertical Shaft The enlargement was commenced on 03-Jan-2023 and completed on 15-Feb-2023.</p> <ul style="list-style-type: none"> Excavation and support work was suspended due to poor ventilation and lighting. <p>Underground Transformer Cavern Total Excavation Volume up to the second bench is 55,300.7m³ of total excavation volume of 234,829.30m³, which is the progress of 23.5% in total.</p> <ul style="list-style-type: none"> Installation of PS Tendon was commenced on 23rd February 2023. The works of PS tendon for arch portion was in progress. <p>Power Intake</p> <ul style="list-style-type: none"> Protection fence was in progress (Ditch Excavation) Surface Excavation at EL.1000m to EL980m,972m. <p>Lower Pressure Tunnel</p> <p>(1) Penstock Adit Tunnel No.01</p> <ul style="list-style-type: none"> Excavation of the Lower pressure Tunnel #1 was Started 08 May 2022. The crown enlargement was No Activity due shift of all resources to other contract works (MW-01) (Current Chainage is 0+47m January 2023). <p>(2) Penstock Adit Tunnel No.02</p> <ul style="list-style-type: none"> Lower pressure tunnel # 2 Invert Cleaning and 921m³ Plug Concrete poured in Jan. 2023. The activities were suspended due to shift of all resources to other contract works (MW-01). The tunnel supporting works (steel arch installation) was resumed on 23 Mar.2023 <p>Tailrace Tunnel</p> <p>(1) Upstream Adit Tunnel CT1</p> <ul style="list-style-type: none"> Excavation/Enlargement junction with transition/tailrace & CT1 was started on 21st Jan 2023 & enlargement of CT1 section at both junctions was completed on 13th Feb 2023. <p>(2) Downstream Adit Tunnel CT2</p> <ul style="list-style-type: none"> Excavation was completed on 19th Feb 2023 and Support work was in progress. <p>(3) Tailrace Tunnel No.1</p> <ul style="list-style-type: none"> The excavation was commenced on 03-Feb-2023 from CT2 and 19-Feb-2023 from CT1 and excavation and support works were in progress. <p>(4) Tailrace Tunnel No.2</p> <ul style="list-style-type: none"> The excavation was commenced on 15-Feb-2023 from CT1 and 21-Feb-2023 from CT2, and the excavation and support work were in progress. <p>Switchyard</p> <ul style="list-style-type: none"> EL.958m to EL.943m 4th Bench central Portion Excavation and mucking was in progress. Support work on 4th bench slope (EI 950 to 940) of both left and right side was in progress. EI.935 Drilling for Boulder Blast. Removing Debris was in progress by daywork order.
3	EM-01	GE Hydro China Co. Ltd. and Power China Engineering Ltd (GE-PC)	<p>Construction Activities</p> <p>(1) Excavation:</p> <ul style="list-style-type: none"> Excavation of Terrace No 15 and Terrace No. 16 was in Progress. <p>(2) Boundary Wall:</p> <ul style="list-style-type: none"> Excavation from CP14 to CP15 in Progress Lean concrete from CP14 to CP15 in Progress Block masonry/ Plinth Beam (RCC) CP6 to CP15 in Progress. Block masonry/Plinth Beam (RCC) was in progress: CP6TO CP15 was in progress. <p>(3) Retaining Walls/Stone Masonry</p> <ul style="list-style-type: none"> Compaction of Terrace No 6, and 15 in Progress. Lean Concrete of Terrace No 6, and 15 in Progress. Stone Masonry of Terrace No 6, and 15 in Progress. <p>(4) HSE Work:</p> <ul style="list-style-type: none"> Safety Training was conducted for workers at site. Morning TBT was conducted on site. <p>(5) Watch Towers:</p> <ul style="list-style-type: none"> Excavation for watchtower was completed. Foundation Concrete and Concrete Structure was completed. Block Masonry Completed: Nil Changes as per Engineer/Wapda Instruction: yet to be done. <p>(6) Under Construction Buildings in March, 2023.</p> <ul style="list-style-type: none"> Security Building Office Building Residency Building <p>Backfilling by layer Including Cut Quantities are 89442 m³ and Fill Quantities are 58,176</p>
B	Preparatory Works		
I	Road Contracts		
1	KKH-01 Relocation of Karakoram Highway from KM 0+000 to 25+200 (preparatory works)	China Civil Engineering Construction Company (CCECC)	<p>The major activities undertaken during this month were:</p> <ul style="list-style-type: none"> Limited Construction Activities in this month. Slope protection works and excavation activities at third bench Zero Point continued during the month.

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S. No.	Contract Name	Contractor	Major Activities During This Quarter
			<ul style="list-style-type: none"> • Excavation and primary support works of K-4 Tunnel outlet side RD=K4+355 continued during the month and 271m heading and benching 139m completed. Preparation for secondary lining assembling of formwork completed. • Excavation and primary support works of Logro-A tunnel inlet side RD=K9+449 continued during the month and 297m heading, benching 256m completed. Preparation for secondary lining assembling of formwork. • Improvement works including construction of retaining walls & laying of RCCP for Khoshe Bypass Road continued during the month. • Construction of camp, workshop and batching plant in Uchar continued during the month. • Preparatory works for Uchar Bridge resumed and continued during the month. Preparation for slope protection works on Dasu direction started and continued during the month. • Barseen Bridge in Kaigah direction Camp construction continued during the month. Construction of access road for Abutment 02 in Kaigah direction started and continued. • Tunnel excavation and primary support works of Logro-B RD=K11+905 18m and Dugah tunnel RD=K23+645 outlet side 5m heading completed during the month. Construction of camp, workshop and batching plant in Kaigah for Dugah tunnel continued during the month. • Preparation for slope protection works on right side pier 01 of Uchar Bridge suspended during the month. • Construction of access road on left side pier 02 of Uchar Bridge started and continued during the month.
2	RAR-01 Construction of Right Bank Access Road from Komila to Seo Dam Site (preparatory works)	CCECC	<p>The major activities undertaken during this month were:</p> <p>Construction Activities</p> <ul style="list-style-type: none"> • Excavation work, drilling and blasting work, boulder blasting etc at middle and end portion of Komila bypass in progress. • Slope cutting from catch point around K0+400 to K0+600 in progress. • Excavation for road around K1+200, drilling and blasting around K2+200 and section Komila Bypass in progress. • Sub grade preparation i.e. levelling etc from K1+500 to K1+750 in progress. • Drilling, blasting and excavation work for local access around K2+100 in progress and completed. • Embankment filling in Nullah for causeway around K1+350 in progress. • Granular backfilling at causeway rip rap area in progress. • Toe wall protection in nullah at K1+350 and stone masonry rip rap in progress and completed. • Concrete for causeway cutoff wall & Slab (L/S) in progress and completed. • Concrete for causeway cutoff wall, lean & A1 concrete for slab at K0+356. Concrete for causeway cutoff wall, lean & A1 concrete for slab at K0+900 completed. • Concrete for causeway cutoff wall & slab (R/S) in progress and completed. • Stone masonry retaining walls around K1+252 and K1+272 in progress and completed. • Granular & stone dust backfilling behind the completed R/walls in progress. • Breast wall stone masonry around k0+700 to K0+850 in progress. • Stone masonry parapet wall around K11+200 at RAR-01 in progress.
3	KKH-02: Relocation of Karakoram Highway from RD 25+200 to 62+213	CGGC	<p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> • Excavation and blasting work at K24+730-800, K26+370-700, K33+520-700, K36+270-450, K42+290-490, K46+200-300 is continue. • New access road has commenced at K38, K40 for gobbar tunnels and bridge (both faces). • Work has been stopped at k31 due to weak geology and at K44 (both sides) due to SMR package.
4	RAR-02: Construction of Right Bank Access Road from Dam Site to Uttar Gah	CGGC	<p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> • Excavation and blasting work continue from K13+370 to K13+800. • Cable crossing work at K20 is almost done. • Work at seer gayal access road has been stopped by locals on 17th of March due to the nonpayment of houses in reservoir area. • The contractor is working on four working faces in kandia, K33+400, K34+450 & K36+410. • Work at k35 has been stopped by locals due to SMR package. • Request for removal of houses inside and below the RAR-02 has been forwarded to the Employer. • The Contractor mobilized to the Kaigah Contractor's camp and brought new equipment and manpower. The Contractor is planning to start Kandia working face and has already started Largani cable way to start new working face by 1st Week of April 2023..
5	RAR-03: Construction of Right Bank Access Road from		Procurement is in progress

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S. No.	Contract Name	Contractor	Major Activities During This Quarter
	Uttar Gah to Shatial		
II	Electrification Contracts		
1	TL-01 Procurement, Design, Supply, Installation, Testing and Commissioning of 132 kV Single Circuit Transmission Line and Grid Station (From Switchyard Dubair Khawar to proposed Grid Station Dasu)	Power China Corporation Company (PCCC)	Activities carried during the month: <ul style="list-style-type: none"> • Excavation/cutting of access road to Grid Station is in progress. • Breast wall at Alignment-1 of access road is completed. • Breast wall at Alignment-2 of access road is in progress. • Fencing work of switchyard is in progress. • Roof treatment on Control house building is completed. <input type="checkbox"/> Foundation of Earth Mast is completed. • Erection of Gantries on Terrace-1 and Terrace-2 is completed
2	TL-02: 10kV Distribution Line to Resettlement Villages		Procurement is in progress
III	Colony Works		
1	PCI-01R: Project Colony & Infrastructure	China Gansu International Corporation for Economic and Technical Cooperation (CGICOP)	The major construction activities undertaken during this month were: <ul style="list-style-type: none"> • Door fixing at Residence Cat -2B is in progress. • Boundary wall masonry and plastering at residence Cat -2, Cat -2A, 2B, 2C & 2D in progress. • Ppr and plumbing work in bath rooms at residence cat-2B, 2C and 2D in progress. • Electrician work at 2B and 2C in progress. • Ramp construction towards the car porch at residence Cat -2 and 2A in progress. • Painting at residence Cat 2 and 2A in progress. • Bathroom fixtures fixing at residence Cat -2B & 2 C in progress. • Installation of windows aluminum at Residence Cat 2,2B and 2c in progress. • Laying of Base course for Secondary roads s1, s2 and s3 in progress. • Car porch concreting at residence Cat 2A & 2 B in progress. • Block masonry at residence Cat 3 and Cat 4 in progress. • Plastering at residence cat -3 and residence cat-4 in progress. • Form work and reinforcing fixing for the mummies of cat 3 and cat 4 is in progress. • Conduction of pressure tests of water supply pipes in progress. • Sluice vales construction in progress. • Septic tank type a construction in progress. • Construction of storm drain along P1 road in progress. • External boundary wall: block masonry and plastering in progress. • Stone masonry of breast wall in progress along P1 road.
2	PCI-02: Project Colony and Infrastructure		Yet to be procured
IV	Resettlement Villages Contracts		Major Activities of RV The major construction activities undertaken during this month were: (1) Additional Choochang site 1 <ul style="list-style-type: none"> • Site is handed over to local people. (2) Choochang Site 1 <ul style="list-style-type: none"> • Block masonry at Mosque is in progress. • Stone masonry for breast wall in progress. (3) Kuz Choochang Site Upper & Lower Portions <ul style="list-style-type: none"> • Stone masonry retaining wall in progress. (4) Choochang Site 2 & 3 <ul style="list-style-type: none"> • No activity (5) Shatial Rock Carving Site <ul style="list-style-type: none"> • Work is stopped at shatial rock carving site due to local since 20-11-2020. However, followings are the summary of activities: <ul style="list-style-type: none"> • Fencing Wall Concrete Columns from Points P2 to P3 is in progress. • Installation of GI Post dia 75mm along river side is completed. • Stone pitching of parking area is in progress. • Super structure work above plinth beam for staff residence building in progress
1	Resettlement of Villages Left Bank of Indus River LBRV-10	Zhongmei Engineering Group Limited (Zhongmei)	No activity
3	RV: Resettlement of Village Chuchang & Construction of Shatyal Museum	Khyber Grace (Pvt.) Limited (KGL)	Retaining wall work at Kuz Chuchang Site still in progress Work has been stopped by locals at Shatial rock carving site since 20-10-2020.
4	Resettlement of Villages Right Bank of Indus River RBRV-10	China Railway 17th Bureau Group Co. Ltd. (CR17B)	No activity
5	Resettlement of Villages Left Bank of Indus River LBRV-13- Right Bank of Indus River RBRV-12		The works are yet to be designed (subject to agreement with the affected communities)
6	Resettlement of Villages RV-01 & RV-02		The works are yet to be finalized
V	Other Works		
1	VTC-01: Vocational Training Centre for Men and Women		Procurement is in progress

ii. Site Inspections and Meetings

The Environment Team of PMU WAPDA and DHC daily visits the construction sites and completes the monitoring checklists. In addition, the Senior Environmental Specialists of DHC and Dep. Director Environment PMU WAPDA conducted weekly inspections to ensure environmental compliances. The observations made were shared with the contractor for rectification. During the daily inspections some issues are communicated directly to the contractor through WhatsApp group for immediate redressal while for the remaining a Walkthrough Environmental inspection report is generated and shared with the contractor. Preparation of Walk through Environmental Inspection Reports (WTEIR) for any non-compliances is also a regular activity through which the contractors are intimated. Further, the team also conducts monthly environmental progress review meetings with the contractors.

iii. Key Non-Compliances

The details of non-compliances noticed during the implementation of various site visits are given in below Table. The Contractors are instructed to address these non-compliances through the issue of WTEIRs and letters.

Table ES-2: Major Non-compliances & Number of WTEIRs Issued During This Quarter

Contract	No. of WTEIRs			Number of Letters			Main Non-Compliances
	Jan	Feb	Mar	Jan	Feb	Mar	
MW-01& MW-02	10	5	4	3	9	12	Minor oil spills, Fugitive Dust, Hiring of Environmental officer, Water pH level beyond NEQS in the Sedimentation Ponds, Air Dispersion Modeling and non- submission of Seo Crush Plant installation NOC's
KKH-01	2	3	2	4	4	8	Minor oil spill, inadequate Waste Management, Inappropriate Utilities in Camp for Labor and Staff, Housekeeping, Fuel Storage without containment, improper Sedimentation Tank at k9.
RAR-01	1	0	0	0	1	1	Dust and minor oil spill.
PCI-01R	2	0	0	1	1	4	Dust, Waste Littering, use of fuel Wood for cooking in labour camps, Minor oil spill, Sewage
KKH-02	0	0	0	0	2	2	Dust Issue, Minor oil spill, Non-hiring Environmental Officer, Spoil Disposal Management Issue
RAR-02	2	0	1	1	1	0	Dust, Non-hiring of Environmental Officer, Spoil Disposal Management Issue, Rolling of Debris down the slope
TL-01	0	0	0	0	2	2	Improper Waste Management, inadequate Housekeeping, Minor Oil Spill, inadequate drinking water facility at site
EM-01	3	0	1	0	0	1	Contract is in Design Stage. EM-01 Camp Construction is in progress i.e., excavation and back filling of terraces., Waste management, use of Wood as fuel, Scarcity of and unhygienic toilets, Hiring of Env Officer.

Contractors have conducted corrective actions to the issues raised by the Engineer, and these actions were reviewed in the monthly progress review meetings. A summary of issues raised during this quarter and their status is given in below Table.

Table ES-3: Number of environmental issues and status of their compliance during this quarter

Contract	No. of Issues Raised			Issues Closed			Issues Still Open			Issues Partially Closed		
	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar
MW-01&-02	15	17	15	2	4	1	9	11	12	4	2	2
KKH-01	13	21	20	6	2	4	6	19	11	1	0	5
RAR-01	4	3	3	2	2	1	0	1	2	2	0	0
TL-01	6	7	3	1	5	1	5	2	2	0	0	0
PCI-01R	9	10	6	1	4	0	7	5	6	1	1	0
EM-01	8	13	9	0	8	3	8	5	5	0	0	1
KKH-02	12	11	10	3	2	2	6	7	8	3	2	0
RAR-02	8	9	10	2	2	1	6	6	8	0	1	1

iv. Monitoring of Air, Noise, Water and Wastewater

During the quarter, the Contractors conducted no quarterly environmental monitoring as they are in negotiations with a new third-party environmental laboratory to conduct the monitoring. The monthly environmental spot monitoring was conducted during the quarter. The results of the spot monitoring are given below:

Table ES-4: Spot monitoring of Surface Water

Contractor	Upstream and Downstream of the Construction Area from River Indus												Remarks
	Turbidity			pH			Conductivity			DO			
	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	
MW-01	41	48.2	477	8.5	8.6	8.4	190	203	246	9.8	5.0	7.7	
MW-02	65.4	52.8	54.5	8.3	8.8	8.4	195.9	221	269	8.8	12.3	7.5	

Locations at MW-01 is: Upstream of Uchar crush plant in River Indus,

Locations at MW-02 is: Downstream near Khoshe Batching plant,

Table ES-5: Spot Monitoring of Wastewater and Compliance with NEQS

	Sr. No.	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Remarks
		Turbidity			pH			Conductivity			DO			
		Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	
MW-01	1	>1000	>1000	976	9.5	9.7	10.2	4.3	103.3	126	9.9	4	5.1	The Contractor was instructed to increase the freshwater addition to lower the pH value and Turbidity.
	2	116.8	594	135.4	11.1	11.0	11.2	295	237	477	9.3	8.5	6.6	
	3	968	473	-	10.8	9.6	-	317	194	-	8.2	6	-	
MW-02	1	407	966	-	10.7	11.2	-	27.3	503	-	4.6	5.8	-	Also the contractor was advised to consider weak acid addition to lower the pH value.
	2	250	317	52.5	10.0	10.3	11.4	98	103	706	5.0	5.5	5.6	
	3	330	544	76	11.4	11.4	11.1	1871	1291	1066	7.8	6.7	6.1	
Standard		200 NTU			6-8			µs/cm			ppm			

Note: Samples were not taken from MAT Pond, CT-02 Pond(MW-02) and Uchar Crushing Plant(MW-01)

Locations at MW-01 are: 1. Sedimentation pond of Uchar crush plant, 2. Sedimentation pond at Uchar Batching plant, 3. Sedimentation pond near Adit-1).

Locations at MW-2 are: 1. Sedimentation Pond at Main Access Tunnel (MAT) 2. Sedimentation Pond at Khoshe Batching Plant

v. Other Activities conducted

The outstanding issues in the Project and other key activities conducted by the environmental team of DHC during this quarter are given in below Table.

Table ES-6: Summary of Other Activities conducted and Outstanding Issues

Sr. No.	Activity/ Outstanding Issue	Progress in this Quarter
1	The pH Level of Sedimentation Tanks of MW-01 and MW-02	The addition of fresh water to the sedimentation tank is time and again “Engineer” has implemented through the CGGC contractor. But this issue seems to be not working in the lowering down of the pH levels in sedimentation Tank. As as further step as described in the IFC guidelines addition of acid to the sedimentation tank was suggested to the CGGC contractor. The “Engineer” conducted a “Jar test” in which samples were taken from the sedimentation tank outside the Main Access Tunnel (MAT). The waste water pH was 11.2 at the time of sampling. By addition of of simple fresh water it was reduced to 10.7 and no further reduction in the pH levels. A meeting was conducted with CGGC EHS Team and Laboratory Team on 1st of March 2023 for conducting an experiment on the sedimentation tank of MAT for lowering of pH in the sedimentation Tank with using mild acid dilution in the sedimentation tank. The environment Team of DHC arranged diluted sulfuric acid(H ₂ SO ₄) with 25% V/V of 50 % concentration. There were seven samples which were runned down in which 0.1 ml, 0.3 ml, 0.5ml, 1ml, 2.5ml, 4ml, 5ml, was used. The Sample size was 1000ml. The experiment resulted in reducing the pH level to a range where it was coming within the NEQS limit. The final effective quantity which was 0.3ml in 900ml resulted in a pH level of 7.8. Later on the contractor did his own calculations based on this experimentation and another meeting was held on 14th of March 2023. The EHS Director of MW-01 and 02 presented his calculations and the amount of acid to be used in the sedimentation tanks of MW-01 & MW-02. The total amount required in a month was too costly and might have had some environmental and safety implications. Therefore, this option is still under consideration but not applied on site. It is important to notice that this option is clearly written in the IFC Guidelines to treat the waste water.
2	Solid Waste Disposal Site(Kaigah)	The Screening Report for the newly identified site at Kaigah (Near 24+0 to 24+400RD of relocated KKH-01) with basic design drawings/layout plans were submitted to WAPDA on 4th of August 2022. The Revenue department started their survey in

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		the start of 2 nd week of Jan 2023 but it was stopped by the community due to some ownership title issues among the community. The revenue team tried three times to conduct the survey by then the two parties of local community submitted different applications to WAPDA which could have led to a fierce conflict/violence. The next two months of February and March 2023 WAPDA and Revenue teams tried to re-console and settlement among the aggrieved parties but all went in vein. The “Engineer” is still of the view that Kaigah(24+00 to 24+500RD) is best available site for SWD activity with having least amount of people having residential claims i.e., 5 dwellings only(as per community claim) and best topography for construction of Land fill site.
3	Meeting with WAPDA agenda of updation of traffic management Plan on 13 Feb 2023 with D.G SS&E WAPDA	Meeting was held among the newly hired Traffic Engineer and D.G SSE for the updating of Traffic Management Plan (TMP) on 13 th of February 2023. The D.G SSE emphasized on the details of staff requirements, Logistics Requirements, Parking Areas, Traffic Safety equipment’s, scheduling of inbound and outbound traffic during the construction phase and cost to bear for implementation should be included in the updated TMP.
4	Meeting with WAPDA agenda of WB arrival 26/02/2023	Meeting on 26 th of February 2023 with D.G SSE WAPDA for discussion on presentation to be given to World Bank on 27 th of February 2023. The Engineer’s Team gave presentation to the D.G SS&E of WAPDA for last moment addition or subtractions of any details which the proprietor of the DHPP deems fit so.
5	WB Implementation Support Mission (ISM) Dated 26-02-2023 to 28-02-2023	Environment team prepared and delivered presentations on two topics i.e., “EMAP implementation” as well as for “Traffic Management Plan” for World Bank Implementation Support Mission. Meetings and site visits were conducted from 26 th to 28 th of February 2023. World Bank, DHC, WAPDA environment teams inspected underground works of MW-01 and MW-02 with WB Teams and inspected the site on 26 th and 28 th of February 2023.
6	Environment Section joined the Virtual Meeting with WB arranged by OHS section on 1 st of March 2023	The Environment Section of DHC attended virtual weekly meeting (dated: 1 st of March, 2023) between WAPDA, DHC and World Bank regarding safety issues of DHPP with an additional agenda regarding Environment for having any output of the joint monitoring of the construction sites.
7	Meeting with Advisor Chairman WAPDA regarding the Traffic Management Plan	A meeting was held on 17 th of March 2023 at WAPDA PMU Hall. Environment section was called upon to participate in the meeting to brief WAPDA Advisor project regarding DHPP traffic management plan. The Advisor project instructed to submit the plan by 31 st March 2023 after incorporating Basha Dam (DBDP) project logistic data. WAPDA has been requested to provide the data. The work on TMP is continued by the “Traffic Engineer” under supervision of Environment Section, DHC.
8	Site visit to Kuza Banda for Traffic Safety/managem ent Survey	The Traffic Engineer (joined DHC on 25 th of Jan, 2023.) along with Sr. Environmentalist visited Kuzabanda Site on 04 th & 5 th of March 2023, to re-visit the parking spaces, layby areas, establishment of site offices along route from rest area of Kuzabanda up till Dasu Town as well as explore options like installation of traffic safety markers/signboards, guard railings etc.
10	Meeting with MSC Consultant and Reporting	A meeting was held in DHC 3-4 times among the Environment Specialist of MSC and Chief Environmentalist and Sr. Environmentalist DHC. During the reporting quarter DHC has shared through PMU, WAPDA, the “required data with MSC”(as per their demand and on direction of D.D Environemnt WAPDA) as and when it was requested by MSC. Six monthly data compilation undertaken and shared by the DHC Environment Section as requested by WAPDA for MSC consultants.
11	Tree Removal	Total trees cut down due to construction of DHPP components or associated activities are 4182 up till Dec 2022. There is no data available during the current reporting period, i.e., Jan-March 2023.
12	Physical Cultural Resources	There were No Physical Cultural Resources found on any construction site of DHPP during this quarter, i.e., Jan-March 2023.
13	Grievance	There is a one tier Independent Grievance Redressal Committee which is headed by a

	Redressal Mechanism	retired Additional Deputy Commissioner (A.D.C). The Engineer's Environment Section is in close liason with this IGRC and till date there has been no registered grievances regarding Environmental component of DHPP. A monthly meeting is conducted with IGRC chaiman from Jan- March 2023, for discussion on having any grievance regarding environmental issues.
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1 Introduction

1.1 Background

Dasu Hydropower Project (DHP or the Project) is a World Bank-financed project in Pakistan and implemented by the Pakistan Water and Power Development Authority (WAPDA). The Project consists of a 242 m high concrete dam with an installed capacity of 4320 MW. The dam site is located 7 km north of Dasu km North of Dasu town in the Kohistan district of the Khyber Pakhtunkhwa Province and 350 km North of Islamabad, the capital city of Pakistan.

WAPDA has established a Project Management Unit (PMU) at Dasu to implement the Project and hired Dasu Hydropower Consultants (DHC) as the Engineer or Construction Supervision Consultant to oversee the implementation. Nippon Koei Ltd., Japan, is the lead consulting firm.

This report presents the progress of the environmental performance of the DHP from January to March 2023 and activities conducted during the period by the environmental staff of PMU and DHC. The progress of the Occupational Health and Safety (OHS) and the Project's social aspects are **presented in separate standalone quarterly reports and hence are not covered in this report.0m**

1.2 Environmental Compliance Requirements of DHP

The key documents that describe the environmental compliance requirements of DHP are:

- An Environmental and Social Assessment (ESA) of DHP was prepared by WAPDA in 2014 through a team of independent consultants and submitted to World Bank. The World Bank has approved the ESA, and its successful implementation is a critical legal covenant of the financing agreement with WAPDA. Hence the environmental performance requirements of DHP should comply with the environmental management plan (EMP) in the ESA.
- The environmental conditions and specifications in the bidding documents of the Contractors.
- The Contractors must prepare Construction Environmental Action Plans (CEAPs) before mobilization with site-specific management plans to address various environmental risks and impacts. The CEAPs were reviewed and approved by the Engineer.

During the detailed design of DHPP (2012-2013), the design consultant has prepared an Environmental Management Action Plan (EMAP), which consists of 7 volumes of documents¹. These are the internal and background documents of WAPDA and the basis for preparing ESA by independent consultants of WAPDA for Word Bank approval.

During the implementation of DHP (2017-2018), WAPDA has prepared Detailed Ecological and Biodiversity Management Plans (DEBMP) consisting of 7 plans².The Project's biodiversity aspects will be addressed by implementing these plans. WAPDA is yet to start implementing these plans, and once the implementation begins, their progress will be presented through a separate quarterly report.

1.3 Project Description

The DHP is planned to be implemented in two stages, with each stage consisting of two phases. Currently, Stage I of the DHP (DHP-I) is under implementation with the World Bank financing. The stage-wise proposed activities in the DHP are given in Table 1.1:

Table 1.1: Stage I and Stage II activities in DHP

Stage	Phase	Description of Works
Stage I	Phase-1	Construction of the dam with full height including whole gate facilities for such as spillway, LLO and flushing tunnels; full construction of power intake; one waterway tunnel until the tailrace outlet; underground powerhouse complex for 3-unit generating equipment; control building with 1 bay of transmission line at switchyard.
	Phase-2	Second waterway tunnel until the tailrace outlet; underground powerhouse complex for another 3-unit generating equipment; 1 bay of transmission line at switchyard.

¹ The EMAP documents are Volume 1: Executive Summary, Volume 2: Environmental Impact Assessment, Volume 3: Terrestrial Ecology, Volume 4: Aquatic Ecology, Volume 5: Physical Cultural Resources, Volume 6: Environmental Baseline Quality, Volume 7: Cumulative and Induced Impact Assessment, and Volume 7: Environmental Management Plan.

² The DEMBP plans are Plan 1: Aquatic Ecology – Fisheries Management Plan, Plan 2: Task 3: Terrestrial Ecology Management Plan, Plan 3: Avian Risk Management Plan, Plan 4: Wildlife Conservation Management Plan, Plan 5: Forestry Management Plan, Plan 6: Watershed Management Plan, and Plan 7: Physical Cultural Resources (PCR) Baseline and Management Plan

Stage II	Phase-3	Third waterway tunnel until the tailrace outlet; underground powerhouse complex for another 3-unit generating equipment; 1 bay of transmission line at switchyard.
	Phase-4	Fourth waterway tunnel until the tailrace outlet; underground powerhouse complex for another 3-unit generating equipment; 1 bay of transmission line at switchyard.

1.4 Procurement Status of Contracts

The DHP-I will be implemented under several construction contracts. These are grouped into two categories, (i) the Preparatory Works, which include the project colony, access roads, power lines and resettlement villages, and (ii) Main Works, which include the construction of the dam, underground powerhouse and related electromechanical works.

The Procurement Status of Contracts works, Resettlement Works and Main Works is presented in Table 1.2.

Table 1.2: Procurement Status of Contracts

S. No.	Contract No.	Date of Award	Date of Signing	Commencement Date	Original completion date	Updated Completion Date	Name of Contractor
1	MW-01: Main Hydraulic Structure, Spillway, Low-Level Outlets, River Diversion, and Hydraulic Steel Structures	28.12.2016	07.03.2017	23.06.2017	22-1-2023	21-11-2026	China Ghezouba Group Company Limited (CGGC)s
2	MW-02: Under Ground Power Complex, Tunnels and Hydraulic Steel Structure	28.12.2016	07.03.2017	23.06.2017	21-2-2023	01-10-2026	China Ghezouba Group Company Limited (CGGC)
3	EM-01: Procurement of Plant Design, Supply, Installation, Testing & Commissioning of Hydro-Mechanical and Electrical Equipment	22.9.2018	25.10.2018	20.5.2020	18-6-2025	NA	G.E. Hydro China Co. Ltd. & Power China Zhongmei Engineering Corporation Ltd. Joint Venture (GE-PC JV)
4	KKH-01: Relocation of Karakoram Highway from KM 0+000 to 25+200	08.02.2015	16.03.2015	24.07.2015	20-2-2017	22-7-2024	China Civil Engineering Construction Company (CCECC)
5	RAR-01: Construction of Right Bank Access Road from Komila to SEO Dam Site and VO-007 of Komila bypass	08.02.2015	16.03.2015	24.07.2015	22-7-2016	31-8-2022	China Civil Engineering Construction Company (CCECC)
6	TL-01: Procurement, Design, Supply, Installation, Testing & Commissioning of 132 kV Single Circuit Transmission Line and Grid Station (From Switchyard Dubair Khwar to proposed Grid Station Dasu)	03.03.2015	24.04.2015	02.10.2015	17-6-2016	18-10-2022	Power China Corporation Company (PCCC)
7	Resettlement of Villages Left Bank of Indus River LBRV-10	27.02.2017	20.04.2017	26.12.2017	25-12-2018	31-7-2022	Zhongmei Engineering Group Limited
7	Resettlement of Villages Left Bank of Indus River LBRV-12	27.02.2017	20.04.2017	26.12.2017	25-12-2018	31-7-2022	Zhongmei Engineering Group Limited
8	RAR-02: Construction of Right Bank Access Road from Dam Site to Uttar Gah	22.06.2016	17.01.2017	20.12.2021	18-5-2023		China Ghezouba Group Company Limited (CGGC)
9	KKH-02: Relocation of Karakoram Highway from KM 25+200 to 62+213	27.02.2017	25.04.2017	15-5-2022	31-12-2024	NA	China Ghezouba Group Company Limited (CGGC)
10	Right Bank of Indus River RBRV-10	27.02.2017	25.04.2017	Commencement Letter not yet issued/ Land Issue		NA	China Railway 17th Bureau Group Co. Ltd. (CR17B)
12	PCI-01R: Project Colony & Infrastructure (Rebid)	27.07.2017	17.9.2017	20.5.2018	17-5-2021	31-10-2022	China Gansu International Corporation for Economic and Technical Cooperation (CGICOP)
13	RV: Resettlement of Village Chuchang & Construction of Shatial Museum (Re-Bid)	23.04.2018	17.06.2018	17.06.2018	15-12-2020 & 16-9-2018	31-12-2022	Khyber Grace (Pvt.) Limited (KGL)

1.5 Status of Project Implementation

The overall construction progress of signed contracts up to reporting period is given in Table 1.3.

Table 1.3: Overall Construction Progress

Sr. No.	Contract	Elapsed Time		Work Progress up to reporting period		Progress in This Time period
		Quarter	%Age	Scheduled %	Actual %	
1	ICB No. DASU-KKH-01(ii)	91.3	176.7	100.0	33.2	The major activities undertaken during this month were: • Limited Construction Activities in this month.

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						<ul style="list-style-type: none"> • Slope protection works and excavation activities at third bench Zero Point continued during the month. • Excavation and primary support works of K-4 Tunnel outlet side RD=K4+355 continued during the month and 271m heading and benching 139m completed. Preparation for secondary lining assembling of formwork completed. • Excavation and primary support works of Logro-A tunnel inlet side RD=K9+449 continued during the month and 297m heading, benching 256m completed. Preparation for secondary lining assembling of formwork. • Improvement works including construction of retaining walls & laying of RCCP for Khoshe Bypass Road continued during the month. • Construction of camp, workshop and batching plant in Uchar continued during the month. • Preparatory works for Uchar Bridge resumed and continued during the month. Preparation for slope protection works on Dasu direction started and continued during the month. • Barseen Bridge in Kaigah direction Camp construction continued during the month. Construction of access road for Abutment 02 in Kaigah direction started and continued. • Tunnel excavation and primary support works of Logro-B RD=K11+905 18m and Dugah tunnel RD=K23+645 outlet side 5m heading completed during the month. Construction of camp, workshop and batching plant in Kaigah for Dugah tunnel continued during the month. • Preparation for slope protection works on right side pier 01 of Uchar Bridge suspended during the month. • Construction of access road on left side pier 02 of Uchar Bridge started and continued during the month.
2	ICB No. DASU-RAR-01(iii)	91.3	155.3	100.0	98.8	<p>The major activities undertaken during this month were:</p> <p>Construction Activities</p> <ul style="list-style-type: none"> • Excavation work, drilling and blasting work, boulder blasting etc at middle and end portion of Komila bypass in progress. • Slope cutting from catch point around K0+400 to K0+600 in progress. • Excavation for road around K1+200, drilling and blasting around K2+200 and section Komila Bypass in progress. • Sub grade preparation i.e. levelling etc from K1+500 to K1+750 in progress. • Drilling, blasting and excavation work for local access around K2+100 in progress and completed. • Embankment filling in Nullah for causeway around K1+350 in progress. • Granular backfilling at causeway rip rap area in progress. • Toe wall protection in nullah at K1+350 and stone masonry rip rap in progress and completed. • Concrete for causeway cutoff wall & Slab (L/S) in progress and completed. • Concrete for causeway cutoff wall, lean & A1 concrete for slab at K0+356. • Concrete for causeway cutoff wall, lean & A1 concrete for slab at K0+900 completed. • Concrete for causeway cutoff wall & slab (R/S) in progress and completed. • Stone masonry retaining walls around K1+252 and K1+272 in progress and completed. • Granular & stone dust backfilling behind the completed R/walls in progress. • Breast wall stone masonry around k0+700 to K0+850 in progress. • Stone masonry parapet wall around K11+200 at RAR-01 in progress.
3	ICB No. DASU-TL-01(iv)	89.0	63.2	100.0	92.2	<p>Activities carried during the month:</p> <ul style="list-style-type: none"> • Excavation/cutting of access road to Grid Station is in progress. • Breast wall at Alignment-1 of access road is completed. • Breast wall at Alignment-2 of access road is in progress. • Fencing work of switchyard is in progress. • Roof treatment on Control house building is completed. ☐ Foundation of Earth Mast is completed. • Erection of Gantries on Terrace-1 and Terrace-2 is completed.

ICB No. DASU-69.3 MW-01	69.3	61.3	41.7	20.4	<p>Preparatory Works Contractor Camp in Kass area is under construction i.e., - Stone Masonry for Retaining Wall-74% 1# Batching Plant and 1# Crushing Plant at Uchar Area - Fencing Wall- 59% - Construction of Generator's house- 95% - Installation of generator system for power supply started on March 20, 2023 and works are on-going in the month of March. Additional Measures for Security Enhancement - The Contractor has worked on establishing of security measures i.e. Installation of watch tower at Uchar and Barseen, installation of Prefabricated Cabins with accessories at Barseen, Uchar, CR9 & Chuchang Area and fixing of blind sheet along CR2 & CR9.</p> <p>Diversion Tunnel A Underground excavation for Diversion Tunnel No. A was started on August 9th, 2019 and completed on March 7, 2023. 712,768m³/ 712,768m³ (100%). Concrete Work of Diversion and Adit Tunnels Diversion Tunnel A 1) Inlet Structure Works (Outside) - 17,940m³ / 18,200m³ (98.57%) completed till end of March, 2023. The concreting works before the river diversion is completed at the Inlet Structure Outside 2) Inlet Lining Works (Inside) - Concrete Works: 10,444m³ / 10,444m³ (100%) completed on March 18, 2023. 3) Invert Levelling Concrete (C20) - L/S- 1,427m / 1,524m (97%) - R/S- 1,524m/1,524m (100%) 4) 1m Invert Structural Concrete (A25) - L/S- 1,296m / 1,411.55m (92%) - R/S- 1,387m/1,411.55m (98%)</p> <p>Diversion Tunnel B Underground excavation for Diversion Tunnel No. B was started on May 30th, 2019 and completed on January 28, 2023. 623,515m³/ 623,515m³ (100%). 1) Inlet Structure Works (Outside) - 17,941m³/ 21,600m³ (83%) completed till end of March, 2023. No concrete observed during the month of March, 2023. Invert Levelling Concrete (C20) - L/S- 1,309m / 1,309m (100%) - R/S- 1,309m/1,309m (100%) Started on January 24, 2021 and completed on January 29, 2023. 1m Invert Structural Concrete (A25) - L/S- 1,163.52m / 1,163.52m (100%) - R/S- 1,163.52m/1,163.52m (100%) Started on April 26, 2022 and completed on February 3, 2023.</p> <p>Outlet Structure Works - Concrete Works: 1829.20m³/ 1829.20m³ (100%) started on May 7, 2021 and completed on May 9, 2022. - Additional Concrete: Additional concrete at DT.B outlet wall started on January 16,2023 and completed on Jan 28, 2023. Total Quantity poured was 358 / 358m³ (100%).</p> <p>Adit Plug Concrete - Concrete Works: 891m³/ 1647m³ (54%) completed till end of March, 2023.</p> <p>Inlet Dyke Some Part of Inlet Dyke in front of Diversion Tunnel No. A was removed for making platform for the Construction of Inlet Structure Slab. - Inlet dyke in front of Diversion Tunnel No. B was removed from El. 788m to El. 776m. 4 No. of blasts carried out on January 31, 2023, 12th, 13th & 16th February, 2023 to remove DT.B Inlet Dyke.</p> <p>Diversion Tunnel Outlet dyke Construction Works- Outlet Dyke in front of DT.B was blasted on February 10, 2023. Demolishing of Diversion Tunnel Outlet Dyke for removal of water from Diversion Tunnel carried out during the month of September 2022</p> <p>Right Bank Bypass Tunnel on The Right Bank</p> <ul style="list-style-type: none"> - 1st U/G Blast at Inlet carried out on February 4, 2023 at Ch. 0+025m and progress up to Ch. 0+118m (93m) till end of March, 2023. - 1st U/G Blast at outlet carried out on February 14, 2023 at Ch. 0+528m and progress up to Ch. 0+462m (66m) till end of March, 2023.
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						<ul style="list-style-type: none"> - Total underground excavation progress is 159m/ 503m (32%) till end of March, 2023. <p>Main Dam</p> <p>Right Bank Abutment (Siglo Area)</p> <ul style="list-style-type: none"> - U/S Temporary Access Road Construction- 70% - D/S Temporary Access Road Construction- 79% - Excavation and support of Right Bank Cable crane Platform above El. 1065m- 75% - Excavation and support of Right Bank Cable crane Platform slope El. 1065m to El.1050m- 72% - Excavation and support of Right Bank Cable crane Platform slope El. 1050m to El. 1035m- 10% (Now El. 1047m) <p>Left Bank Abutment</p> <ul style="list-style-type: none"> - Excavation of the second layer of CR5-2 Road (1032-1018)- 100% - Left Bank Cable Crane Platform Excavation- 0% <p>Upstream Starter Dam Concrete Works</p> <ul style="list-style-type: none"> - Concrete works of U/S Starter Dam started on March 8, 2023 and progress is 3,505.50m³/ 37,337 (9.40%) till end of March, 2023. <p>Cut-off Wall</p> <ul style="list-style-type: none"> - Cut-off Wall Drilling started on December 24th, 2022 from the right side and remained continued during the month of January-2023. Drilling progress achieved 2184m²/4,748.40m² (46%) till end of March 2023. - Concrete pouring for Cut off wall started on January 17, 2023 and progress is -1438.50m³/ 4810m³ (30%) till end of March, 2023 - Concrete pouring for the Guide wall of the Cut-off wall started on Dec 3rd, 2022-122m/122m (100%) completed till end of March, 2023 <p>Left Bank Traffic Diversion</p> <ul style="list-style-type: none"> Tunnel - Underground Excavation from U/S started on April 1, 2021 and progressed up to 1037m till end of March, 2023. - Underground Excavation from d/s started on December 15, 2022 and progressed up to Ch.1245 (120m) till end of March, 2023. - Total U/G Excavation Progress 1,157m/1,365 (85%) Upstream Starter Dam Concrete Works Concrete works of U/S Starter Dam started on March 8, 2023 and progress is 5090.50m³/37,337 (13.6%) till end of March, 2023.
5	ICB No. DASU-MW-02	69.3	64.2	52.8	8.9	<p>Preparatory Works</p> <p>Surge Chamber Vault Access Tunnel</p> <ul style="list-style-type: none"> Bench Excavation and Support of SCVAT #1 Gallery was in progress (current chainage 0+67 m (25 Jan. 2023)) Bench Excavation and Support of SCVAT #2 Gallery was in Progress (Current chainage 0+026 m (25 Jan. 2023)) The excavation and supporting works were suspended due to lack of ventilation system since January 2023. The bottom enlargement was in progress in March 2023 to secure additional space for ventilation system. <p>GIS Room Access Tunnel</p> <ul style="list-style-type: none"> No activity in this month. The excavation was commenced on 01 March 2020 and substantially completed in March 29, 2023 (113m in total 98.9% of the total length of 114.18 m) <p>Exhaust Tunnel</p> <p>Excavation and supporting works of the vertical shaft were commenced on 26th October 2022 and completed on 15th February 2023.</p> <p>Exhaust Vertical Shaft</p> <p>The enlargement was commenced on 03-Jan-2023 and completed on 15-Feb-2023.</p> <ul style="list-style-type: none"> Excavation and support work was suspended due to poor ventilation and lighting. <p>Underground Transformer Cavern</p> <p>Total Excavation Volume up to the second bench is 55,300.7m³ of total excavation volume of 234,829.30m³, which is the progress of 23.5% in total.</p> <ul style="list-style-type: none"> Installation of PS Tendon was commenced on 23rd February 2023. The works of PS tendon for arch portion was in progress. <p>Power Intake</p>

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						<ul style="list-style-type: none"> • Protection fence was in progress (Ditch Excavation) Surface Excavation at EL.1000m to EL980m,972m. Lower Pressure Tunnel (1) Penstock Adit Tunnel No.01 • Excavation of the Lower pressure Tunnel #1 was Started 08 May 2022. • The crown enlargement was No Activity due shift of all resources to other contract works (MW-01) (Current Chainage is 0+47m January 2023). (2) Penstock Adit Tunnel No.02 • Lower pressure tunnel # 2 Invert Cleaning and 921m3 Plug Concrete poured in Jan. 2023. The activities were suspended due to shift of all resources to other contract works (MW-01). The tunnel supporting works (steel arch installation) was resumed on 23 Mar.2023 Tailrace Tunnel (1) Upstream Audit Tunnel CT1 • Excavation/Enlargement junction with transition/tailrace & CT1 was started on 21st Jan 2023 & enlargement of CT1 section at both junctions was completed on 13th Feb 2023. (2) Downstream Adit Tunnel CT2 • Excavation was completed on 19th Feb 2023 and Support work was in progress. (3) Tailrace Tunnel No.1 • The excavation was commenced on 03-Feb-2023 from CT2 and 19-Feb-2023 from CT1 and excavation and support works were in progress. (4) Tailrace Tunnel No.2 • The excavation was commenced on 15-Feb-2023 from CT1 and 21-Feb-2023 from CT2, and the excavation and support work were in progress. Switchyard • EL.958m to EL.943m 4th Bench central Portion Excavation and mucking was in progress. • Support work on 4th bench slope (EI 950 to 940) of both left and right side was in progress. • El.935 Drilling for Boulder Blast. • Removing Debris was in progress by daywork order.
	ICB No. DASU-LBRV-11	51.2	219.6	100.0	97.0	No activity In this quarter
6	ICB No. DASU-LBRV-10(v)	47.2	206.8	90.0	87.0	<ul style="list-style-type: none"> -Parapet wall construction is in progress. -Access road work is in progress. -Water supply line work is in progress
7	ICB No. DASU-LBRV-12	51.2	228.3	100.0	98.0	No activity In this quarter
8	ICB No. DASU-PCI-01R	46.4	112.1	100.0	61.2	<p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> • Door fixing at Residence Cat -2B is in progress. • Boundary wall masonry and plastering at residence Cat -2, Cat -2A, 2B, 2C & 2D in progress. • Ppr and plumbing work in bath rooms at residence cat-2B, 2C and 2D in progress. • Electrician work at 2B and 2C in progress. • Ramp construction towards the car porch at residence Cat -2 and 2A in progress. • Painting at residence Cat 2 and 2A in progress. • Bathroom fixtures fixing at residence Cat -2B & 2 C in progress. • Installation of windows aluminum at Residence Cat 2,2B and 2c in progress. • Laying of Base course for Secondary roads s1, s2 and s3 in progress. • Car porch concreting at residence Cat 2A & 2 B in progress. • Block masonry at residence Cat 3 and Cat 4 in progress. • Plastering at residence cat -3 and residence cat-4 in progress. • Form work and reinforcing fixing for the mummies of cat 3 and cat 4 is in progress. • Conduction of pressure tests of water supply pipes in progress. • Sluice vales construction in progress. • Septic tank type a construction in progress. • Construction of storm drain along P1 road in progress. • External boundary wall: block masonry and plastering in progress. • Stone masonry of breast wall in progress along P1 road.
8	ICB No. DASU-RV(Vi)	45.5	253.3	100.0	62.6	<p>Major Activities of RV</p> <p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> (1) Additional Choochang site 1 • Site is handed over to local people. (2) Choochang Site 1 • Block masonry at Mosque is in progress. • Stone masonry for breast wall in progress.

						<p>(3) Kuz Choochang Site Upper & Lower Portions</p> <ul style="list-style-type: none"> Stone masonry retaining wall in progress. <p>(4) Choochang Site 2 & 3</p> <ul style="list-style-type: none"> No activity <p>(5) Shatial Rock Carving Site</p> <ul style="list-style-type: none"> Work is stopped at shatial rock carving site due to local since 20-11-2020. However, followings are the summary of activities: Fencing Wall Concrete Columns from Points P2 to P3 is in progress. Installation of GI Post dia 75mm along river side is completed. Stone pitching of parking area is in progress. Super structure work above plinth beam for staff residence building in progress
9	ICB No. DASU-EM-01	34.4	56.4	16.4	7.1	<p>Construction Activities</p> <p>(1) Excavation:</p> <ul style="list-style-type: none"> Excavation of Terrace No 15 and Terrace No. 16 was in Progress. <p>(2) Boundary Wall:</p> <ul style="list-style-type: none"> Excavation from CP14 to CP15 in Progress Lean concrete from CP14 to CP15 in Progress Block masonry/ Plinth Beam (RCC) CP6 to CP15 in Progress. Block masonry/Plinth Beam (RCC) was in progress: CP6TO CP15 was in progress. <p>(3) Retaining Walls/Stone Masonry</p> <ul style="list-style-type: none"> Compaction of Terrace No 6, and 15 in Progress. Lean Concrete of Terrace No 6, and 15 in Progress. Stone Masonry of Terrace No 6, and 15 in Progress. <p>(4) HSE Work:</p> <ul style="list-style-type: none"> Safety Training was conducted for workers at site. Morning TBT was conducted on site. <p>(5) Watch Towers:</p> <ul style="list-style-type: none"> Excavation for watchtower was completed. Foundation Concrete and Concrete Structure was completed. Block Masonry Completed: Nil Changes as per Engineer/Wapda Instruction: yet to be done. <p>(6) Under Construction Buildings in March, 2023.</p> <ul style="list-style-type: none"> Security Building Office Building Residency Building <p>Backfilling by layer Including Cut Quantities are 89442 m3 and Fill Quantities are 58,176</p>
10	ICB No. DASU-RAR-02	22.6	94.4	98.5	1.7	<p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> Excavation and blasting work continue from K13+370 to K13+800. Cable crossing work at K20 is almost done. Work at seer gayal access road has been stopped by locals on 17th of March due to the nonpayment of houses in reservoir area. The contractor is working on four working faces in kandia, K33+400, K34+450 & K36+410. Work at k35 has been stopped by locals due to SMR package. Request for removal of houses inside and below the RAR-02 has been forwarded to the Employer. The Contractor mobilized to the Kaigah Contractor's camp and brought new equipment and manpower. The Contractor is planning to start Kandia working face and has already started Largani cable way to start new working face.
11	ICB No. DASU-KKH-02	10.6	44.1	32.7	2.6	<p>The major construction activities undertaken during this month were:</p> <ul style="list-style-type: none"> Excavation and blasting work at K24+730-800, K26+370-700, K33+520-700, K36+270-450, K42+290-490, K46+200-300 is continue. New access road has commenced at K38, K40 for gobbar tunnels and bridge (both faces). Work has been stopped at k31 due to weak geology and at K44 (both sides) due to SMR package.

- Elapsed time of each contract/package is from commencement until the end of the reporting period.
- Scheduled progress of KKH-01 is based on EOT-02. The Contractor is preparing revised schedule (EOT-03) for re-alignment (new tunnels & bridges)
- The contractor is preparing revised schedule (EOT-4 for the remaining works of RAR-01 including VO of Komila bypass
- The revised schedule of TL-01 (EOT-4) is under preparation with the contractor
- Revised schedules (EOT-02) of LBRV-10&12 is based on change in scope of non-handover sites is under process.
- Revised schedule (EOT-1) of Dasu -RV based on change in scope is under progress.

1.6 Environmental Staffing of PMU and DHC

The staff in the environmental unit of PMU and DHC are given in Table 1.4. The OHS staff of DHC are not included in this table.

Table 1.4: Environmental Staff of PMU and DHC

Sr. No.	Position	Staff Status
A	PMU	
1	Director	Vacant
2	Deputy Director	Imran Tariq
3	Assistant Director Environment	Vacant
4	Deputy Director Ecology	Farhat Ali Khan
5	Assistant Director Ecology	Liaqat Ali
6	Supervisor Ecology	Vacant
7	Supervisor Env &OHS	Junaid
8	Supervisor Env &OHS	Arslan
B	DHC	
1	Chief Environmentalist	Zafar Iqbal Chaudhry
2	Sr. Environmentalist	Sardar Alam
3	Sr. Environmentalist	Awais Hassan
	Sr. Environmentalist	Ahsan Akhlaq
4	Jr. Environmentalist	Vacant
5	Supervisor	Nasir Khan
6	Supervisor	Hidayatullah
7	Supervisor	Mehmood Khan
8	Environmental Advisor	Venkata Nukala

1.7 Structure of this Report

This report is divided into various chapters, and the contents of each chapter are briefly given in Table 1.5.

Table 1.5: Structure of this Report

Chapter No.	Chapter Name	Contents of the Chapter
Chapter 1	Introduction	Introduction to the Project, description of project works and status of implementation
Chapter 2	Main Works Contracts	Progress of implementing MW-01 and MW-2 contracts, environmental inspections and monitoring conducted, and key environmental issues and non-compliances noticed during implementation.
Chapter 3	KKH-01 Contract	Progress of implementing the KKH-01 contract, environmental inspections and Monitoring conducted, and key environmental issues and non-compliances noticed during implementation.
Chapter 4	RAR-01 Contract	Progress of implementing the RAR-01 contract, environmental inspections and Monitoring conducted, and key environmental issues and non-compliances noticed during implementation.
Chapter 5	TL-01 (132 KV Transmission Line Contract)	Progress of implementing 132 KV Transmission Line contract, environmental Inspections and monitoring conducted, and key environmental issues and non-compliances noticed during implementation.
Chapter 6	PCI-01R Contract	Progress of implementing PCI-01R contract, environmental inspections and monitoring conducted, and key environmental issues and non-compliances noticed During implementation.
Chapter 7	RAR-02	Progress of implementing other contracts (RAR-02), environmental inspections And monitoring carried out, and key environmental issues and non-compliances noticed during implementation.
Chapter 8	KKH-02	Progress of implementing other contracts (KKH-02), environmental inspections And monitoring carried out, and key environmental issues and non-compliances noticed during implementation. EM-01 status
Chapter 9	EM-01	Progress in implementing the RAR-01 contract, environmental inspections and Monitoring conducted, and key environmental issues and non-compliances noticed during implementation.
Chapter 10	Other Environmental Aspects	Status of solid waste disposal site, WB Mission other important Meetings
Annexure A		Minutes of Environmental progress review meetings during the quarter
Annexure B		Results of monthly Environmental Spot monitoring
Annexure C		Photolog

2 Main Works Contracts (MW-01 & MW-02)

2.1 Overview of Contracts

A brief overview of the MW-01 and MW-02 contracts is given in Table 2.1. The MW-01 contract works are related to the dam construction, and MW-02 works are related to the powerhouse construction. CGGC is the Contractor for both MW-01 and MW-02 contracts.

Table 2.1: Overview of MW-01 and MW-02 Contracts

Sr. No.	Item	MW-01	MW-02
1	Contract Number	ICB No. Dasu-MW-01	ICB No. Dasu-MW-02
2	Contractor Name	Main Hydraulic Structure, Spill Way, Low-Level Outlets, River Diversions and Hydraulic Steel Structures	Underground Power Complex, Tunnels and Hydraulic Steel Structures
3	Contractor	China Gezhouba Group Co. Ltd (CGGC)	CGGC
4	Commencement Date	June 23, 2017	June 23, 2017
5	Original Contract Completion Date	Jan 22, 2023	Feb 21, 2023

2.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report. The CEAP consists of 17 site-specific management plans. All these plans were approved by the Engineer except the plans on waste management and construction camp, which were conditionally approved. Contractor has been instructed to submit the remaining plans.

2.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 2.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 2.3.

Table 2.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A. Worker's Camps				
1	Chinese Workers Camp(MW-01)	Barseen, Kass	Jan# 210, Feb# 246, March# 227	
2	Chinese Workers Camp(MW-02)	Barseen, Kass	Jan# 257, Feb# 229, March# 220	
3	Pakistan Workers Camps(MW-01)	Barseen, Uchar	Jan# 1581, Feb#1486 , March# 1465	
4.	Pakistan Workers Camps(MW-02)	Barseen Uchar	Jan# 1313, Feb# 1647, March# 1931	
B. Crushing/Batching Plants				
1	Crushing Plant	Uchar	A small plant with 120 tons/hr capacity	
2	Crushing plant	Uchar Thoki	250 tons/hr	Under construction
3	Batching plant	Uchar	60 m ³ /hr capacity	
4	Batching plant	Khoshe	240 m ³ /hr capacity	
5	Pozzolan Plant	Chillas	-Construction of Chillas Pozzolan milling plant- 87% completed -Equipment Installation of Chillas pozzolan milling plant- 70% completed	

Table 2.3: Contractor's ESHS Staff

Sr. No.	Position	MW-01 Contract	MW-02 Contract	Remarks
1	Director EHS	Sun Kang	Sun Kang	
2	Environmental Officer	Vacant	Vacant	The contractor has been instructed to fill the vacant positions for each contract
3	Environment supervisor	Rahmat	Vacant	The contractor has been instructed to fill the vacant positions for each contract

2.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 2.4 and Table 2.5 for MW-01 and MW-02 Works, respectively.

Table 2.4: Construction Activities in MW-01 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	Diversion Tunnel A	Inlet structure Works Outside	98.57% Completed
	Diversion Tunnel A	Inlet Lining Works (Inside)	100% Completed
2	Diversion Tunnel B	Inlet structure Works Outside	100% Completed
	Diversion Tunnel B	Inlet Lining Works (Inside)	100% Completed
3	Adit Tunnels(3-2)	Excavation works	100% Completed
5	Left bank traffic diversion Tunnel	Excavation works	85% Completed
6	Chilas Pozzolan Plant	Equipment Installation	70%Completed
Main Dam			
7	Right Bank Abutment	Temp Road(U/S &D/S)	70% & 79 %
		Excavation & Support RB Cable Crane PF	72% &75% (1065-1050 EI) 10%(1050-1035 EI)
8	Left Bank Abutment	Excavation of the second layer of CR5-2	100%
9	U/S Starter Dam	Concreting	9.4%
10	Cutt Off Wall	Drilling	46%
		Concreting	30%

Table 2.5: Construction Activities in MW-02 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	Surge Chamber VAT	Excavation	97.7% completed
2	STA	Excavation	99.5 % completed
3	GIS Room access tunnel	Excavation	98.9% completed
4	Underground powerhouse Crown portion	Excavation	17.34% completed
5	Underground Transformer cavern Crown portion	Excavation	23.5% completed
6	Drain tunnel	Excavation	97.36% completed
7	Penstock Adit tunnel No.1	Excavation	100 % completed
7	Chilas Pozzolan Plant	Equipment Installation	Same plant will be used for both contracts

2.5 Construction Supervision and Environmental Compliances


2.5.1 Site Inspections and WTEIRs



Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities. Daily monitoring checklists are filled after the observations are noted at site. In addition, Joint Inspections with WAPDA on every Tuesday of the week for one or two contracts of DHPP, Schedule starting from 14th of Feb 2023, walk-through environmental inspections have also been conducted weekly at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). The Contractor has also been instructed to address these issues within a suggested timeframe. The Contractor has resolved the non-compliances and submitted rectification reports. The WTEIRs, consisting of both non-compliances and rectifications, are given in the following tables.


Table 2.6: Walk-Through Environmental Inspection Report 68

Report No. E-68

Date of Issuance: 03-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
68.1	03-01-2023 Switch yard labor camp (MWs-02)	Littering		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		

68.2	03-01-2023 CR9 generator room + work shop (MW-02)	Oil spill		<p>Contactors is instructed to remove the spill replace the spill by fresh soil and sand.</p> <p>After that dispose off the toxicity soil as per ECPs and SOPs.</p>	Immediate		
68.3	03-01-2023 CT-2 kitchen. (MW-02)	Fuel wood.		<p>The contractor is instructed to provide LPG for workers and reduce the dependency on local forest as soon as possible.</p>	Reminder		


68.4	03-01-2023 MAT sedimentation pond + CT-02 sedimentation pond. (MW-02)	Untreated water.		The contractor is instructed to keep always open fresh water in sedimentation pond and stop over flow water from the first chamber.	immediate		
68.5	03-01-2023 CT-02 (MWs-02)	Animals		The contractor is instructed to remove animals from construction site.	immediate		



(*Note: The contractor did the rectifications and sent the rectifications in the Whatsapp Group; Verification for which was done by DHC Field Staff on the next day of Pictures being shared in the Whats App Group)

Table 2.7: Walk-Through Environmental Inspection Report 69

Report No. E-69

Date of Issuance: 06-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
69.1	06-01-2023 Near A1 tunnel (MW-01)	Littering		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		


69.2	06-01-2023 Baching plant CR2 + HT office (MW-01)	Oil spill		<p>Contractors is instructed to remove the spill replace the spill by fresh soil and sand.</p> <p>After that dispose off the toxicity soil as per ECPs and SOPs.</p>	Immediate		
69.3	06-01-2023 Old crushing plant uchar (MW-01)	Animals		<p>The contractor is instructed to remove animals from construction site.</p>	immediate		



(*Note: The contractor did the rectifications and sent the rectifications in the Whatsapp Group; Verification for which was done by DHC Field Staff on the next day of Pictures being shared in the Whats App Group)



Table 2.8: Walk-Through Environmental Inspection Report 70



Report No. E-70



Date of Issuance: 19-01-2023



Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
70.1	17-01-23 CT-02 labor camp.	Solid waste	 <p style="font-size: small; text-align: center;">Jan 17, 2023 9:21:22 AM 285° SW Index number: 4661</p>	<p>Contractor is instructed to place the waste bins at the site.</p> <p>collect the solid waste from different place and put them to the bins at the site</p> <p>Dump the waste in to proper dumping site approved by engineers.</p>	immediately		

70.2	17-01-23 CT-02 tunnel portal	Oil spillage	 <p style="text-align: right; font-size: small;">Jan 17, 2023 9:21:06 AM 83° E Index number: 4659</p>	<p>The contractor is instructed to remove the oil spill from the site by replacing fresh soil.</p> <p>Follow SOPs and ECPs.</p>	immediate		
70.3	17-01-23 CT-02 labor camp	Unhygienic condition	 <p style="text-align: right; font-size: small;">Jan 17, 2023 9:22:40 AM 113° SE Index number: 4664</p>	<p>The contractor is instructed to maintain the hygienic condition in kitchen and also discard the kitchen waste into proper waste bins.</p> <p>Place a waste bins in the kitchen</p>	immediate		

70.4	17-01-23 CT-02 labor camp	Improper workers accommodation		The contractor is instructed to follow the living condition in rooms as per instruction in CEAPS and IFC guidelines.	immediate		
70.5	17-01-23 CT-02 labor camp	poor welfare facilities		Contractor is instructed to provide welfare facilities in toilets and washrooms and also provide hot water facility to the work force. Follow SOPs and ECPs.	immediate		

70.6	17-01-23 CT-02 labor camp	Fuel wood.		<p>Contractor is instructed to provide LPG gas for cooking purposes</p> <p>Use of fuel wood is strictly prohibited.</p>	immediate		
70.7	17-01-23 Labor camp barseen.	Poor sanitation		<p>The contractor is instructed to provide proper sanitation facilities to the work force</p> <p>Follow SOPs and ECPs.</p>	immediate		

70.8	17-01-23 Management camp barseen.	Unhygienic condition		<p>The contractor is instructed to maintain the hygienic condition in kitchen and also discard the kitchen waste into proper waste bins.</p> <p>Place a waste bins in the kitchen</p>	immediate		
70.9	17-01-23 Management camp barseen	Improper workers accommodation		<p>The contractor is instructed to follow the living condition in rooms as per instruction in CEAPS and IFC guidelines.</p>	immediate		


70.1 1	17-01-23 Management camp barseen. And labor camp barseen	poor welfare facilities		Contactor is instructed to provide welfare facilities in toilets and washrooms and also provide hot water facility to the work force. Follow SOPs and ECPs.	immediate		
70.1 2	17-01-23 Management camp barseen. And labor camp barseen	Fuel wood		Contactor is instructed to provide LPG gas for cooking purposes Use of fuel wood is strictly prohibited.	immediate		



Note: The compliance was undertaken by the CGGC Contractor and reported in the Whatsapp group which was duly verified by DHC and WAPDA 2-3 days after the compliance by CGGC. Also it was noted that that there was no common room/ dinning hall for the Pakistani staff/labor


Table 2.9: Walk-Through Environmental Inspection Report 71

Report No. E-71

Date of Issuance: 19-01-2023-

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
71.1	18-01-23 CR-02 near Adit -1 tunnel	Inadequate housekeeping		The contractor is instructed to keep and maintain good housekeeping at the site as per ECPs and SOPs.	immediate		

71.2	18-01-23 CR-02 In front of CR-02 mosque.	Open burning		<p>The contractor is instructed to stop This practice immediate.</p> <p>Open burning strictly prohibited.</p> <p>Follow CEAPs and ECPs.</p> <p>Educate and conduct TBT training in every morning to the work force regarding any non-compliances.</p>	immediate		
71.3	18-01-23 CR-02 workshop.	Workshop waste (grease etc.)		<p>The contractor is instructed to</p> <p>Place separate waste bin for workshop waste i-e grease etc.</p>			



71.4	18-01-23 Near batching plant CR-02	Solid waste		<p>Contactor is instructed to collect the solid waste. litteing from scattered place and also place waste bins there.</p> <p>Follow SOPs and ECPs.</p>			
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Note: The compliance was undertaken by the CGGC Contractor and reported in the Whatsapp group which was duely verified by DHC and WAPDA 2-3 days after the compliance by CGGC. Also it was noted that that there was no common room/ dinning hall for the Pakistani staff/labor



Table 2.10: Walk-Through Environmental Inspection Report 72

Report No. E-72

Date of Issuance: 20-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
72.1	20-01-2023 traffic diversion tunnel (MW-01)	Inadequate housekeeping		The contractor is instructed to keep and maintain good housekeeping at the site as per ECPs and SOPs.	immediate		
72.2	20-01-2023 HT office slope CR2 (MW-01)	Improper waste mgt		Contractor is instructed to collect the solid waste. litteing from scattered place and also place waste bins there. Follow SOPs and ECPs.	immediate		

72.3	20-01-2023 coffer dam (MW-01)	Heavy dust during drilling		The contractor is instructed to ensure maintenance of equipment and ensure wet drilling at construction site as soon as possible	Immediate		
72.4	20-01-2023 uchar old crushing plant	Poor maintenance of sedimentation tank		The contractor is instructed to remove the sludge immediately and dispose it to designated disposal site.	Immediate		

72.5	20-01-2023 thoki crushing plant Uchaar(MW-01)	Labour welfare facility		The contractor is instructed to provide dinning place/container with availability of safe drinking water.	Immediate		
72.6	20-01-2023 Thoki crushing plant Uchaar(MW-01)	Oil spill		The contractor is instructed to remove oil spill by replacing contaminated soil with fresh soil and dispose off properly according to ECPs	Immediate		


72.7	20-01-2023 uchar old crushing plant (MW-01)	Pet Animals cage		The contractor is instructed to remove animals from construction site.it is strictly prohibited	immediate		
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Note: The compliance was undertaken by the CGGC Contractor and reported in the Whatsapp group which was duly verified by DHC and WAPDA 2-3 days after the compliance by CGGC. Also it was noted that that there was no common room/ dinning hall for the Pakistani staff/labor


Table 2.11: Walk-Through Environmental Inspection Report 73

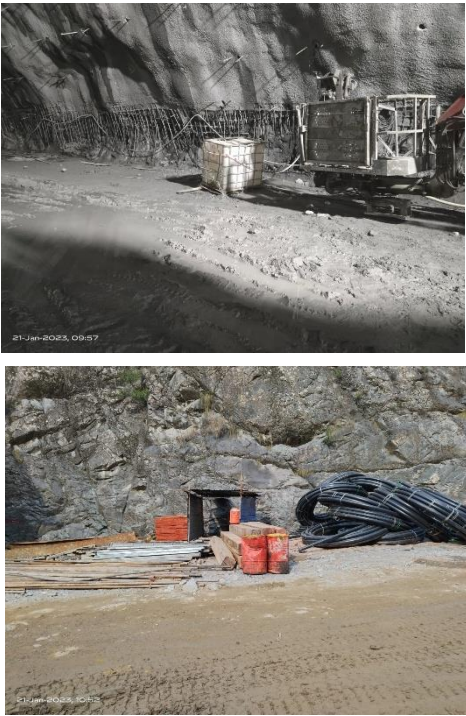

Report No. E-73


Date of Issuance: 22-01-2023

Sr. No	Date and Location of Inspection	Environment Observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
73.1	21-01-2023 CT-02 main gate	Littering on the Slope above Indus River.		The contractor is instructed to keep waste bins on site and collect solid waste from the slopes and dispose of properly according to ECPs.	Immediate		


73.2	21-01-2023 power house + switch yard	Oil spill		<p>Contactors is instructed to remove the oil spill and replace the contaminated soil by fresh soil and sand.</p> <p>Dispose off the contaminated soil as per ECPs and SOPs.</p>	Immediate		
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73.3	21-01-2023 Underground power house	No drinking water		The contractor is instructed to provide clean drinking water for underground working Staff	Immediate		
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73.4	21-01-2023 power house + starter dam Siglo	Empty chemical and fuel drums		The contractor is instructed to remove empty drums and admixture chemical tanks from the site to avoid any environmental incident at site. Transport the empty drum/chemical tank to designated Storage site having concrete foundation and proper boundary.	Immediate		
73.5	21-01-2023 starter dam	Improper dispose of sludge		The contractor is instructed to dispose off sludge away from river bank ensure disposal at designated dumping site rather than releasing it in the flowing Indus River.	Immediate		

73.6	21-01-2023 switch yard labor camp	Substandard accommodation		<p>During camp inspection it was observed that there are total of 21 rooms and in one room 6 and 9 workers are living</p> <p>The contractor is instructed to provide ILO standard accommodation for workers:</p> <ul style="list-style-type: none"> a) separate bed for each worker; b) adequate headroom, providing full and free movement, of not less than 203 centimetres; c) the minimum inside dimensions of a sleeping space should be at least 198 centimetres by 80 centimetres; d) beds should not be arranged in tiers of more than two; e) bedding materials should be reasonably comfortable; f) bedding and 	Immediate		
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				<p>bedframe materials</p> <p>should be designed to deter vermin;</p> <p>g) separate accommodation of the sexes;</p> <p>h) adequate natural light during the daytime and adequate artificial light;</p> <p>i) a reading lamp for each bed;</p> <p>j) adequate ventilation to ensure sufficient movement of air in all conditions of weather and climate;</p> <p>k) heating where appropriate;</p> <p>l) adequate supply of safe potable water;</p>			
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73.7	21-01-2023 switch yard labor camp	Fuel wood		<p>The contractor is instructed to provide LPG for cooking and heating purposes. Use of Wood as fuel is strictly prohibited as per WB approved ESA, WB guidelines and ECP's.</p>	Immediate		
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73.8	21-01-2023 switch yard labor camp	Improper sewerage system		The contractor is instructed to connect the sewage water pipe to septic tank with immediate effect.	immediate		
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Note: The compliance was undertaken by the CGGC Contractor and reported in the Whatsapp group which was duly verified by DHC and WAPDA 2-3 days after the compliance by CGGC. Also it was noted that that there was no common room/ dinning hall for the Pakistani staff/labor

Table 2.12: Walk-Through Environmental Inspection Report 74

Report No. E-74

Date of Issuance: 27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
74.1	27-01-2023 DTA outlet office (MWs-01)	Littering		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		31-01-2023
74.2	27-01-2023 DTA outlet office (MWs-01)	Oil spill		Contractors is instructed to remove the spill replace the spill by fresh soil and sand. After that dispose off the toxicity soil as per ECPs and SOPs.	Immediate		31-01-2023

74.3	27-01-2023 DTB outlet (MWs-01)	Inadequate housekeeping		The contractor is instructed to keep and maintain good housekeeping at the site as per ECPs and SOPs.	Immediate		31-01-2023
74.4	27-01-2023 DTA outlet + near A1 sedimentation pond (MWs-01)	Empty fuel drums.	 	The contractor is instructed to remove empty drums from the site to designated site	Immediate	 	




74.5	27-01-2023 near A1 sedimentation pond (MWs- 01)	Open burning		<p>The contractor is instructed to stop This practice immediate.</p> <p>Open burning is strictly prohibited.</p> <p>Follow CEAPs and ECPs.</p> <p>Educate and conduct TBT training in every morning to the work force regarding any environmental non-compliances.</p>	Immediate		
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Table 2.13: Walk-Through Environmental Inspection Report 75



Report No. E-75

Date of Issuance: 28-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
75.1	28-01-2023 Switchyard Labor camps (CT-3)	Chemical Tanks		Chemical Tanks are in use for Drinking water, Cooking etc. It is strictly instructed the contractor to remove the chemical tanks from camps and provide safe tanks ASAP.	Immediate		

*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like use of fire wood. The sub contractor whose responsible for food of the labor was not complying to the WB policies. Other were rectified and reported through Whatsapp Group(Verified by DHC Field Staff)

							
75.2	28-01-2023 Switch yard Labor camps (CT-3)	Inadequate housekeeping		It is instructed the contractor keep maintain good housekeeping at all sites. Clean and clear all the sites ASAP.	Immediate		

			 <p>28-Jan-2023, 11:27</p>				
			 <p>28-Jan-2023, 09:59</p>				

			 <p>The top photograph shows a cluttered outdoor area with a blue metal container on the left. In front of it is a large, weathered tree stump. To the right, there are several red metal barrels and a large pile of coiled grey hoses and dry sticks. The ground is dirt and covered with some debris. A timestamp '28-Jan-2023, 10:00' is visible in the bottom left corner of the photo.</p> <p>The bottom photograph shows a grey metal container with its doors closed. In front of the container, there is a large amount of trash, including a bright green tarp, a blue plastic bag, and other pieces of waste. The ground is dirt and littered with debris. A timestamp '28-Jan-2023, 10:00' is visible in the bottom left corner of the photo.</p>				
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<p>75.3</p>	<p>28-01-2023 Switch yard Labor camps (CT-3)</p>	<p>Fuel wood</p>		<p>Fuel wood are used for cooking Purpose at both camps. It is instructed the contractor to provide LPG Gas ASAP.</p>	<p>Immediate</p>		
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			 <p>The top photograph shows a person in a green shirt stirring a large metal pot on a fire made of logs. A date stamp '28/01/2023, 10:01' is visible in the bottom left corner. The bottom photograph shows a pile of cut wood and cooking items on a concrete floor. A date stamp '28/01/2023, 10:01' is visible in the bottom left corner.</p>				
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75.4	28-01-2023 Switch yard Labor camps (CT-2)	Inadequate kitchen		Instructed the contractor to maintain good kitchen at all camps.	Immediate		
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Table 2.14: Walk-Through Environmental Inspection Report 76

Report No. E-76

Date of Issuance: 28-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
76.1	28-01-2023 CR-02 HT office (MWs-01)	Littering		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		

76.2	28-01-2023 CR-02 HT office (MWs-01)	Oil spill		<p>Contractors is instructed to remove the spill replace the spill by fresh soil and sand.</p> <p>After that dispose off the toxicity soil as per ECPs and SOPs.</p>	Immediate		
76.3	28-01-2023 DTB outlet (MWs-01)	Heavy dust		<p>The contractor is instructed to ensure wet drilling inside the tunnel and reduce dust emissions</p>	Immediate		



76.4	28-01-2023 CR-02 toilets (MWs-01)	Poor hygienic condition		The contractor is instructed to past a daily cleaning checklist and ensure cleaning on daily basis and disinfect the toilets at least once a week.	Immediate		
76.5	28-01-2023 CR-02 workshop (MWs-01)	Water sprinkling over oil spill		It was observed many time at CR-02 workshop workers are sprinkling water on oil spill. the contractor is instructed educate the workers and remove oil spill according to ECPs	Immediate		



*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like use of fire wood. The sub contractor whose responsible for food of the labor was not complying to the WB policies. Other were rectified and reported through Whatsapp Group(Verified by DHC Field Staff)

Table 2.15: Walk-Through Environmental Inspection Report 77

Report No. E-77

Date of Issuance: 30-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
77.1	30-01-2023 CR-02 workshop slope	Discarded food waste		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		1-02-2023

77.2	30-01-2023 CR-02 workshop slope	Oil spill	 <p style="text-align: right; font-size: small;">Jan 30, 2023 10:11:38 AM 272° W Index number: 4847</p>	<p>Contactors is instructed to remove the spill replace the spill by fresh soil and sand.</p> <p>After that dispose off the toxicity soil as per ECPs and SOPs.</p>	Immediate		1-02-2023
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<p>77.4</p>	<p>CR-02 sedimentation pond in front of batching plant.</p>	<p>Untreated water discharge</p>		<p>During routine inspection the addition of fresh water to the sedimentation tank was not witnessed</p> <p>It is instructed to the contactor to make practice of fresh water addition consistence to overcome PH level.</p>	<p>immediate</p>		
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Table 2.16: Walk-Through Environmental Inspection Report 78

Report No. E-78

Date of Issuance: 16-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
78.1	15-02-2023 CR-9	Inadequate housekeeping		Contractor is instructed to keep maintain good housekeeping at all sites. Clean and clear all the sites ASAP.	Immediate		

							
78.2	15-02-2023 CR-9			<p>Contractor is Instructed to remove contaminated soil with clean and fresh Soil as per SOPs provided in ECPs ASAP.</p> <p>Note: Submit incident report.</p>	Immediate		


							
78.3	15-02-2023 MAT Sedimentation Tank	Fuel wood		<p>Contractor is instructed to Clean and clear the sediments from Tank and remove the sludge and sand at dumping area Immediately.</p> <p>Keep cleaning practice twice a week.</p>	Immediate		



			 <p>15-Feb-2023, 16:56</p>				
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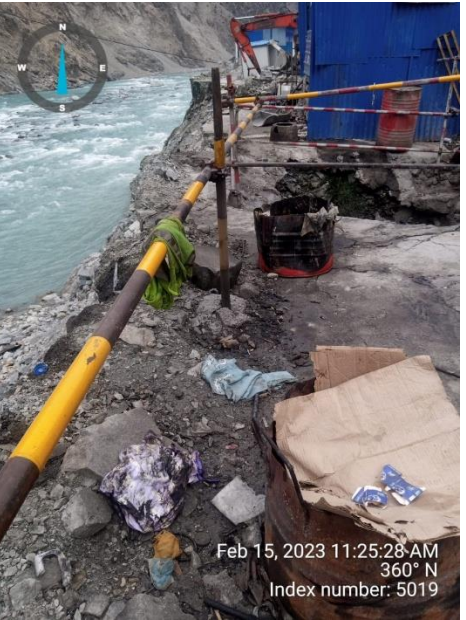
Table 2.17: Walk-Through Environmental Inspection Report 79

Report No. E-79

Date of Issuance: 16-02-2023-

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
79.1	15-02-2023 CR-02 office front	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>After that dump the litter at designated site.</p>	immediate		

79.2	15-02-2023 CR-02 workshop.	Oil spill		<p>The contractor is instructed to use spill Kit or spill sheet during mechanical work and remove the oil spill from the site by replacing contaminated soil with fresh soil and store contaminated soil in a drum temporary then transport to the designated site.</p>	immediate		
79.3	15-02-2023 CR-02 near audit 1 sedimentation tank	Inadequate housekeeping		<p>The contractor is instructed to keep away construction material from walkways and ensure good housekeeping at site.</p>	immediate		


79.4	15-02-2023 CR-02 near audit 1 sedimentation tank	Open burning		The contractor is instructed to arrange awareness session with all work force to avoid open burning of solid waste.	immediate		
79.5	15-02-2023 CR-02 workshop	Improper disposal of waste bin. (Workshop waste)		The contractor is instructed to dispose and discard the waste into the waste bins. After that dispose the waste into onward disposal site to overcome further scattering of waste.	immediate		



*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like use of fire wood and provision of spill kits for oil spills.. Other were rectified immediately and reported through Whatsapp Group(Verified by DHC Field Staff


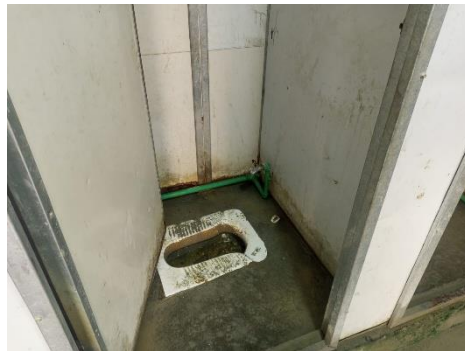
Table 2.18: Walk-Through Environmental Inspection Report 80


Report No. E-80

Date of Issuance: 16-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
80.1	16-02-2023 CR-02 HT office and workshop	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>Impart training to all site specific staff regarding Waste management</p>	Immediate		

80.2	16-02-2023 CR-02 HT office and batching plant waste oil place	Oil spill		<p>The contractor is instructed to use spill kit or spill sheet during mechanical work. Oil spillage is strictly prohibited as per ECP's and remove the contaminated soil from the site and replacing it with fresh soil and store contaminated soil in a drum temporarily then transport to the designated storage site.</p>	immediate		
80.3	16-02-2023 CR-02 workshop	Inadequate housekeeping		<p>The contractor is instructed to keep away construction material from walkways and ensure good housekeeping at site.</p>	Immediate		

80.4	16-02-2023 batching plant waste oil place	Improper placement of fuel drums. And poor shelter.		The contractor is instructed to provide concrete pavement foundation and put each drum on a drip tray and extend the shelter and protect the drums from weathering.	Immediate		
80.5	16-02-2023 CR-02 toilets	Poor Hygienic Toilets		The contractor is instructed to clean toilets on daily basis and paste a daily cleaning checklist on toilets and open clogging toilets as soon as possible	Immediate		


80.6	16-02-2023 CR-02 HT office	Animals		The contractor is instructed to stop the entrance of dogs at construction site. Animals which are PET or wild are not to be roaming on any construction site especially dogs (There is no rabies vaccine found in RHC Dasu nor DHQ Dasu.	immediate		
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*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like use of fire wood and provision of spill kits for oil spills and dirty toilets due to pebbles usage by the labor causing to choke the laterines... Other were rectified immediately and reported through Whatsapp Group (Verified by DHC Field Staff)


Table 2.19: Walk-Through Environmental Inspection Report 81


Report No. E-81

Date of Issuance: 17-02-2023


Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
81.1	17-02-2023 Coffer dam Sigloo near kitchen	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>Follow SOP's provided in ECP's</p>	immediate		

81.2	17-02-2023 Coffer dam Sigloo near workshop	Oil spill		<p>The contractor is instructed to use spill kit or spill sheet during mechanical work, storage of oil Drums and remove the contaminated sand/soil from the site by replacing the contaminated soil with fresh soil and store contaminated soil in a drum temporary then transport to the designated site.</p>	Immediate		
81.3	17-02-2023 Coffer dam Sigloo near workshop	Inadequate housekeeping		<p>The contractor is instructed to keep away construction material from walkways and ensure good housekeeping at site.</p>	Immediate		

81.4	17-02-2023 Coffer dam Sigloo site toilets and kitchen	Poor hygienic toilets and kitchen		<p>The contractor is instructed to clean toilets on daily basis and paste a daily cleaning checklist on toilets and increase number of toilets. Ensure availability of water all the time at these toilets.</p> <p>Also ensure cleanliness in kitchen at every time as soon as possible.</p> <p>The grey water from Toilets must not enter the Indus River.</p>	immediate		
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81.5	17-02-2023 Coffer dam Sigloo site labor camp	No drinking facility	clean water	 	The contractor is instructed to conduct water test on emergency basis and install a water filter near temporary camp at Coffer Dam Site and ensure provision of safe drinking water for workers on this site as per contractual provisions.	immediate		
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81.6	17-02-2023 Coffer dam Sigloo site kitchen	Poor mess facility		The contractor is instructed to provide a cook and Helper to serve food for workers and follow ECPs and CEAP and provide all facility in mess hall which are mentioned.	immediate		
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81.7	17-02-2023 Coffer dam Sigloo site labor camp	No hot water and no supply in washrooms		The contractor is instructed to provide hot water in washrooms and provide proper water supply on 24 hrs basis in each washroom as well.	immediate		
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*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like use of fire wood and provision of spill kits for oil spills and dirty toilets due to pebbles usage by the labor causing to choke the laterines... Other were rectified immediately and reported through Whatsapp Group(Verified by DHC Field Staff

Table 2.20: Walk-Through Environmental Inspection Report 82

Report No. E-82

Date of Issuance: 18-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
82.1	18-02-2023 CT-2	Waste near CT-2		Contractor is instructed to keep the site clear and ensure Zero waste on site policy. It is further instructed that that waste bins should be installed at this site and all staff members of CGGC either Labor or Staff should be apprised these things in the induction training as well as refresher trainings.	Immediate		
82.2	18-02-2023 CR-02	Oil spill near Adit A		Contractor is Instructed to remove contaminated soil with replace the contaminated soil with clean and fresh Soil as per SOPs provided in ECPs.	Immediate		

82.3	18-02-2023 Thoki Crushing Plant	Oil Spill		Contractor is Instructed to remove contaminated soil with replace the contaminated soil with clean and fresh Soil as per SOPs provided in ECPs.	Immediate		





82.5	18-02-2023 Adit Tunnel A	Waste at Slope		Contractor is instructed to keep the slopes clean from the waste and clear the site with immediate effect. Also impart training/ awareness session for all staff of this site regarding littering and waste management clauses. If the staff is not complying impose fines on them to ensure smooth environmental compliance.	Immediate		
82.6	18-02-2023 Near Traffic diversion Tunnel along KKH	Dust		Contractor is instructed to keep to ensure water sprinkling on daily basis at least thrice a day.	Immediate		


Table 2.21: Walk-Through Environmental Inspection Report 83

Report No. E-83

Date of Issuance: 03-03-2023-

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
83.1	03-03-2023 CR2 HT office	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>After that dump the litter at designated site.</p>	immediate		

83.2	03-03-2023 uchar old crushing plant	Inadequate housekeeping		The contractor is instructed ensure good housekeeping at site.	immediate		
83.3	03-03-2023 uchar old crushing plant	Improper placement of fuel drums		The contractor is instructed to keep fuel drum in a concrete banded palce and provide proper shelter and protect from rains as soon as possible.	immediate		

83.4	03-03-2023 batching plant CR2	Untreated water		<p>The contractor is instructed to remove sludge from the pound and install a permanent fresh water pipe that should be fix with one location and ensure addition of fresh water for all time as soon as possible.</p>	immediate		
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83.5	03-03-2023 uchar old crushing plant + CR2 HT office	animals		The contractor is instructed to remove animals from construction site which is strictly prohibited and stop entrance of animals in construction site.	immediate		
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*Note: The Contractor rectified some of the issues highlighted in this WTEIR but some were not addressed till April 2023 like animals on the site, provision of spill kits for oil spills and enough waste bins. Other were rectified immediately and reported through Whatsapp Group (Verified by DHC Field Staff)



Table 2.22: Walk-Through Environmental Inspection Report 84

Report No. E-84

Date of Issuance: 04-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
84.1	04-03-2023 CT2 + switchyard labor camp	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>After that dump the litter at designated site.</p>	immediate		

84.2	04-03-2023 CT2	Oil spill		The contractor is instructed to use spill Kit or spill sheet during mechanical work and remove the oil spill from the site by replacing contaminated soil with fresh soil and store contaminated soil in a drum temporary then transport to the designated site.	immediate		
84.3	04-03-2023 CT2 + switchyard labor camp	Poor hygienic toilets and kitchen		The contractor is instructed to clean toilets on daily basis and paste a daily cleaning checklist on toilets and increase toilets. And also make ensure cleanliness in kitchen at every time as soon as possible.	immediate		


84.4	04-03-2023 CT2 switchyard labor camp +	Fuel woods		The contractor is instructed to provide LPG stove and oven for workers as soon as possible.	immediate		
84.5	04-03-2023 switchyard labor camp	Poor sewerage system		The contractor is instructed to connect toilets pipe to the septic tank as soon as possible.	immediate		


(*Note: The contractor had been repeatedly instructed to remove the waste from the slopes, stop using fire wood for cooking, dirty toilets and kitchen space but these were pending issues till April 2023). DHC Field Staff continued to monitor and push the contractor to comply with the ECP's.

Table 2.23: Walk-Through Environmental Inspection Report 85

Report No. E-85



Date of Issuance: 11-03-2023



Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
85.1	11-03-2023 CT2 near kitchen	Solid waste, littering		<p>The Contactor is instructed to place waste bins at the site.</p> <p>collect the solid waste from different place and put them into the bins at the site</p> <p>After that dump the litter at designated site.</p>	immediate		

85.2	11-03-2023 CR9 generator room and CR9 work shop	Oil spill		<p>The contractor is instructed to use spill kit or spill sheet during mechanical work and remove the oil spill from the site by replacing contaminated soil with fresh soil and store contaminated soil in a drum temporary then transport to the designated site.</p>	immediate		
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85.3	11-03-2023 CT2 toilets and kitchen	Poor hygienic toilets and kitchen		<p>The contractor is instructed to clean toilets on daily basis and paste a daily cleaning checklist on toilets and increase toilets. And also make ensure cleanliness in kitchen at every time as soon as possible.</p>	immediate		
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85.4	11-03-2023 CT2 kitchen	Fuel woods		The contractor is instructed to provide LPG stove and oven for workers as soon as possible.	Reminder 2		
85.5	11-03-2023 CT2 toilets	Poor sewerage system		The contractor is instructed to connect toilets pipe to the septic tank as soon as possible.	immediate		

85.6	11-03-2023 CT-2 and CR9 Grease place	Improper placement of fuel drums.		The contractor is instructed to develop concrete banded palace for fuel storage place approximately lined should be 6 inches height as soon as possible	immediate		
85.7	11-03-2023 CR9 sedimentation pond	Sedimentation pond full with sludge		The contractor is instructed to clean the as soon as possible and add fresh water continually at every time	immediate		


85.8	11-03-2023 CT-2 toilets	Poor sanitation facility		The contractor is instructed to make functional hand washing basin and keep clean at every time.	immediate		
85.9	11-03-2023 CT2 sedimentation pond	Extra pipe		The contractor is instructed to remove extra pipe from the pond which is not for any use	immediate		


(*Note: The contractor complied on most of the non compliances like sedimentation tank, and toilets cleaning but failed to replace the fire wood as the CGGC claims that there is no budgetary provision for LPG gas to be provided to all labor.) DHC Field Staff continued to monitor and push the contractor to comply with the ECP's


Table 2.24: Walk-Through Environmental Inspection Report 86


Report No. E-86


Date of Issuance: 26-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
86.1	24-03-2023 CR-9 Workshop	Solid Waste		It is instructed to the contractor to keep the site clear from solid waste .	Immediate		


<p>86. 2</p>	<p>24-03-2023 CR-09 Batching Plant</p>	<p>Oil spill</p>		<p>The contractor is Instructed to remove contaminated soil and replace it with clean and fresh Soil as per SOPs provided in ECPs. Treat this issue as urgent and report to the Engineer's office.</p>	<p>Immediate</p>		
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86. 3	24-03-2023 Power house	Oil Spill	 <p>The top photograph shows a spill of yellowish-green liquid on a concrete floor. A yellow loader is visible in the background. The bottom photograph shows a spill of a similar liquid in a trench or excavation area, surrounded by dark soil.</p>	The contractor is Instructed to remove contaminated soil with clean and fresh Soil as per SOPs provided in ECPs submit incident report.	Immediate		
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			 <p>24-Mar-2023, 09:20</p> <p>24-Mar-2023, 09:17</p>				
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<p>86. 5</p>	<p>24-03-2023 Powerhouse and Sedimentation Pond CR-09</p>	<p>Sludge created in the Powerhouse.s</p>		<p>The contractor is instructed to remove the sludge from Powerhouse and from Outside the Sedimentation pond and dump into designated spoil disposal site.</p>	<p>Immediate</p>		
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<p>86. 6</p>	<p>24-03-2023 CT-2</p>	<p>Oil Spill</p>		<p>The contractor is Instructed to remove contaminated soil with clean and fresh Soil as per SOPs provided in ECPs.</p>	<p>Immediate</p>		
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			 <p>The top photograph shows a pile of grey, irregularly shaped stones and debris on a dirt ground. The bottom photograph shows a stack of long, brown pipes next to a truck tire on a dirt ground.</p>				
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86. 7	24-03-2023 CT-2	Fuel wood	 	The contractor is instructed to provide LPG instead fuel wood	Immediate		
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<p>86. 8</p>	<p>24-03-2023 CT-2</p>	<p>Improper Placement Chemical Tanks</p>		<p>It is instructed to the contractor to construct concrete platform under the chemical tanks and placed all the tanks on the platform with protection bund.</p>	<p>Immediate</p>		
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2.5.2 Notices and Letters

In addition to the 19 WTEIRs discussed in the earlier section, the Engineer has issued notices to the Contractor on several persistent issues during the reporting period. There were 24 Letters/instructions issued to the Contractor during the reporting period of Jan-March 2023 (additional details are given in chapter 10).

2.5.3 Quarterly Monitoring of Air, Noise, Water and Wastewater

The Contractor has not yet conducted any quarterly environmental monitoring through a third party monitoring laboratory. Negotiations with a third-party environmental monitoring laboratory (Bureau Veritas) were underway during 1st quarter of 2023 which had to be approved from “The Engineer” on behalf of Contractor CGGC.

The Third-Party Environmental Monitoring Laboratory i.e., Bureau Veritas failed to produce KP-EPA Registration certificate. After a long session of discussions among the concerned parties as well as with WAPDA Environmental Staff, Contractor (CGGC) requested time up till 25th of Jan 2023 for the new Third Party Laboratory i.e. Bureau Veritas for quarterly environmental monitoring. So far the Bureau Veritas has failed to produce Registration Certificate from Federal EPA nor from KPK EPA. After the Therefore the matter is still pending with the contractor, CGGC was advised by DHC to look for a new laboratory as Bureau Veritas has failed to full fill statutory requirements. The contractor was still looking for a new third party laboratory by end of the March 2023.

2.5.4 Spot Monitoring of Wastewater Quality

Monthly spot monitoring was carried out during the reporting quarter to assess the quality of wastewater. The wastewater discharges from the construction sites are collected in the sedimentation ponds and assessed monthly for turbidity, conductivity, pH and dissolved oxygen (DO). These tests are conducted by the Contractor in the presence of the Environment team of PMU and DHC using portable equipment. The pH level in most of the samples showed high alkalinity due to the use of admixture chemicals with concrete inside the tunnels for shotcreting. Fortunately, the receiving body is of huge volume (River Indus) and the dilution factor resolves the issue which was confirmed from downstream surface water quality testing. The surface water was tested downstream of the sedimentation tanks to assess the pH value which was the same as was at upstream of the sedimentation tanks. The coordinates of the sampling locations are given below:

Table 2.14: Location of the Spot Monitoring

Sr.No	Location	Coordinates
Surface water		
1	Upstream Indus River at Uchar	35° 20' 31.83" N 73° 12' 17.76" E
2	Downstream Indus River near Kass area truss bridge	35° 17' 27.27" N 73° 13' 14.83" E
Wastewater		
1	Uchar crusher plant sedimentation pond	35° 20' 25.56" N 73° 12' 17.76" E
2	Uchar Batching plant sedimentation pond(CR-02)	35° 18' 31.9" N 73° 12' 01.71" E
3	Sedimentation tank near Adit-1	35° 18' 16.87" N 73° 10' 57.78" E
4	Sedimentation tank near MAT	35° 17' 21.15" N 73° 10' 35.55" E
5	Sedimentation tank at Khoshe batching plant(CR-09)	35° 17' 07.72" N 73° 10' 48.27" E
6	Sedimentation Tank at CT-02	35° 17' 48.13" N 73° 12' 29.73" E

Table 2.15: Results of Spot Monitoring MW-01

Sr. No.	Quarter	Location	Turbidity (NTU)	Conductivity (uS/cm)	pH	DO mg/l	Temperature, °C	visual presence of Petroleum	Remarks
1	Jan	Uchar crusher plant sedimentation pond	>1000	4.3	9.5	9.9	6.5	Nil	
		CR-02 Batching plant sedimentation pond	116.8	295	11.1	9.3	5.9	Nil	
		Sedimentation tank near Adit-1	968	317	10.8	8.2	11.6	Nil	
		CT-02 sedimentation Pond	330	1871	11.4	7.8	15.4	Nil	
		Uchar crusher plant sedimentation pond	>1000	103.3	9.7	4.0	10.2	Nil	
		CR-02 Batching plant	594	237	11	8.54	12	Nil	

2	Feb	sedimentation pond							
		Sedimentation tank near Adit-1	473	193.8	9.6	6.0	14.4	Nil	
		CT-02 sedimentation Pond	544	1291	11.4	6.7	18.7	Nil	
3	Mar	Uchar crusher plant sedimentation pond	976	126	10.2	5.1	13.9	Nil	
		CR-02 Batching plant sedimentation pond	135.4	477	11.2	6.6	15.9	Nil	
		Sedimentation tank near Adit-1	-	-	-	-	-	Nil	Sedimentation Tank was full of sludge therefore no sampling/testing was conducted from this waste water tank @ Adit-01
		CT-02 sedimentation Pond	76	1066	11.1	6.1	20	Nil	
NEQS			200NTU		6-8		<40		

Table 2.16: Results of Spot Monitoring MW-02

Sr. No.	Quarter	Location	Turbidity (NTU)	Conductivity (uS/cm)	pH	DO mg/l	Temperature, °C	The visual presence of Petroleum Product	Remarks
1	Jan	Sedimentation tank near MAT	407	27.3	10.7	4.60	11.2	Nil	
		Sedimentation tank at Khoshe batching plant	250	98.1	9.98	5.01	7.5	Nil	
2	Feb	Sedimentation tank near MAT	966	503	11.2	5.8	13.6	Nil	
		Sedimentation tank at Khoshe batching plant	317	130	10.3	5.5	11.6	Nil	
3	Mar	Sedimentation tank near MAT	-	-	-	-	-	Nil	
		Sedimentation tank at Khoshe batching plant	52.5	706	11.4	5.6	16.9	Nil	
NEQS			200 ntu		6-8		<40		

2.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 2.17: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	Geology team of the Engineer supervised this aspect during the reporting quarter and issued necessary instructions to the Contractors for the areas where there was a potential of landslide. As far as the 37 landslides are concerned that are coming in the reservoir area and the effect will be monitored once the dam impounding is started.
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Quarterly visual inspection carried out. No occurrence was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of construction sites. The locations of sampling can be same locations of new locations recommended by the CSC.	Sampling and analysis of the wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	The Contractor is in negotiation with Bureau Veritas (B.V) Environmental laboratory to conduct the third-party environmental monitoring. But till the end of this Quarter (Jan-March 2023) B.V failed to submit certificate of registration from EPA KPK neither from Feral EPA. From March 2023 the CGGC contractor is looking for a new Laboratory whom can be hired for third party Laboratory.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspections were carried out during the quarter and instructions were given to contractor for compliance. The Contractor was strictly instructed to increase water sprinkling frequency. The dust is under control.

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5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	The Contractor is in negotiation with Bureau Veritas (B.V) Environmental laboratory to conduct the third-party environmental monitoring. But till the end of this Quarter (Jan-March 2023) B.V failed to submit certificate of registration from EPA KPK neither from Feral EPA. From March 2023 the CGGC contractor is looking for a new Laboratory whom can be hired for third party Laboratory.
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Quarterly visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	The Contractor is in negotiation with Bureau Veritas (B.V) Environmental laboratory to conduct the third-party environmental monitoring. But till the end of this Quarter (Jan-March 2023) B.V failed to submit certificate of registration from EPA KPK neither from Feral EPA. From March 2023 the CGGC contractor is looking for a new Laboratory whom can be hired for third party Laboratory.
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	The Contractor is disposing the spoil in the designated spoil dumping site at Khoshe and is also transporting the spoil to the crushing plant at Uchar as raw material for aggregate
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Quarterly monitoring was carried out and contractor disposed the waste in Barseen area as a temporary arrangement till the landfill site is finalized by the DHPP.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Quarterly monitoring was carried out. The spills were recorded during the quarter and contractor was instructed to rectify the issue.
11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Quarterly monitoring was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and Sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Weekly Monitored. The contractor provided Filtered water in large water coolers to the workers at the sites.

2.7 Key Performance Indicators

The key performance indicators identified in the ESA³ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table:

³ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 2.18: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of exceeding values against NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

Table 2.19: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Contractor Mobilization and Demobilization	1.1 Traffic Management						None reported in this quarter
	1.2 Soil Erosion and Contamination						-do-
	1.3 Air Quality						-do-
	1.4 Noise						-do-
	1.5 Public Safety						-do-
	1.6 Damage to Infrastructure						-do-
2. Contractor's Camp	2.1 Soil and Water Contamination						-do-
	2.2 Air Quality						No quarterly environmental monitoring is done
	2.3 Vegetation loss					Number of trees felled:0	
	2.4 Noise						No monitoring is done
	2.5 Health and Safety						Covered under OHS Quarterly Report
	2.6 Social and Gender Issues						Covered under Social Quarterly report
	2.7 Damage to PCRs					Number of chance finds: 0	None reported this quarter
	2.7 Increased load on local services						Covered under Social Report
3. Transportation of Equipment	3.1 Traffic Management						Two letters were issued on the hauling of oversized equipment
	3.2 Soil Erosion and Contamination						None reported
	3.3 Air Quality						-do-
	3.4 Noise						-do-
	3.5 Public Safety					Number of trainings provided:	Covered under social report
	3.6 Damage to infrastructure						None reported
4. Construction of Dam, Powerhouse and other Infrastructure	4.1 Changes to topography						-do-
	4.2 Landslides					Number of landslides: Number of blasting events:	-do-
	4.3 Soil erosion				2	Number of incidences borrow-pits not covered:	-do-
	4.4. Soil and water contamination				4		
	4.5 Water pollution				5		
	4.6 Air Quality	Nil					
	4.7 Health and Safety					Covered under OHS	Covered under OHS report
	4.7 Noise and vibration				5		-do-
	4.8. Landscape and visual Intrusion	Nil					Nil
4.9. Vegetation Loss	Nil				The number of trees felled:0 The number of saplings planted:0 The survival rate of samplings after one	-do-	

						year: 0	
	4.10. Fauna/wildlife	Nil				Number of reports of sighting- key wildlife species	-do-
	4.12 Mortality of fish	Nil					-do-
	4.13 Impact on ecological connectivity						Covered under BEDMP
	4.14 Damage to infrastructure						None reported
	4.15 Damage to PCRs	Nil				Number of chance finds:0	-do-
	4.16. Loss of access to villages	Nil				Presence of new roads:	-do-
	4.17 Disturbance to visual landscape and natural habitats	Nil					-do-
	4.17. Social conflicts due to labour influx						Covered under Social Report
	4.18 Local cultural values						do
	4.20. Health impacts on local community					Number of patients being treated in local hospitals:	-do-
	4.21 Increased load on local services and supplies						-do-
5. Quarry Operation	5.1 Changes to topography 5.2 Landslide 5.3 Soil erosion 5.4 Soil and water contamination 5.5 Air Quality	Nil					No quarry operation started
	5.6 Health and Safety 5.7 Noise and Vibration 5.7 Landscape and Visual Intrusion 5.8 Vegetation loss 5.9 Fauna / Wildlife 5.10 Damage to infrastructure 5.12 Damage to PCRs						
6. Spoil Area Management	6.1 Changes to topography 6.2 Landslide 6.3 Soil erosion 6.4 Air Quality 6.5 Landscape and Visual Intrusion 6.6 Vegetation loss	Nil					
7. Waste Management	7.1 Soil and water contamination 7.2 Odor		7				7 incidences of waste management are mentioned in WTEIRs of this quarter

2.8 NCR Issued in this Quarter

During the quarter, three NCRs were issued to the MW-01 and MW-02 contractor and details are given in the following table.

Table 2.20: Non-conformance reports (NCRs) issued during the quarter

Sr. No.	Contract	Subject	Issuance Date
1	MW-01	Persistent Oil Spills at Construction Sites	22 nd Feb 2023
2	MW-02	Persistent Oil Spills at Construction Sites	22 nd Feb 2023
3	MW-01	Dumping of Sludge material on the right bank of the Indus River near coffer dam area and Diversion Tunnel-C.	15 th March 2023

2.9 Overall Compliance Status – Tri-Partite monthly Meetings

During the quarter, monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in Annexure A.

The Major pending issues are:

- Third party environmental monitoring
- Adaptive measures for the closure of NCRs
- Status of Air dispersion modelling for the proposed Seo crusher plant
- Appointment of Environmental Officer

3 KKH-01 Contract

3.1 Overview of Contracts

A brief overview of the KKH-01 contract is given in Table 3.1. The KKH-01 contract works are related to the construction of 25.2 km road along with the tunnels and bridges.

Table 3.1: Overview of KKH-01 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu-KKH-01
2	Contractor Name	Relocation of Karakorum Highway (KKH) RD0+000 to RD 25+200
3	Contractor	China Civil Engineering Construction Corporation (CCECC)
4	Commencement Date	March 16, 2015
5	Contract Completion Date	Feb 20, 2017
6	Updated Completion Date	July 22, 2024

3.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

3.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 3.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 3.3.

Table 3.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A. Worker's Camps				
1	Chinese Workers Camp	Uchar/Shaal/Chuhang/Dasu/Zaal	About 101 workers live in this camp	
2	Pakistan Workers Camps	Uchar/K4/K8/K3/K6/K9/Logro-B/Uchar & Dugah	About 842 workers live in these camp	
B. Crushing/Batching Plants				
1	Crushing Plant	Uchar & K-05, Kaigah Bypass		The crushing Plant in Kaigah is under construction
2	Batching plant	Uchar & K-06, Dugah Tunnel		There are three batching plant for KKH-01. One is at K-06 and One is at Uchar and at Dugah Tunnel outlet (Under construction)
C. Other Facilities				
1	Construction Yard	Uchar, Kaigah		The Kaigah Facilities are currently under construction.
2.	Explosive Magazine	Barseen	20 Ton capacity	

Table 3.3: Contractor's ESHS Staff

Sr. No.	Position	KKH-01 Contract	Remarks
1	Manager EHS	Manzoor Hussain	
2	Environmental Officer	Vacant	
3	Environmental Supervisor	Arif Hussain	
4	Environmental Supervisor	Yasser Hussain	
5	Environmental Supervisor	Rahat Hameed	

3.4 Construction Activities at KKH-01

Details of construction activities conducted during the reporting period are shown in Table 3.4.

Table 3.4: Construction Activities in KKH-01 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	K4 Tunnel	<ul style="list-style-type: none"> Excavation and primary support works of K-4 Tunnel outlet RD=K4+471 continued during the month and 155m heading completed. Excavation and primary support works of K-4 Tunnel outlet side RD=K4+355 continued during the month and 271m heading and benching 139m completed. Preparation for secondary lining assembling of formwork completed. 	Continued during the quarter

2	Logro-A Tunnel inlet	<ul style="list-style-type: none"> • Excavation and primary support works of Logro-A tunnel RD=K9+333 continued during the month and 181m heading completed. • Excavation and primary support works of Logro-A tunnel inlet side RD=K9+396 continued during the month and 244m heading, benching 120m completed. Preparation for secondary lining assembling of formwork in progress. • Excavation and primary support works of Logro-A tunnel inlet side RD=K9+396 continued during the month and 244m heading, benching 120m completed. Preparation for secondary lining assembling of formwork in progress. • Excavation and primary support works of Logro-A tunnel inlet side RD=K9+449 continued during the month and 297m heading, benching 256m completed. Preparation for secondary lining assembling of formwork. 	Continued during the quarter
3	Khoshe Bypass Road	Improvement works including construction of retaining walls & laying of RCCP for Khoshe Bypass Road continued during the month.	Continued during the quarter
4	Uchar Bridge	<ul style="list-style-type: none"> • Preparatory works for Uchar Bridge resumed and continued during the month. Preparation for slope protection works on Dasu direction started and continued during the month. • Preparation for slope protection works on right side pier 01 of Uchar Bridge suspended during the month. • Construction of access road on left side pier 02 of Uchar Bridge started and continued during the month. 	Continued during the quarter
5	Barseen Bridge	<ul style="list-style-type: none"> • After backfilling for camp area of Barseen Bridge in Kaigah direction construction works started & continued during the month. • Barseen Bridge in Kaigah direction Camp construction continued during the month. Construction of access road for Abutment 02 in Kaigah direction started and continued. 	Continued during the quarter
6	Uchar Contractor Camp	Construction of camp, workshop and batching plant in Uchar continued during the month.	Continued during the quarter
7	Kaigah Contractor Camp	<ul style="list-style-type: none"> • Backfilling with stone masonry for the retaining wall on Kaigah Bypass suspended during the month. • Construction of camp, workshop and batching plant in Kaigah for Dugah tunnel continued during the month. 	Continued during the quarter
8	Logro-B Tunnel	<ul style="list-style-type: none"> • Installation of serial arches and Canopy pipes at outlet area of Logro-B during the month started and continued. • Installation of serial arches and Canopy pipes at outlet area of Logro-B during the month continued. 	Continued during the quarter
9	Zero Point	Slope protection works at Zero point third bench and excavation activities at third bench continued during the month.	Continued during the quarter

3.5 Construction Supervision and Environmental Compliances



3.5.1 Site Inspections and WTEIRs

Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, Joint Inspections with WAPDA on every Tuesday of the week for one or two contracts of DHPP, Schedule starting from 14th of Feb 2023, walk-through environmental inspections have been conducted at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). The Contractor has also been instructed to address these issues within a suggested timeframe. The Contractor has rectified these non-compliances and submitted the report with the actions taken. The WTEIRs, consisting of both non-compliances and rectifications, are given in the following tables





Table 3.5: Walk-Through Environmental Inspection Report 40





Report No. E-40





Date of Issuance: 19-01-2023


Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
40.1	19-01-2023 K4 Tunnel Portal	Fuel/ Oil Spills Spillage at slope		Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site. Dispose off the contaminated soil in a drum. Dispose of the contaminated soil as per SOPs provided in ECP	Immediate		27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
40.2	19-01-2023 K4 Tunnel Portal and Camp	Solid waste along the slopes		The Contractor is strictly instructed to halt this process and clean the existing mess created along the slopes. The Contractor is instructed to arrange an awareness session with the staff regarding waste management. Provide waste bins at the location.	Immediate		27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
							27-01-2023
40.3	19-01-2023 K4 Camp	Erosion along the slope		The contractor is instructed to arrange proper sanitation system as per the IFC guidelines for construction camps. By arranging proper sanitation system the soil erosion could be stopped. This needs your immediate attention.	Immediate		27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
							27-01-2023
40.4	19-01-2023 K4 Tunnel Camp	Untidy Washrooms		The Contractor is instructed to clean the washrooms and arrange water for flushing otherwise this will be of no use at all. A bucket and a mug or Muslim shower should be arranged ASAP.	Immediate		27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
							27-01-2023
40.5	19-01-2023 K4 Camp	Oil spill		This issue has so many times been instructed but either there is no capability or well to implement the protocol. The Contractor is instructed to clean the area as per the protocol and report.	Immediate		27-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
40.6	19-01-2023 K9 camp	Overcrowded accommodation		<p>Contractor accommodate more than 10 Workers at each room.</p> <p>Contractor is instructed refer to IFC guidelines.</p> <p>Density standards are expressed either in terms of minimal volume per resident or of minimal floor space. Usual standards range from 10 to 12.5 cubic meters (volume) or 4 to 5.5 square meters (surface).</p> <p>If the above condition is met then 2 to 8 persons per room can be accommodated.</p> <p>The Contractor is instructed to increase the rooms and facilitate their workers for good productivity.</p>	Immediate	Accommodation over crowded issue has been communicated with higher management and waiting for their response to build more rooms	27-01-2023










Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
40.7	19-01-2023 K9	Improper Sludge disposal		The Contractor is instructed to submit the disposal plan of the improperly designed sedimentation tank. Spreading sludge this is unacceptable. It should be hauled to the designated site only.	Immediate		27-01-2023
40.8	19-01-2023 K9	Empty Chemical tanks		The Contractor is instructed to remove the empty chemical drums and send it to the vendor for reuse/refill/recycling.	immediate	Contractor is keeping empty chemical (sigunit) drums for temporarily. They are removing drums following their schedule	





Table 3.6: Walk-Through Environmental Inspection Report 41


Report No. E-41





Date of Issuance: 21-01-2023-


Sr. No	Date and Location of Inspection	Environment observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
41.1	21-01-2023 K-04 Tunnel steel plant slope + office slope	Littering		The Contactor is instructed to place waste bins at the site. collect the solid waste from different place and put them into the bins at the site Furthermore, It is also reminded that training to all staff should be done on regular basis like every fortnightly on waste management.	immediate		25-1-2023

41.2	21-01-2023 K-04 Tunnel workshop	Oil spill		<p>The contractor is instructed to remove oil spill from site by replacing contaminated soil with fresh soil and store contaminated soil in a drum temporarily at a storage space with a impermeable base and a boundary wall/fence.</p>	Immediate		25-1-2023
41.3	21-01-2023 water filling station	Improper disposal of solid waste.		<p>The contractor is instructed to clean the slope and dispose off solid waste at designated dumping site which is approved by "The Engineer". Also impart training to all site staff and start imposing fines if the staff is</p>	Reminder		25-1-2023

41.4	21-01-2023 K-09 sedimentati on pound	Improper disposal of sludge and no signage	 	<p>committing non-compliance.</p> <p>The contractor is instructed to add fresh water and install sediment traps before the sedimentation pond and install appropriate signage.</p> <p>Ensure disposal of waste water in a form which is compliant to NEQS and the sludge from the sedimentation pond at designated dumping site.</p>	Immediate	 	25-1-2023
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41.5	21-01-2023 K-09 labor camp + K4 labor camp	Sub-standard accommodation		<p>There are 16 rooms and more than 100 workers are at k4 and at k9 182 workers and 20 rooms each room contain 7,8 and 10 workers. The rooms are in capable of providing shelter from water during raining season and room is not having a proper roof. The contractor is instructed to provide proper bedding for each worker i.e., 1 bed for a single labor/staff and a closets in side every room. The rooms should have a proper roof rather than putting CGI sheets which do not stop rain water even.</p>	immediate	Accommodation over crowded issue has been communicated with senior management, we are waiting for their response to construct more new rooms	25-01-2023
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41.6	21-01-2023 K-09 labor camp + K4 labor camp	Geyser is not functional		The contractor is instructed to provide hot water for workers. Repair geyser with immediate effect.	Immediate		25-1-2023
41.7	21-01-2023 K4 labor camp	Untreated water		The contractor is instructed to connect sewage water to septic tank with immediate effect.	Immediate		25-1-2023

41.8	21-01-2023 K-09 labor camp + K4 labor camp	Poor Sanitation Facilities		<p>The contractor is instructed to ensure following instructions (as per ILO Standards): Adequate sanitary facilities should include a minimum of one toilet, one wash basin and one tub or shower for every six persons. They should be provided at a convenient location which prevents nuisances. Sanitary facilities provided should meet minimum standards of health and hygiene. They should also provide reasonable standards of comfort,</p>	immediate		25-1-2023
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				<p>including hot and cold fresh running water. There should be separate sanitary facilities provided for men and for women. Sanitary facilities should have ventilation to the open air, independently of any other part of the accommodation. Soap and hygienic paper should be adequately stocked.</p>			
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***Note:** There is no Mess Hall for workers, No waiters for serve foods, No recreational facilities for workers. At K9 drinking water providing from water sprinkler for workers. Total workers were 182 at the time of inspection. The contractor CCECC rectified most of the non compliances but left only ones which had a construction/procurement aspect involved in it.



Table 3.7: Walk-Through Environmental Inspection Report 42



Report No. E-42

Date of Issuance: 16-02-2023



Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.1	16-02-2023 K4	Fuel/ Oil Spills		<p>Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site.</p> <p>Dispose of the toxicities Soil in a drum. Dispose of the contaminated soil as per SOPs provided in ECP</p> <p>Note Submit incident report</p>	Immediate		20-02-2023



Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.2	16-02-2023 K9 Tunnel Portal	Waste at slope		Contractor is Instructed to keep the site clean and provide the proper waste bins at all sites. Also impart training for waste management to all site staff.	Immediate		20-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.3	16-02-2023 K4 Camp	Improper drainage		Contractor is instructed to keep proper drainage system at construction site and Camp immediately. Follow ECP's and EMP for addressing Water Supply and Drainage issues.			20-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.4	16-02-2023 K4 Tunnel	Open defecation		Contractor is Instructed to construct / place portable Toilets at/ near Tunnel portal immediate.	Immediate		20-02-023

42.5	19-01-2023 K9 Tunnel	Oil spill		<p>Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site. Dispose of the toxicities Soil in a drum. Contractor is instructed to construct banded area for storage.</p>	Immediate		20-02-023
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Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.6	16-02-2023 K9	Spare parts	 <p>The top photograph shows a pile of rocks and debris on a dirt surface next to a metal structure. The bottom photograph shows a cluttered indoor or semi-enclosed area with various tools, a red toolbox, and other debris scattered on the ground.</p>	Contractor is instructed to remove the spare parts from site and arrange proper area for parts.		 <p>The top photograph shows a close-up of a worker in a yellow safety vest and orange boots cleaning up debris. The bottom photograph shows two workers in safety gear (yellow and green vests, yellow hard hats) working together to clear a cluttered area inside a structure.</p>	20-02-023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.7	16-02-2023 K9	Sludge		Instructed the contractor to remove the sludge from site and dump at dumping site and do not throw the sludge at site at Future.	Immediate		20-02-2023
42.8	16-02-2023 K9	Chemical Tank		Instructed the contractor to remove the chemical tanks from site and replace at proper storage ASAP.		Contractor is keeping diesel in the drums for the purpose of generator fuel on temporarily basis. They are Instructed to remove the tanks from site and replace at proper storage ASAP.	20-02-2023





Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
42.9	16-02-2023 K4	Dust		Instructed the contractor to ensure the water sprinkling each site on dust.			20-02-023

Table 3.8: Walk-Through Environmental Inspection Report 43

Report No. E-43

Date of Issuance:18-02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
43.1	18-02-2023 K-04 tunnel steel plant slope + office slope	Littering		The Contactor is instructed to place waste bins at the site. collect the solid waste from different place and put them into the bins at the site Follow SOP's provided in ECP's.	immediate		20-02-023


43.2	18-02-2023 K-04 generator room	Oil spill		The contractor is instructed to remove oil spill from site by replacing contaminated soil with fresh soil and store contaminated soil in a drum temporarily and then transport to the designated site.	immediate		20-02-023
43.3	18-02-2023 K4 labor camp	Poor sewerage system		The contractor is instructed to connect grey water to septic tank immediately	Reminder 3		20-02-023

43.4	18-02-2023 K4 road	Heavy dust		<p>The contractor is instructed to install speed limit signboards at different location on road and reduce dust emissions by ensuring water sprinkling and increase water sprinkling frequency on dirt roads.</p>	immediate		20-02-2023
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Table 3.9: Walk-Through Environmental Inspection Report 44

Report No. E-44


Date of Issuance: 24 -02-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
44.1	23 -02-2023 Kaigah Tunnel	Fuel/ Oil Spills		Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site. Dispose of the toxicities Soil in a drum. Dispose of the contaminated soil as per SOPs provided in ECP	Immediate		


			 				
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44. 2	23-02-2023 Kaigah Tunnel Portal	Waste, Littering		Instructed the contractor to keep clean the site and provide the proper waste bins at all sites.	Immediate	

			 				
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<p>44. 3</p>	<p>23-02-2023 Kaigah Tunnel Portal</p>	<p>Nominal Washroom for more than 35 Workers</p>		<p>Contractor is instructed to construct the Washrooms for worker at camp and Site as well. No washroom at camp and camp. Workers doing open defecation at site which is prohibited.++</p>	<p>Immediate</p>		
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44. 4	23-02-2023 Kaigah Tunnel Portal	Unhygienic Kitchen as well living room		Contractor is instructed to construct a Separate kitchen and maintain clean and hygienic	ASAP		



							
44. 5	23-02-2023 Kaigah Tunnel Portal	Improper placement of drums		Instructed the contractor to remove the Oil drums from site and replace at proper storage ASAP.	Immediate		




							
<p>44. 6</p>	<p>23-02-2023 Kaigah Tunnel Portal</p>	<p>Unsafe Drinking Water</p>		<p>Instructed the contractor to Provide safe drinking water for workers ASAP.</p>			





Table 3.10: Walk-Through Environmental Inspection Report 45







Date of Issuance: 25 -03-2023

Report No. E-45

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
45.1	25 -03-2023 K4	Fuel/ Oil Spills		<p>Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site.</p> <p>Dispose of the toxicities Soil in a drum.</p> <p>Dispose of the contaminated soil as per SOPs provided in ECP</p>	Immediate	<p>The oil spills were removed from the sites and disposed of the contaminated soil replace with fresh soils.</p> 	27-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
							
45.2	25-02-2023 K4 Tunnel Portal	Waste, Littering		Instructed the contractor to keep clean the site and provide the proper waste bins at all sites.	Immediate	<p>The sites have cleaned and waste bins provided at different locations at site.</p> 	27-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
45.3	25-03-2023 K4 Tunnel Portal	Oil storage		Contractor is instructed to construct the banded platform for Oil storage.	Immediate	Constructed the bund and platform for Oil storage 	27-03-2023
45.4	25-03-2023 K9 Tunnel Portal	Open Burning		Instructed the contractor to stop Wood burning at site.	ASAP	The spot has been cleaned and instructed to all labours to avoid wood burning at working sites. 	27-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
44.5	23-02-2023 K9 Tunnel Portal	Improper placement of Chemical Tanks	 	Instructed the contractor to remove the Chemical Tanks from site and replace at proper storage ASAP. Need to construct proper platform for Empty tanks.	Immediate	<p>The empty Chemical Tanks removed from the site</p>  <p>Tank is keeping to fill water for construction purpose temporarily. So, label pasted on the tank</p> 	27-03-2023
45.6	25-03-2023 K9 Tunnel Portal	Chemical Spill		Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site. Dispose of the toxicities Soil in a drum. Dispose of the contaminated soil as per SOPs provided in ECP	ASAP	<p>The chemical were removed and treated by fresh soil on the site.</p> 	27-03-2023




Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
45.7	5-03-2023 K9 Tunnel Portal	Oil spills		<p>Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site.</p> <p>Dispose of the toxicities Soil in a drum.</p> <p>Dispose of the contaminated soil as per SOPs provided in ECP</p> <p>Construct a banded fuel oil storage at site and store properly.</p>	ASAP	<p>The oil spillage was removed and replace with clean and fresh soil on the site.</p> 	27-03-2023



Table 3.11: Walk-Through Environmental Inspection Report 46

Report No. E-46

Date of Issuance: 31 -03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
46.1	31 -03-2023 Logro Tunnel B	Fuel/ Oil Spills		<p>Contractor is instructed to replace the soil with clean and fresh soil immediate basis. And use spill kits for oil spill on the site.</p> <p>Dispose of the toxicities Soil in a drum.</p> <p>Dispose of the contaminated soil as per SOPs provided in ECP</p>	Immediate		

			 <p>The table contains two photographs of a construction site. The top photograph shows a dirt slope with a pile of dark, possibly organic or mineral, material. A yellow bag and some other debris are visible. The timestamp is '31-Mar-2023, 09:32'. The bottom photograph shows a similar dirt slope with a pile of dark material. The timestamp is '31-Mar-2023, 09:35'. The background of both photos shows a large-scale construction project with concrete structures and a river.</p>				
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46.2	31-03-2023 Logro Tunnel B	Waste, Littering		Instructed the contractor to keep clean the site and provide the proper waste bins at all sites.	Immediate		

			 <p>31-Mar-2023, 09:30</p>				
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46.3	31-03-2023 Logro Tunnel B	Oil Drums and Chemical tanks storage		Instructed the contractor to remove the Chemical Tanks and Oil drums from site and replace at proper storage ASAP. Need to construct proper platform for Empty tanks.	Immediate		

			 <p>The top photograph shows a row of white Intermediate Bulk Containers (IBCs) lined up on a dirt path at a construction site. The bottom photograph shows a blue generator labeled 'BOREAS BKCY-2012' with two blue fuel drums connected to it.</p>				
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			 <p style="font-size: small; text-align: center;">31-Mar-2023, 09:33</p>				
46.4	31-03-2023 Logro Tunnel B	Inadequate Housekeeping	 <p style="font-size: small; text-align: center;">31-Mar-2023, 09:27</p>	Instructed the contractor to maintain good housekeeping .			

3.5.2 Notices and Letters

Total sixteen No. of Letters were issued to the KKH-01 Contractor in addition to the issuance of 7 WTEIRs by the Engineer during the reporting quarter from Jan –March 2023.

3.5.3 Quarterly Monitoring of Air, Noise, Water and Wastewater

During the quarter the scope of the work was i.e., breast wall construction, K4, K3, K8 working camps establishment work as well as K3, K4, K9, Logro-B, Uchar and Dugah, Tunnels, Uchar, Uchar and Barseen bridges was going on etc. The KKH-01 has balance quantities for Environmental monitoring which will be utilized once the construction works starts momentum.

3.6 Contractor’s Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer’s observation of the monitoring status is also given in the last column of this table.

Table 3.11: Status of Contractor’s Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	Most of the identified landslides will be triggered Once the reservoir impounding is started. However, the construction related landslides are Supervised by DHC Geology team during the reporting quarter. Slope stabilization works were in place during the quarter
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Quarterly monitored visually. No occurrence was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the Downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	Not done due to the current limited scope of work. If the Work pace is enhanced in next quarter then it might re start again.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspections were carried out during the Quarter and instructions were given to contractor for compliance. The Contractor was strictly instructed to Increase water sprinkling frequency. The dust is under control. In this regard a Real time Whats App group is also established to quickly communicate with contractor if any non-compliance is noted
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the constructions works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	Not done due to the current limited scope of work
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Quarterly visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction	24-hour noise monitoring	Quarterly	Not done due to the current limited scope of work

		works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC			
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	The Contractor is disposing the spoil in the designated spoil dumping site at Khoshe and is also transporting the spoil to the crushing plant at Uchar as a raw material for aggregate
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Quarterly monitoring was carried out. The Contractor is temporarily storing the waste at the camp. The Organic waste is dumped in a pit at Uchar and covered with soil. This temporary practice is adopted due to non-availability of landfill site. Whereas the reusable and recyclable material are sent to local vendors.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Quarterly monitoring was carried out. The spills were recorded during the quarter were communicated to the contractor through the walkthrough environmental inspection reports.
11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	This aspect was also monitored on Quarterly basis. No damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Weekly monitored. The contractor provided water coolers to the workers at the sites.

3.7 Key Performance Indicators

The key performance indicators identified in the ESA⁴ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 3.12: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of instances where parameters values exceeded over NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS

⁴ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

and social aspects are covered in the relevant reports, not in this report.

Table 3.13: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding in values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil					Contractor traffic management plan implemented
	3.2 Soil Erosion and Contamination	Nil					
	3.3 Air Quality	Nil					
	3.4 Noise	Nil					
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
4. Contractor's Camp	4.1 Soil and Water Contamination						2 Incident of minor spill reported to Contractor which was rectified
	4.2 Air Quality	Nil					
	4.3 Vegetation loss	Nil				Number of trees felled: 0	
	4.4 Noise	Nil					
	4.5 Health and Safety						Covered under OHS Report
	4.6 Social and Gender Issues						Covered under social report
	4.7 Damage to PCRs	Nil				Number of chance finds: 0	
	4.7 Increased load on local services						Covered under social report
5. Transportation of Equipment	5.1 Traffic Management						
	5.2 Soil Erosion and Contamination	Nil					
	5.3 Air Quality	Nil					
	5.4 Noise	Nil					
	5.5 Public Safety	Nil				Number of trainings provided:	Covered under OHS Report
	5.6 Damage to infrastructure	Nil					
7. KKH Construction	7.1 Changes to topography						
	7.2 Landslides	Nil					
	7.3 Soil erosion						
	7.4 Soil and water contamination	Nil					
	7.5 Air Quality	Nil			3		Fugitive dust issues were monitored and raised in the What's app group as well as in WTEIR were issued to the contractor and rectified by the contractor and provided above
	7.6 Health and Safety						Covered under OHS
	7.7 Noise and Vibration	Nil					
	7.7 Landscape and Visual Intrusion	Nil					
	7.8 Vegetation loss	Nil					Not reported during the quarter
	7.9 Fauna / Wildlife	Nil					Not reported during the quarter
	7.10 Mortality of Fish	Nil					Not reported during the quarter

	7.12 Damage to infrastructure	Nil					Not reported during the quarter
	7.13 Damage to PCRs	Nil					Not reported during the quarter
	7.14 Disturbance of Visual Landscape and Natural Habitats	Nil					Nil
	7.15 Social conflict due to the Influx of Workers and In- migrants						Covered under Social report
	7.16 Conflicts due to culturally inappropriate behaviors by the workers						Covered under Social report
	7.17 Adverse Effects on Health Situation						
	7.17 Increased Load on Local Services and Supplies						
7. Quarry Operation	7.1 Changes to topography 7.2 Landslide 7.3 Soil erosion						No quarry operation has started. The excavated rock is used as a raw material for aggregate.
	7.4 Soil and water contamination 7.5 Air Quality 7.6 Health and Safety 7.7 Noise and Vibration 7.7 Landscape and Visual Intrusion 7.8 Vegetation loss 7.9 Fauna / Wildlife 7.10 Damage to infrastructure 7.12 Damage to PCRs						
8. Spoil Area Management	8.1 Changes to topography 8.2 Landslide 8.3 Soil erosion 8.4 Air Quality 8.5 Landscape and Visual Intrusion 8.6 Vegetation loss	Nil					
12. Waste Management	12.1 Soil and water contamination 12.2 Odor 12.3 Solid Waste Management		6				6 incidences of Waste management which were reported in WTEIR by The Engineer and rectified by the contractor.

3.8 Non-conformance report (NCR) issued in this Quarter

During the quarter the no NCRs were issued for the non-compliances observed at site.

3.9 Overall Compliance Status – Tri-Partite Monthly Meetings

During the quarter, three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in Annexure. The following were the major issues discussed during the meetings:

- Ensure water sprinkling at Khoshe access Road, Dugah Tunnel, Logro B Tunnel Area and BArseen Access Road to Barseen Bridge Site, Shaal Area, Kaigah By Pass Area
- Ensure solid waste management
- Oil spillages removal
- Proper disposal of used oils and other chemical by hiring a registered Vendor for collection of discarded materials.

4 RAR-01 Contract

4.1 Overview of Contracts

A brief overview of the RAR-01 contract is given in Table 4.1. The RAR-01 contract works are related to the construction of 12 km of road from Komila town up to the dam site.

Table 4.1: Overview of RAR-01 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu-RAR-01
2	Contractor Name	Right Bank Access Road RD0+000 to RD 12+000
3	Contractor	China Civil Engineering Construction Corporation (CCECC)
4	Commencement Date	March 16, 2015
5	Contract Completion Date	Aug 22, 2016
6	Updated Completion Date	August 31, 2022

4.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

4.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 4.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 4.3.

Table 4.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A. Worker's Camps				
1	Chinese Workers Camp	Zaal	Jan#20, Feb#20 and Mar #22	
2	Pakistan Workers Camps	Zaal	Jan#105, Feb# 138 and Mar #129	
B. Crushing/Batching Plants				
1	Crushing Plant	Kass	The crushing plant has now been removed	
2	Batching plant	Kass	The Batching plant will be removed as the road work has almost been completed	
C. Other Facilities				
1	Construction Yard			
2	Explosive Magazine	Kass	20 Ton capacity	

Table 4.3: Contractor's ESHS Staff

Sr. No.	Position	RAR-01 Contract	Remarks
1	Manager EHS	Junaid Gillani	
2	Environmental Officer	Vacant	
3	Environmental Supervisor	Kifayatullah	

4.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 4.4.

Table 4.4: Construction Activities in RAR-01 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	K0+400 to K0+ 600, K0+700 & K0+850 K11+200, K1+252, K1+272, K1+350, K1+ 750, K1+500	<ul style="list-style-type: none"> • Slope cutting from catch point around K0+400 to K0+600 in progress. • Sub grade preparation i.e. levelling etc from K1+500 to K1+750 in progress. • Breast wall stone masonry around k0+700 to K0+850 in progress. • Stone masonry parapet wall around K11+200 at RAR-01 in progress. • Stone masonry retaining walls around K1+252 and K1+272 in progress and completed. • Embankment filling in Nullah for causeway around K1+350 in progress. • Toe wall protection in nullah at K1+350 and stone masonry rip rap in progress and completed. 	In progress
2	Miscellaneous	<ul style="list-style-type: none"> • Concrete for causeway cutoff wall & slab (R/S) in progress and completed. • Granular & stone dust backfilling behind the completed R/walls in progress. • Granular backfilling at causeway rip rap area in progress. 	In progress

4.5 Construction Supervision and Environmental Compliances


4.5.1 Site Inspections and WTEIRs



Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, Joint Inspections with WAPDA on every Tuesday of the week for one or two contracts of DHPP, Schedule starting from 14th of Feb 2023, walk-through environmental inspections have been conducted at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). The Contractor has also been instructed to address these issues within a suggested timeframe. The Contractor has rectified these mistakes and submitted the report with the actions taken. The WTEIRs, consisting of both non-compliances and rectifications, are given in the following tables.


Table 4.5: Walk-Through Inspection Report 18

Report No. E-18

Date of Issuance: 26-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
18.1	26-01-2023 Zaal Camp (Chinese Side)	Oil spill		The contractor is instructed to remove the spill by replacing with fresh soil and soil After that dispose of the toxicity as per ECPs and SOPs.	Immediate		

18.2	26-01-2023 zal pakistani camp	Littering		<p>The contractor is instructed to increase waste bins in camp and dispose off littered materials in those waste bins as per SOP's provided in ECP's.</p> <p>Contractor is instructed to conduct refresher training sessions for all labor and staff on Waste Management.</p>	Immediate		
18.3	26-01-2023 zal pakistani camp	Poor hygienic condition		<p>The contractor is instructed to paste a daily cleaning checklist on toilets and ensure cleaning twice a day on daily basis.</p> <p>Disinfect the toilets at least once a week.</p>	Immediate		

18.4	26-01-2023 Zaal Camp	Fuel wood		<p>The contractor is instructed to remove fuel woods and close all wood burning spots with immediate effect, because every kind of wood burning is strictly prohibited.</p>	Immediate		
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4.5.2 Notices and Letters

Two letters have been issued to the contractor during the reporting quarter other than WTEIR issued by the “Engineer” during the reporting Period from Jan-Mar 2023.

4.5.3 Quarterly Monitoring of Air, Noise, Water and Wastewater

No quarterly environmental monitoring was conducted during the quarter

4.5.4 NCR’s Issued in this Quarter

No NCR is issued in this quarter for RAR-01 Contract.

4.6 Contractor’s Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer’s observation of the monitoring status is also given in the last column of this table.

Table 4.6: Status of Contractor’s Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	Most of the identified landslides will be triggered once the reservoir impounding is started. However, the construction related landslides are supervised by DHC Geology team during the reporting quarter.
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Quarterly monitored visually. No occurrence was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	Not done due to the current limited scope of work. If the work pace is enhanced in next quarter then it might re start again.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspections were carried out during the quarter and instructions were given to contractor for compliance. The Contractor was strictly instructed to increase water sprinkling frequency. The dust is under control. In this regard a Real time WhatsApp group is also established to quickly communicate with contractor if any non-compliance is noted
5	Air Quality (PM10, NO ₂ , SO ₂ , CO ₂ , CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	Not done due to the current limited scope of work
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Quarterly visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	Not done due to the current limited scope of work
	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on	Quarterly	The Contractor is disposing the spoil in the designated spoil dumping site at Kass area

			Waste Management		
8	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Quarterly monitoring was carried out. The Contractor is temporarily storing the waste at the camp. The Organic waste is dumped in a pit at Uchar and covered with soil. This temporary practice is adopted due to non-availability of landfill site. Whereas the reusable and recyclable material are sent to local vendors.
9	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Quarterly monitoring was carried out. The spills were recorded during the quarter were communicated to the contractor through the walkthrough environmental inspection reports.
10	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	This aspect was also monitored on Quarterly basis. No damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Weekly monitored. The contractor provided water coolers to the workers at the sites.

4.7 Key Performance Indicators

The key performance indicators identified in the ESA⁵ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 4.7: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of parameters exceeding over NEQS	The number of parameters in ambient air and noise quality, drinking water, Waste water discharges and surface waters found beyond the national standards.
5	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

⁵ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 4.8: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related grievances	Number of related incidents	Exceeding Parameters against Standards (air, noise, water, etc.)	Other Indicators
Remar						
3. 1. Design/Pre-Construction Stage						Not relevant
3. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil				
	3.2 Soil Erosion and Contamination	Nil				
	3.3 Air Quality	Nil				
	3.4 Noise	Nil				
	3.5 Public Safety	Nil				
	3.6 Damage to Infrastructure	Nil				
4. Contractor's Camp	4.1 Soil and Water Contamination	Nil				
	4.2 Air Quality	Nil				
	4.3 Vegetation loss	Nil			Number of trees felled: 0	
	4.4 Noise	Nil				
	4.5 Health and Safety	Nil				Covered under OHS Report
	4.6 Social and Gender Issues	Nil				Covered under social report
	4.7 Damage to PCRs	Nil			Number of chance finds: 0	
	4.7 Increased load on local services	Nil				Covered under social report
5. Transportation of Equipment	5.1 Traffic Management	Nil				
	5.2 Soil Erosion and Contamination					No issue reported in this quarter
	5.3 Air Quality					No issue reported in this quarter
	5.4 Noise	Nil				No issue reported in this quarter
	5.5 Public Safety				Number of trainings provided:	No issue reported in this quarter
	5.6 Damage to infrastructure					
7. RAR-01 Construction	7.1 Changes to topography					
	7.2 Landslides					
	7.3 Soil erosion					
	7.4 Soil and water contamination		2			No issue reported in this quarter
	7.5 Air Quality					No issue reported in this quarter
	7.6 Health and Safety					Covered under OHS Report
	7.7 Noise and Vibration					Covered under OHS Report
	7.7 Landscape and Visual Intrusion					
	7.8 Vegetation loss				Number of trees felled: 0	No issue reported in this quarter
	7.9 Fauna / Wildlife					No issue reported in this quarter
	7.10 Mortality of Fish	Nil				No issue reported in this quarter
	7.12 Damage to infrastructure	Nil				No issue reported in this quarter
	7.13 Damage to PCRs	Nil				No issue reported in this quarter

	7.14 Disturbance of Visual Landscape and Natural Habitats	Nil					No issue reported in this quarter
	7.15 Social conflict due to the Influx of Workers and In-migrants						Covered under Social section report
	7.16 Conflicts due to culturally inappropriate behaviors by the workers						Covered under Social section report
	7.17 Adverse Effects on Health Situation	Nil					Covered under Social section report
	7.17 Increased Load on Local Services and Supplies						
8. Spoil Area Management	8.1 Changes to topography 8.2 Landslide 8.3 Soil erosion 8.4 Air Quality 8.5 Landscape and Visual Intrusion 8.6 Vegetation loss	Nil	2				Fugitive Dust (one Time) due to Improper Spoil Disposal
12. Waste Management	12.1 Soil and water contamination 12.2 Odor	Nil					

4.8 Overall Compliance Status – Tri-Partite monthly Meetings

During the quarter, three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in Annexure. The major environmental issues discussed during the meetings were:

- Solid waste management procedures to be reported in MPR
- Oil spillage removal at zaal Camp (Chinese Side of Zaal Camp)
- Bunding and canopies for Genrator
- Fugitive Dust Emmission from Bypass Construction
- Proper disposal of spoil disposal

5 TL-01 Contract

5.1 Overview of Contracts

A brief overview of the TL-01 contract is given in Table 5.1. The TL-01 contract works are related to the construction of transmission line from Pattan up to Chuchang and a Grid station at Kuz Chuchang.

Table 5.1: Overview of TL-01 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu-TL-01
2	Contract Name	Procurement, Design, Supply, Installation, Testing and Commission of 132KV Single Circuit Transmission Line and Grid Station (From 132KV Switchyard Dubair Khwar to Proposed 132 KV Grid Station Dasu)
3	Contractor	Power China Corporation of China Ltd (PCCL)
4	Commencement Date	November 02, 2015
5	Contract Completion Date	June 18, 2016
6	Updated Completion Date	November 18, 2022

5.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

5.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 5.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 5.3.

Table 5.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A. Worker's Camps				
1	Chinese Workers Camp	Dasu	Jan # 2, Feb # 2, March # 5	
2	Pakistan Workers Camps	Dasu	Jan # 41, Feb # 49, March # 35	
B. Crushing/Batching Plants				
1	Crushing Plant	Nil		
2	Batching plant	Nil		
C. Other Facilities				
1	Construction Yard			
	Explosive Magazine	Dubair, lower kohistan	The explosives are purchased from a licensed supplier at Dubair	

Table 5.3: Contractor's ESHS Staff

Sr. No.	Position	TL-01 Contract	Remarks
1	Manager EHS	Mr. Waleed	
2	Environmental Supervisor	vacant	

5.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 5.4.

Table 5.4: Construction Activities in TL-01 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	Grid Station	Foundation work for Gantries at Grid Station is completed Excavation/cutting of access road to Grid Station is in progress..	In progress
2	Access road	Breast wall at Alignment-1 of access road is in progress.	In progress
3	Switchyard	Fencing work of switchyard is in progress.	In progress

5.5 Construction Supervision and Environmental Compliances

5.5.1 Site Inspections and Rectifications

Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists.

The active site work was mainly restricted to the grid station with no major environmental non-compliances during this quarter. The small scale environmental non compliances are being referred to the contractor directly conveyed to the relevant staff on the site, others are conveyed to the contractor via what's app group which is more effective method for rectification of site issues. The contractor has rectified these mistakes and submitted the report with the corrective actions taken. Although the rectification was done at site, but the reports were not submitted to the Engineer due to non-hiring of the environmental manager. No WTEIR is issued in the reporting period.

5.5.2 Notices and Letters

Four number of letters were issued to the contractor by the Engineer during the reporting period from Jan-Mar 2023.

5.5.3 Non-conformance Report issued in this quarter

No NCRs was issued to the contractor during the reporting quarter from Jan-Mar 2023.

5.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 5.6: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	NA
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Quarterly visual inspection done. No incident was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	NA
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspections were carried out during the quarter at the Grid Station and instructions were given to contractor for compliance. The Contractor was strictly instructed to increase water sprinkling frequency. The dust is under control.
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	N.A
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Quarterly visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	NA
8	Waste	At the designated rock	Visual inspection on spoil	Quarterly	Small scaled project do not produce

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	Management	disposal area	disposal in accordance with EMP Sub plan on Waste Management		large amount of Waste and if produced then Spoil is being dumped at the Khoshe disposal site
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Quarterly visual inspection was carried out. The Contractor is temporarily storing the waste at the camp. The Contractor is disposing the spoil in the waste bins of Local government at Komila bazar. This temporary practice is adopted due to non- availability of landfill site. Whereas the reusable and recyclable material are sent to local vendors.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Quarterly visual inspection was carried out during the quarter.
11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Quarterly visual inspection was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in Consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Monitored. The contractor Provided water coolers to the workers at the sites.

5.7 Key Performance Indicators

The key performance indicators identified in the ESA⁶ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 5.7: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of parameters exceeding against NEQS values.	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

⁶ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 5.8: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1.Design/Pre- Construction Stage							Not relevant
2. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil					
	3.2 Soil Erosion and Contamination	Nil	2				Reported and rectified immediately within 2 days of incident; All communication done in the Whatsapp group. Physical verification was done by DHC field Staff and closed the points.
	3.3 Air Quality	Nil					No Third Party monitoring is undertaken
	3.4 Noise	Nil					No Third Party monitoring is undertaken
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
3. Contractor's Camp	4.1 Soil and Water Contamination	Nil					
	4.2 Air Quality	Nil					
	4.3 Vegetation loss	Nil				Number of trees fallen= 0	
	4.4 Noise	Nil					
	4.5 Health and Safety						Covered under OHS Report
	4.6 Social and Gender Issues						Covered under social report
	4.7 Damage to PCRs					Number of chance finds: 0	
	4.7 Increased load on local services						Covered under social report
4. Transportation of Equipment	5.1 Traffic Management	Nil					
	5.2 Soil Erosion and Contamination						
	5.3 Air Quality	Nil					
	5.4 Noise	Nil					
	5.5 Public Safety					Number of trainings provided:0	
	5.6 Damage to infrastructure	Nil					
5. Spoil Area Management	8.1 Changes to topography	Nil					
	8.2 Landslide						
	8.3 Soil erosion						
	8.4 Air Quality						
	8.5 Landscape and Visual Intrusion						
	8.6 Vegetation loss						
6. Waste Management	12.1 Soil and water contamination	Nil					No WTEIR issued in this quarter nor any waste
	12.2 Odor						

							issue reported in this month.
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5.8 Overall Compliance Status – Tri-Partite Monthly Meetings

During the quarter, three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in the Annexure. The Major issues discussed during the meetings were:

- Maintaining Good Housekeeping
- Dust suppression measures on the grid station road
- Provision of Drinking water to Labor and staff at site.
- Prevention of Oil Spills at Grid Station Site.

6 PCI-01R Contract

6.1 Overview of Contracts

A brief overview of the PCI-01R contract is given in Table 6.1. The PCI-01R contract works are related to the construction of project colony and infrastructure at Chuchang.

Table 6.1: Overview of PCI-01R Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu- PCI-01R
2	Contract Name	Construction of Project Colony and Infrastructure
3	Contractor	China Gansu International Corporation for Economic and Technical Corporation (CGICOP)
4	Commencement Date	Oct 17, 2017
5	Contract Completion Date	May 17, 2021
6	Revised Completion Date	October 31, 2022

6.2 Construction Environmental Action Plan(CEAP)

The Contractor has submitted the Construction Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

6.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 6.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 6.3.

Table 6.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A.	Worker's Camps			
1	Chinese Workers Camp	Chuchang	About 13 workers live in this camp	
2	Pakistan Workers Camps	Chuchang	About 334 workers live in this camp	
B.	Crushing/Batching Plants			
1	Crushing Plant	Chuchang		Not operational
2	Batching plant	Chuchang		Not operational
C.	Other Facilities			
1	Construction Yard	Chuchang		

Table 6.3: Contractor's ESHS Staff

Sr. No.	Position	PCI-01R Contract	Remarks
1	Manager EHS	Mr. Fazal Mabood	
2	Environmental Officer	Vacant	
3	Environmental Supervisor	Vacant	

6.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 6.4.

Table 6.4: Construction Activities in PCI-01R Contract

Sr. No.	Work Site	Details of Works	Remarks
1	DHPP Project Office	Additional Door polishing in progress at project office building. Paint repairing in progress at project office.	In progress
2	Category 2 Houses	<ul style="list-style-type: none"> • Roof treatment at residence cat-2C and 2D units in progress. • Marble tile fixing for floor at cat -2D is in progress. • Boundry wall construction at residence cat -2, cat -2A & 2B in progress. • Kuphrail tile fixing on roof of resident CAT - 2D in progress. • Sand filling in kitchens and bathrooms at residence cat-2C in progress. • Ppr and plumbing work in bath rooms at residence cat-2B, 2C and 2D in progress. • Tile fixing in bath rooms at residence cat -2C & 2D in progress. • Electrification work at 2B and 2C in progress. • Plumbing and bath room fixture at cat 2B, 2C in progress. • Marble skirting at cat 2 is in progress. Plastering at hostel cat -2A & hostel cat -2B.	In progress
3	Category 1 Houses	Rectification of bath rooms of cat -1 in progress.	In progress
4	Category 3 & 4	<ul style="list-style-type: none"> • Block masonry at cat 3 and cat 4 is in progress. • Plastering at residence cat -3 and residence cat-4 in progress. • Form work and reinforcing fixing for the mummies of cat 3 and cat 4 is in progress. • Electrical conduiting at residence cat -3 and evidence cat -4 in progress. 	In progress
5	Water supply related	External water supply from Indus River: excavation for the retaining wall in progress. Laying of water supply pipes in colony in progress.	In progress

		<ul style="list-style-type: none"> • Conduction of pressure tests of water supply pipes in progress. • Sluice vales construction in progress. • At S5 road excavation for the water supply is in progress. 	
6	Drainage & Disposal Issues	<ul style="list-style-type: none"> • Sluice vales construction in progress. • Septic tank type A construction in progress. • Construction of Manhole cap covers along P1 road in progress. 	In progress
7	Boundary Wall	<ul style="list-style-type: none"> • External boundary wall: block masonry and plastering in progress. 	In progress

6.5 Construction Supervision and Environmental Compliances

6.5.1 NCR's issued in this Quarter

No NCR's has been issued in this quarter from January to March 2023

6.5.2 Site Inspections and WTEIRs



Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, Joint Inspections with WAPDA on every Tuesday of the week for one or two contracts of DHPP, Schedule Schedule starting from 14th of Feb 2023, walk-through environmental inspections have been conducted at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). The Contractor has also been instructed to address these issues within a suggested timeframe. The Contractor has rectified these mistakes and submitted the report with the actions taken. The WTEIRs, consisting of both non-compliances and rectifications, are given in the following tables.

Table 6.6: Walk-Through Inspection Report-No.40

Date of Issuance: 01-01-2023

Date of Response: 09-01-2023

Report No. E-40

Sr. No	Date and Location of Inspection	EHS observations	Before Rectification Picture	Action Taken by the Contractor	After Rectification picture
40.1	01-01-2023 Wapda colony chuchang	Littering of solid waste		Collected the scattered waste from site and disposed off at designated site, also conducted awareness session regarding safe disposal of waste and use of waste bins	


40.2	01-01-2023 In front of Officer colony	Oil spill		Cleaned the spilled area and replaced it with fresh soil	
40.3	01-01-2023 Wapda colony	Inadequate Housekeeping		Housekeeping is done, collected all the scattered waste from site and disposed off properly at designated site	

40.4	01-01-2023 In front of Officer colony	Improper disposal of solid waste		Collected the waste from dust bin and emptied it and place at site also label and install awareness signage's	
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Table 6.7: Walk-Through Inspection Report-No.41

Date of Issuance: 28-01-2023


Report No. E-41



Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
41.1	27-01-2023 WAPDA Colony Labor camp	Littering		Contractor is instructed to remove the littering from site and keep clean the site.	Immediate		

							
41. 2	27-01-2023 Labor camp	Poor drainage system		The contractor is to construct a proper drainage system at labor camp ASAP.	Immediate		

							
41.3	27-01-2023 WPADA Colony Labor camp	Fuel wood		It is instructed the contractor to provide LPG gas.	Immediate		

							
41.4	27-01-2023 WPADA Colony Crushing plant	Oil Spillage near Crushing plant CGICOP		It is instructed the contractor to remove contaminated soil with clean and fresh soil as per SOPs provided in ECP.	Immediate		

							
41.5	27-01-2023 WPADA Colony	Inadequate housekeeping		Instructed the contractor to remove construction waste from site ASAP.			

			 <p>27-Jan-2023, 11:05</p>				
			 <p>27-Jan-2023, 11:04</p>				

6.5.3 Notices and Letters

In addition to the Joint Inspections and WTEIRs (discussed in the previous section), the Engineer also issues Notices and Letters as in this quarter i.e., Jan-Mar 2023; six letters/ notices were issued.

6.5.4 Quarterly Monitoring of Air, Noise, Water and Wastewater

5th Quarterly environmental monitoring was postponed with the consent of Employer as the work were very limited during the quarter. The monitoring will be conducted once the construction work starts momentum.

6.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 6.9: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	NA
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Quarterly monitored visually. No incident was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	5th Quarterly Environmental monitoring was postponed with the consent of Employer due to limited construction work i.e., whitewashing/paint, electrification etc.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspections were carried out during the quarter at the DHPP Colony site and instructions were given to contractor for compliance. The Contractor was strictly instructed to increase water sprinkling frequency. The dust is under control.
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	5th Quarterly Environmental monitoring was postponed with the consent of Employer due to limited construction work i.e., whitewashing/paint, electrification etc.
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Quarterly visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	5th Quarterly Environmental monitoring was postponed with the consent of Employer due to limited construction work i.e., whitewashing/paint, electrification etc.
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	Spoil (if any) is being dumped at the Khoshe disposal site
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Quarterly visual inspection was carried out. The Contractor is temporarily storing the waste at the camp. The Contractor using the Organic waste as compost for the kitchen garden while the reusable and recyclables are

					temporarily stored at the site for onward sending to local trash vendor.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Weekly and Quarterly visual inspection was carried out. The non-compliances are reported to the contractor in the WTEIRs for rectification.
11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Regular monitoring was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Monitored. The contractor provided water coolers to the workers at the sites.

6.7 Key Performance Indicators

The key performance indicators identified in the ESA⁷ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 6.10: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of exceeding values over NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

⁷ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 6.11: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Design/Pre- Construction Stage							Not relevant
2. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil					
	3.2 Soil Erosion and Contamination	Nil					
	3.3 Air Quality	Nil					
	3.4 Noise	Nil					
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
3. Contractor's Camp	4.1 Soil and Water Contamination		1				The rain water and labor camp drainage(sewage) water was stagnant behind the CGICOP Main camp inside the Colony area. Reported in Joint inspection with WAPDA and rectified through PM of CGICOP Mr. Liu.
	4.2 Air Quality	Nil					
	4.3 Vegetation loss	Nil				Number of trees felled:0	
	4.4 Noise	Nil					
	4.5 Health and Safety						Covered under OHS Report
	4.6 Social and Gender Issues						Covered under social report
	4.7 Damage to PCRs	Nil				Number of chance finds: 0	
	4.7 Increased load on local services						Covered under social report
4. Transportation of Equipment	5.1 Traffic Management	Nil					
	5.2 Soil Erosion and Contamination						
	5.3 Air Quality						
	5.4 Noise						
	5.5 Public Safety					Number of trainings provided:	
	5.6 Damage to infrastructure						
5. Spoil Area Management	8.1 Changes to topography	Nil					
	8.2 Landslide						
	8.3 Soil erosion						
	8.4 Air Quality						
	8.5 Landscape and Visual Intrusion						
	8.6 Vegetation loss						
6. Construction Colony	9.1 Change in topography	Nil					
	9.2 Landslide						
	9.3 Soil erosion		1				
	9.4 Soil and water contamination						
	9.5 Air Quality						
	9.6 Health and Safety						
	9.7 Noise and Vibration						1 incident of Oil spillage, 1 incidences of inadequate housekeeping, 1 incidence of Fire Wood usage and three incidences of Solid Waste littering reported through WTEIR for rectification

	9.7 Landscape and Visual Intrusion 9.8 Vegetation loss 9.9 Fauna / Wildlife 9.10 Damage to infrastructure 9.12 Damage to PCRs 9.13 Access						
7. Waste Management	12.1 Soil and water contamination 12.2 Odor		2				2 incidence reported through WTEIRs for rectification

6.8 Overall Compliance Status – Tri-Partite Monthly Meetings

During the quarter three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in Annexure. The major issues discussed during the meetings were:

- Submission NOC for Fuel storage license
- Housekeeping
- Dust control
- Welfare facilities to contractor labor camp like provision of gas cylinders for cooking and heating, Janitors for Cleaning of Toilets and common areas like kitchen, availability of More Toilets and provision of proper drainage pipes from ablution area and toilets/ bath rooms.
- Drainage Issue
- Extension of sedimentation tank chambers to increase retention time.

7 RAR-02 Contract

7.1 Overview of Contracts

A brief overview of the RAR-02 contract is given in Table 7.1. The RAR-02 contract works are related to the construction of construction of Right bank access road that is starting from dam site up to Uttar Gah.

Table 7.1: Overview of RAR-02 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu- RAR-02
2	Contract Name	Construction of Right bank Access Road (Dam site to Uttar Gah)
3	Contractor	China Gezhouba Group Co. Ltd. (CGGC)
4	Commencement Date	May 20, 2021
5	Contract Completion Date	May 17, 2023

7.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

7.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 7.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 7.3.

Table 7.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A.	Worker's Camps			
1	Chinese Workers Camp	Kaigah	Jan# 28, Feb#30, March#22	
2	Pakistan Workers Camps	Kaigah	Jan# 107, Feb#115, March# 135	
B.	Crushing/Batching Plants			
1	Crushing Plant	Nil		
2	Batching plant	Nil		
C.	Other Facilities			
1	Construction Yard	Nil		
2	Explosive magazine	Nil	Explosive from MW-02 at Kass area is being used for the construction work	

Table 7.3: Contractor's ESHS Staff

Sr. No.	Position	RAR-02 Contract	Remarks
1	Manager EHS	Liaqat Ali Khan	Contractor has been instructed to engage environmental officer along with supervisory staff
2	Environmental Officer	vacant	
3	Environmental Supervisor	vacant	

7.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 7.4.

Table 7.4: Construction Activities in RAR-02 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	K13+200 to K13+700	Excavation and blasting work continue from K13+200 to K13+700. Backfill with gabion work is going on at K13+300.	In progress
2	K13+300.	Backfill with gabion work is going on at K13+300.	In progress
3	K32+600 to K33+150.	Excavation work is continue from k32+600 to k33+150.	In progress
4	K13+300.	Construction of gabion wall has been completed at k13+300.	In progress
5	K13+400	Excavation and blasting work continue from K13+400 to onward.	In progress
6	K33+100, K36+410, K37+700	Excavation work is in progress at k33+100, k36+410, k37+700 to onward.	In progress
7	K13+370 to K13+800.	Excavation and blasting work continue from K13+370 to K13+800.	In progress
8	Cable crossing	Cable crossing work at K20 is almost done.	In progress
9	K33+400, K34+450 & K36+410.	The contractor is working on four working faces in kandia, K33+400, K34+450 & K36+410.	In progress
10	Mobiization @ Kaigah Camp	The Contractor mobilized to the Kaigah Contractor's camp and brought new equipment and manpower. The Contractor is planning to start Kandia working face and has already started Largani cable way to start new working face.	In progress

7.5 Construction Supervision and Environmental Compliances

7.5.1 Non-Conformance Reports(NCRs) issued in this Quarter

One NCR were issued to the contractor for the non-conformance noted at site. They are presented the following table:

Table 7.5: Non-conformance report issued during the quarter

Sr. No.	Contract	Subject	Issuance Date
1	RAR-02	NCR-Failure to Hire and Mobilize Environmental Officer for RAR-02"	19 th Jan 2023


7.5.2 Site Inspections and WTEIRs

Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, Joint Inspections with WAPDA on every Tuesday of the week for one or two contracts of DHPP, Schedule starting from 14th of Feb 2023, walk-through environmental inspections have been conducted at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). The Contractor has also been instructed to address these issues within a suggested timeframe. The Contractor has rectified these mistakes and submitted the report with the actions taken. The WTEIRs, consisting of both non-compliances and rectifications, are given in the following tables.

Table 7.6: Walk-Through Inspection Report No. 17

Report No. E-17

Date of Issuance:04-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
17.1	04-01-2023 Gayal access road	Improper placement of fuel drums		The contractor is instructed to construct the concrete pavement storage area for fuel drums and place dip ray for each drums to avoid further soil contamination.	Reminder		

17.2	04-01-2023 Gayal access road + kandia bypass labor camp	Oil spill		<p>The contractor is instructed to remove the spill by replacing with fresh soil and soil</p> <p>After that dispose of the toxicity as per ECPS and SOPs.</p>	immediate		
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17.3	04-01-2023 Kandia bypass labor camp	Fuel wood		The contractor is instructed to use LPG and avoid to use fuel woods from the local forest.	Reminder		
17.4	04-01-2023 Gayal access road.	Heavy dust		the contractor is instructed to ensure maintenance of equipment regularly and ensure wet drilling and provide appropriate mask for crawling machine operator	Reminder		

Table 7.7: Walk-Through Inspection Report No.18

Report No. E-18

Date of Issuance:25-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
18.1	25-01-2023 Gayal access road	Improper placement of fuel drums		The contractor is instructed to construct the concrete pavement storage area for fuel drums and place dip tray for each drums to avoid further soil contamination.	Reminder		

18.2	25-01-2023 labor camp kandia bypass	Poor camp management		<p>During routine supervision it was observed that</p> <ol style="list-style-type: none"> 1 there is poor kitchen which make by tent 2 No proper mess hall. 3 no waiters for serve food 4 no cook helper 5 no cleaner for camp <p>the contractor is instructed to provide adequate facilities for workers as soon as possible.</p>	Immediate		
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18.3	25-01-2023 labor camp kandia bypass	Fuel wood		The contractor is instructed to use LPG and avoid to use fuel woods from the local forest.	Reminder		
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18.4	25-01-2023 Gayal access road	Heavy dust		<p>the contractor is instructed to ensure maintenance of equipment regularly and ensure wet drilling and provide appropriate mask for crawling machine operator</p>	<p>Reminder</p>		
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Table 7.8: Walk-Through Inspection Report No.19

Report No. E-19

Date of Issuance: 10-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
19.1	10-03-2023 Gayal access road	Oil spill		<p>The contractor is instructed to remove the spill by replacing with fresh soil and soil</p> <p>After that dispose of the toxicity as per ECPS and SOPs. And provide shelter for fuel storage area as soon as possible.</p>	Reminder 1		

19.2	10-03-2023 kandia bypass labor camp	Fuel wood		The contractor is instructed to use LPG and avoid to use fuel woods from the local forest.	Reminder 6		
19.3	10-03-2023 kandia bypass labor camp	Poor quality stove.		The contractor is instructed to provide good pressure quality stove for workers and provide LPG oven for bread cooking and reduce dependency on woods asap.	Reminder 3		

19.4	10-03-2023 kandia bypass labor camp	No save drinking water	 <p>The top photograph shows a man in a grey shirt and a red cap crouching next to a wall with green and white pipes. He is using a tube to collect water into a small container. The bottom photograph shows a person's hands holding a pink bowl with a floral pattern, which appears to contain water.</p>	<p>During routine supervision it was observe that workers are using tube water for drinking the contractor is instructed to conduct water test with in 15 days and submit to engineers</p>	Immediate		

7.5.3 Notices and Letters

There were two letters issued to the contractor other than three WTEIRs during the reporting quarter from Jan-Mar 2023. The details of the letters are reflected in chapter -10

7.5.4 Quarterly Monitoring of Air, Noise, Water and Wastewater

The Contractor has not conducted 24-hour monitoring of air, and noise quality during the quarter.

7.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 7.14: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	Fortnight visual inspection was conducted, and no landslide was observed.
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Monitored visually. No incident was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, ammonia, sulfates, chlorides)	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Weekly visual inspection was conducted during the quarter. Contractor was instructed to ensure water sprinkling.
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Regular visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	Spoil is being dumped along the slope of designated spoil dump area.
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Regular monitoring was carried out. The Contractor is temporarily storing the waste at the camp.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Quarterly visual inspection observation regarding the spills was reported to the contractor for rectification.

11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Regular monitoring was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Monitored. The contractor provided water coolers to the workers at the sites.

7.7 Key Performance Indicators

The key performance indicators identified in the ESA⁸ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 7.15: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of exceeding values against NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

⁸ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 7.16: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Design/Pre- Construction Stage							Not relevant
2. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil					
	3.2 Soil Erosion and Contamination	Nil	3				3 occurrence of Minor oil spill reported through WTEIR for rectification
	3.3 Air Quality	Nil					
	3.4 Noise	Nil					
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
3. Contractor's Camp	4.1 Soil and Water Contamination	Nil					
	4.2 Air Quality						
	4.3 Vegetation loss	Nil				Number of trees felled: 0	
	4.4 Noise	Nil					
	4.5 Health and Safety	Nil					Covered under OHS Report
	4.6 Social and Gender Issues	Nil					Covered under social report
	4.7 Damage to PCRs	Nil				Number of chance finds: 0	
	4.7 Increased load on local services	Nil					Covered under social report
	4.8 Use of Fire Wood						3 incidence of using Fire wood reported through the WTEIR and rectified through provision of LPG Cylinders and stoves
4. Transportation of Equipment	5.1 Traffic Management	Nil					
	5.2 Soil Erosion and Contamination	Nil					
	5.3 Air Quality		4				4 Dust Side issues reported in Kandia through WTEIRs and Joint Inspection, which were rectified 2 Dust Side issues reported in Sigloo and Seer Gayal Area through WTEIRs and Joint Inspection. which were not rectified
	5.4 Noise	Nil					
	5.5 Public Safety	Nil				Number of trainings provided:	
	5.6 Damage to infrastructure	Nil					
5. Spoil Area Management	5.1 Changes to topography	Nil					
	5.2 Landslide						
	5.3 Soil erosion						
	5.4 Air Quality						
	5.5 Landscape and Visual						

	Intrusion						
	5.6 Vegetation loss						
6. Waste Management	6.1 Soil and water contamination						
	6.2 Odor						

7.8 Overall Compliance Status – Tri-Partite Monthly Meetings

During the quarter three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in the Annexure. The major environmental issues discussed during the meeting were:

- Hiring of environmental officer
- Submission of MPR as per discussion in monthly meetings.
- Oil Spillage
- Suppression of dust
- Proper haulage of spoil
- Use of Wood as Fuel for Cooking & Heating

8 KKH-02 Contract

8.1 Overview of Contracts

A brief overview of the KKH-02 contract is given in Table 8.1. The KKH-02 contract work is related to the construction of construction of relocated road that is starting from Kaigah 25 RD up to Lachi Nullah.

Table 8.1: Overview of KKH-02 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu- KKH-02
2	Contract Name	Construction of Relocated KKH-02 (K24 to K61)
3	Contractor	China Gezhouba Group Co. Ltd. (CGGC)
4	Commencement Date	May 15, 2022
5	Contract Completion Date	May 12, 2024

8.2 Contractor Environmental Action Plan

The Contractor has submitted the Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. The plan was reviewed by the Engineer and the contractor was asked to revise the plan as per engineer comments. The revised report is not yet submitted. In addition, the Contractor has also prepared an Occupational Health and Safety Management Plan (OHSMP), and details of these plans are not covered in this report.

8.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 8.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 8.3.

Table 8.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A	Worker's Camps (Kaigah)			
1	Chinese Workers Camp	Kaigah	Jan#45, Feb#46, March#64 workers in the camp	
2	Pakistan Workers Camps	Kaigah	Jan#128, Feb#115, March#135 workers in the camp	
B	Crushing/Batching Plants	Nil		
1	Crushing Plant	Nil		
2	Batching plant	Nil		
C	Other Facilities			
1	Construction Yard	Nil		
2	Explosive magazine	Barseen	20 ton capacity	

Table 8.3: Contractor's ESHS Staff

Sr. No.	Position	KKH-02 Contract	Remarks
1	Manager EHS	Usman Iftikhar	Contractor has been instructed to engage environmental officer along with supervisory staff
2	Environmental Officer	Vacant	Contractor has been instructed to engage environmental officer along with supervisory staff
3	Environmental Supervisor	Fazal Akbar	

8.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 8.4.

Table 8.4: Construction Activities in KKH-02 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	Contractor Mobilization	The Contractor is mobilizing equipments to site time by time.	
2	K24+700	Blasting and Excavation work is continued from k24+700 to onward.	In progress
3	K26+370	Excavation and blasting work at k26+370 are continue. Work is stopped from K26+370 to reverse ndirection and k28+600 to onward direction due to nonpayment of local houses in ROW.	In progress
4	K33+520	&Excavation and blasting work from K33+520 to reverse direction & k33+800 to	In progress

	k33+800	onward is continue.	
5	K36+400 K42+400, K42+650	Blasting and Excavation work from k36+400 to onward, k42+650 to onward & k42+400 to reverse direction is continued.	In progress
6	Tunnel Portal	The DID Team of WAPDA is doing Drilling work at Tunnel portal. Drilling work for shori-1 tunnel' s inlet is completed.	In progress
7	K24+730-800, K26+370-700, K33+520-700, K36+270-450, K42+290-490, K46+200-300	Excavation and blasting work continued	In progress
8	K-38 & K-40	New access road has commenced at K38, K40 for gobbar tunnels and bridge (both faces).	In progress

8.5 Construction Supervision and Environmental Compliances

8.5.1 Site Inspections and WTEIRs

Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, walk-through environmental inspections have been conducted at all work sites regularly by the senior environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor mainly through Walk-Through Environmental Inspection Reports (WTEIRs). The procedure is that the contractor has also been instructed to address these issues within a suggested timeframe. The contractor has rectified these mistakes and submitted the report with the actions taken. There was closure of work during Jan-2023 on all sites. Some of the sites like K34, K47, K38 were further closed up till end of February 2023. There were No WTEIR issued during the reporting quarter.

8.5.2 Notices and Letters

There were four letters were issued to the contractor except there was no WTEIRs during the reporting quarter from Jan-Mar 2023.

8.5.3 Non-conformance Report(NCR's)

There is only one NCR during this first quarter of 2023 for KKH-02 contract.

Sr. No.	Contract	Subject	Issuance Date
1	KKH-02	NCR-Failure to Hire and Mobilize Environmental Officer for RAR-02"	19/01/ 2023

8.5.4 Quarterly Monitoring of Air, Noise, Water and Wastewater

The Contractor has not conducted 24-hour monitoring of air, and noise quality during the quarter.

8.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 8.5: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequenc y	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	NA at the moment in the areas of construction.
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Monitored visually. No incident was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Regular visual inspections were carried out during the quarter. The contractor was instructed to ensure water sprinkling
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Regular visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	Spoil is being dumped at the designated spoil disposal sites along KKH, If not then WTEIR was issued for non compliance
	Construction		Visual inspection that solid waste is disposed of at designated site	Quarterly	Regular monitoring was carried out. The Contractor is temporarily storing the waste at the camp. The

9	camps and construction management				reusable and recyclables are temporarily stored at the site for onward sending to local trash vendor.
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Regular monitoring was carried out. The non-compliances are reported to the contractor in the WTEIRs for rectification.
11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Regular monitoring was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Monitored. The contractor provided water coolers to the workers at the sites.

8.7 Key Performance Indicators

The key performance indicators identified in the ESA⁹ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 8.11: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of exceeding values against NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

⁹ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 8.12: Key Performance Indicators and their Status during the reporting period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Design/Pre- Construction Stage							Not relevant
2. Contractor Mobilization and Demobilization	3.1 Traffic Management	Nil					
	3.2 Soil Erosion and Contamination	Nil					
	3.3 Air Quality	Nil					
	3.4 Noise	Nil					
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
3. Contractor's Camp	4.1 Soil and Water Contamination	Nil					
	4.2 Air Quality	Nil					
	4.3 Vegetation loss	Nil					
	4.4 Noise	Nil					
	4.5 Health and Safety	Nil					Covered under OHS Report
	4.6 Social and Gender Issues	Nil					Covered under social report
	4.7 Damage to PCRs	Nil				Number of chance finds: 0	
	4.7 Increased load on local services	Nil					Covered under social report
4. Transportation of Equipment	5.1 Traffic Management	Nil					
	5.2 Soil Erosion and Contamination	Nil					
	5.3 Air Quality	Nil					
	5.4 Noise	Nil					
	5.5 Public Safety	Nil				Number of trainings provided:	
	5.6 Damage to infrastructure	Nil					
5. Spoil Area Management	8.1 Changes to topography	Nil					
	8.2 Landslide						
	8.3 Soil erosion						
	8.4 Air Quality						
	8.5 Landscape and Visual Intrusion						
	8.6 Vegetation loss						
6. Waste Management	12.1 Soil and water contamination						
	12.2 Odor						
7. KKH-2 Construction	7.1 Changes to topography						
	7.2 Landslides	Nil					
	7.3 Soil erosion						
	7.4 Soil and water contamination	Nil					
	7.5 Air Quality	Nil		2			
	7.6 Health and Safety						Covered under

							OHS
	7.7 Noise and Vibration	Nil					
	7.7 Landscape and Visual Intrusion	Nil					
	7.8 Vegetation loss	Nil					
	7.9 Fauna / Wildlife	Nil					Not reported during the quarter
	7.10 Mortality of Fish	Nil					Not reported during the quarter
	7.12 Damage to infrastructure	Nil					Not reported during the quarter
	7.13 Damage to PCRs	Nil					Not reported during the quarter
	7.14 Disturbance of Visual Landscape and Natural Habitats	Nil					Nil
	7.15 Social conflict due to the Influx of Workers and In-migrants						Covered under Social report
	7.16 Conflicts due to culturally inappropriate behaviors by the workers						Covered under Social report
	7.17 Adverse Effects on Health Situation						
	7.17 Increased Load on Local Services and Supplies						

8.8 Overall Compliance Status – Tri-Partite Monthly Meetings

During the quarter, three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in the Annexure. The major environmental issues discussed during the meeting were:

- Hiring of dedicated Environmental Officer
- Submission of Quarterly Environmental progress report
- Submission of revised CEAP
- Dust suppression measures
- Haulage of spoil material to designated spoil disposal sites
- Burning of Fire Wood by Labor and Security personel.

9 Electromechanical Works (EM-01)

9.1 Overview of Contracts

A brief overview of the EM-01 contract is given in Table 9.1. The EM-01 contract work is related to the electromechanical works.

Table 9.1: Overview of EM-01 Contract

Sr. No.	Item	Data
1	Contract Number	ICB No. Dasu- EM-01
2	Contract Name	Electromechanical Works EM-01
3	Contractor	JV Power China & Zhongnan Engineering Corporation limited
4	Commencement Date	May 20, 2020
5	Contract Completion Date	June 18, 2025

9.2 Contractor Environmental Action Plan

The Contractor has submitted a draft Contractor Environmental Action Plan (CEAP) with the site-specific management plans to address the environmental impacts and risks of the construction activities. The plan was reviewed by the Engineer and the contractor was asked to revise the plan as per engineer comments. The revised report is not yet submitted.

9.3 Contractor's Facilities and ESHS Staff

The facilities established by the Contractor, such as workers' camps and construction yards, are given in Table 9.2. The Environmental Social Health and Safety (ESHS) Staff of the Contractor are given in Table 9.3.

Table 9.2: Contractor's Facilities

Sr. No.	Facility	Location	Details	Remarks
A.	Worker's Camps (Kass & Dasu, near Matoo Hotel)			Under construction at Kass. While the staff is living in a rented building at Dasu
1	Chinese Workers Camp	Dasu	About 1 workers in this camp	
2	Pakistan Workers Camp	Dasu	Jan # 81, Feb # 83, March # 105	
B.	Ware House	Nil		
1	EM-Equipment	Nil		
2	Storage for Camp construction material	Kass	Under construction	
C.	Other Facilities			
1	Construction Yard	Nil		

Table 9.3: Contractor's ESHS Staff

Sr. No.	Position	KKH-02 Contract	Remarks
1	Manager EHS	Asad Abbas	Contractor has been instructed to engage environmental officer along with supervisory staff
2	Environmental Supervisor	Zawar Khan	

9.4 Construction Activities

Details of construction activities conducted during the reporting period are shown in Table 9.4.

Table 9.4: Construction Activities in EM-01 Contract

Sr. No.	Work Site	Details of Works	Remarks
1	Kass camp of EM-01	<p>Excavation: Excavation and lowering level of Terrace #2, #6, #15 was in progress.</p> <p>Boundary Wall:</p> <ul style="list-style-type: none"> • Excavation completed: CP5 TO CP6 (Side boundary wall) • Lean concrete completed: CP5 TO CP6 (Side boundary wall) • Block masonry/ Plinth Beam (RCC) was in progress: CP5 TO CP6 was in progress. • Block masonry/Plinth Beam (RCC) was in progress: CP14 TO CP15 was in progress. <p>Retaining Walls/Stone Masonry</p> <ul style="list-style-type: none"> • Terrace # 02 Retaining wall was in progress. • Terrace # 04 Retaining wall was in progress. • Terrace # 07 Retaining wall was in progress. • Terrace # 10 Retaining wall was in progress. • Terrace # 12 Retaining was in Progress. 	In progress

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9.5 Construction Supervision and Environmental Compliances


9.5.1 Site Inspections and WTEIRs

Site visits to the construction areas are conducted daily by the environmental staff to supervise environmental compliance of the construction activities and complete daily monitoring checklists. In addition, Joint Inspection of WAPDA and DHC Environment Section as well as walk-through environmental inspections have been conducted at all work sites regularly by the senior & field environmental staff of DHC and PMU to identify any environmental issues and non-compliance. The issues identified at the construction sites are communicated with the Contractor through Walk-Through Environmental Inspection Reports (WTEIRs). Currently there has been four observations were taken or reported during the quarter Jan-Mar 2023.

Table 9.5: Walk Through Environmental Inspection Report of EM-01 No.01

Report No. E-01

Date of Issuance: 02-01-2022





Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
1.1	29-12-2022 Chinese canteen	Littering		The contractor is instructed to keep waste bins on side and collect solid waste and dispose of properly according to ECPs.	immediate		

1.2	29-12-2022 Chinese canteen	Inadequate housekeeping.		The contractor is instructed to manage construction material properly according to ECPs and ensure good housekeeping at site.	immediate		
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Table 9.6: Walk Through Environmental Inspection Report of EM-01 No.02

Report No. E-02

Date of Issuance: 27-01-2022

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
2.1	26-01-2022 EM-01, steel workshop	Inadequate housekeeping		The contractor is instructed to maintain good housekeeping on site and manage construction material properly as per SOPs provided in the ECP's	immediate	The EM01 contractor has done housekeeping of the site. 	02-02-2022
2.2	26-01-2022 EM-01 kitchen	Chemical drums		The contractor is instructed to avoid use of chemical drums for human consumption, remove the drum, and provide a water tank for workers with immediate effect.	immediate	The EM01 contractor removed the chemical tanks and provided a new tank for utilization of water. 	10-02-2022







2.3	26-01-2022 EM-01 kitchen	Fuel wood	 	<p>The contractor is instructed to provide LPG cylinders and gas stoves for cooking purposes and avoid burning woods because as per ECP's it is strictly prohibited to burn wood as fuel either for cooking or heating purposes.</p>	Immediate	<p>The Contractor replaced burning of fuel wood with LPG Cylinder.</p> 	05-02-2022



Table 9.7: Walk Through Environmental Inspection Report of EM-01 No.03




Report No. E-03

Date of Issuance: 31-01-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
3.1	31-01-2023 EM-01 Slope of labor camp.	Littering, solid waste		The contractor is Instructed to keep waste bins on site and collect Littered, solid waste and dispose of properly as per ECPs.	immediate	 <p>The EM01 contractor provided waste bins at site for management of waste.</p>	07-02-2023

3.2	31-01-2023 EM-01 camp	Inadequate housekeeping		The contractor is instructed maintain good housekeeping on site and manage construction material properly also follow SOPs and ECP.	Immediate	The waste seen in the image belong to effected family of EM01 camp. The EM01 contractor will ask the family owner to relocate the waste ASAP.	Continue
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3.3	31-01-2023 EM-01 labor camp.	Chemical drums		<p>The contractor is instructed to install New water tank for the work force because the labor is also using this used chemical tank for drinking purpose. Use of Chemical tank is strictly prohibited for Humans as it can seriously affect the health of work force.</p>	Reminder	 <p>The EM01 contractor removed chemical tanks with new tank for utilization of water.</p>	10-02-2023
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3.4	31-01-2023 EM-01 labor camp.	Poor welfare facility	 	<p>During routine supervision it was observed that EM-01 labor camp having only one washroom which is functional having no water connection no adequate welfare facilities</p> <p>It is instructed to the contractor to provide adequate welfare facilities to the workforces as per SOPs and ECPs.</p>	Immediate	 <p>The EM01 contractor new tank at site. The contractor will provide adequate washroom facilities at for the welfares of site workers.</p>	10-02-2023
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<p>3.5</p>	<p>31-01-2023 EM-01 labor camp.</p>	<p>Bad living condition</p>	 <p>Jan 31, 2023 9:51:43 AM 65° NE Index number: 4864</p> <p>Jan 31, 2023 9:54:09 AM 268° W Index number: 4867</p>	<p>During routine supervision it was observed that one small room having 10 labors are living. And room roof have many holes, covering with plastic cover to prevent water dripping in room. The contractor is instructed to follow the living condition in rooms as per instruction in CEAPS and construction camp management plan.</p>	<p>Reminder</p>	<p>The EM-01 contractor will ensure the welfare facilities of workers at site as per CEAP.</p>	<p>Continue</p>
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<p>3.6</p>	<p>31-01-2023 EM-01 labor camp.</p>	<p>Fuel wood burning</p>		<p>Use of fuel wood is strictly prohibited as per ECP's. Contactor is instructed to provide LPG gas for cooking and heating purposes</p>	<p>Reminder</p>	<p>The Contractor replaced burning of fuel wood with LPG Cylinder.</p> 	<p>05-02-2023</p>
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Table 9.8: Walk Through Environmental Inspection Report of EM-01 No.04

Report No. E-04

Date of Issuance: 30-03-2023

Sr. No	Date and Location of Inspection	EHS observations	Picture	Instructions to the Contractor	Timeline	Action Taken by the Contractor	Completion Date
4.1	31-01-2023 EM-01 camp near fuel storage place	Inadequate housekeeping		The contractor is instructed maintain good housekeeping on site and manage construction material properly also follow SOPs and ECP.	immediate		
4.2	30-03-2023 EM-01 labor camp	Poor welfare facility		During routine supervision, it was observed that EM-01 labor camp having only one washroom is functional having no water connection no adequate welfare facilities. Camp having almost 15-20 labors accommodated. It is instructed to the contractor to provide adequate welfare facilities to the workforces as	Immediate		

				per SOPs and ECPs.			
4.3	30-03-2023 EM-01 labor camp	Improper fuel storage area		The contractor is instructed to provide shelter for fuel storage place and built proper paved or lined place for fuel storage	immediate		
4.4	30-03-2023 EM-01 labor camp	Poor accommodation		The contractor is instructed to keep proper distance between beds and follow ECPs and SOPs	immediate		

Note: All Non compliances were complied with ECP's and were reported in the MPR and Monthly meeting As well by EM-01 contractor. Physical verification was done by the DHC Field Staff.

9.5.2 Notices and Letters

There was a single letter and four WTEIR's issued to the contractor during the reporting quarter from Jan-Mar 2023 as there was very little work related to camp construction was performed by EM-01 contractor.

9.5.3 Quarterly Monitoring of Air, Noise, Water and Wastewater

The contractor has not conducted 24-hour monitoring of air, and noise quality during the quarter. Because the contract is just constructing its own camp in Kass Area..

9.6 Contractor's Effect Monitoring

The monitoring requirements of the Contractor as per the bidding documents are given in the following table. The Engineer's observation of the monitoring status is also given in the last column of this table.

Table 9.9: Status of Contractor's Effect Monitoring

Sr. No.	Parameter	Location	Means Monitoring	Frequency	Status
1	Landslides	37 identified landslide prone areas in EIA	Visual Inspection on stability of landslides	Fortnightly	NA
2	Erosion	Earthwork areas and material storage sites	Visual inspection of erosion prevention measures and occurrence of erosion	Quarterly	Monitored visually. No incident was recorded during the quarter.
3	Surface water quality	In the rivers and tributaries at the downstream of the construction sites. The locations of sampling can be same locations of baseline water quality or new locations recommended by the CSC.	Sampling and analysis of river water quality and wastewater discharges for the key parameters given in NEQS (river water quality – DO, BOD, COD, Temperature, pH, Conductivity, TSS, turbidity, nitrate, Wastewater – BOD, TSS, turbidity, TDS, COD, grease and oil, iron, ammonia, sulfates, chlorides)	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
4	Air Quality (dust, smoke)	Construction sites, quarry areas along KKH and blasting areas	Visual inspection to ensure good standard equipment is in use and dust suppression measures (spraying of waters) are in place.	Weekly	Regular visual inspections were carried out during the quarter. The contractor was instructed to ensure water sprinkling
5	Air Quality (PM10, NO2, SO2, CO2, CO)	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC.	Air quality monitoring for 24 hours for the parameters specified in NEQS 2000	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
6	Emissions from plant and equipment	At all the construction sites for dam, KKH and tunnels	Visual Inspection	Quarterly	Regular visual inspections were carried out during the quarter and no issue was observed.
7	Noise and vibration	Near the sensitive sites and settlements at the close to the construction works and along KKH. The locations of sampling can be same locations of baseline air quality or new locations recommended by the CSC	24-hour noise monitoring	Quarterly	No Quarterly Environmental monitoring was conducted during the quarter.
8	Waste Management	At the designated rock disposal area	Visual inspection on spoil disposal in accordance with EMP Sub plan on Waste Management	Quarterly	No spoil is generated during the activities at site. However, the spoil disposed by RAR-01 at Kass was used in levelling of the under construction camp.
9	Construction camps and construction management		Visual inspection that solid waste is disposed of at designated site	Quarterly	Under-construction
10	Spills from Hydrocarbon	Material storage sites and construction yards	Visual Inspection for leaks and spills	Quarterly	Regular monitoring was carried out. No incident observed

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11	Traffic Safety	Along KKH and access roads to the construction areas	Visual inspection to see whether Traffic Management Plan (EMP Sub Plan 12) is implemented	Quarterly	Supervised by OHS
12	Local Roads	Approach Roads	Visual inspection to ensure local roads are not damaged	Quarterly	Regular monitoring was carried out and no damage was observed to the local roads
13	Cultural and archeological Sites	At the physical and cultural resources identified in the EIA	Visual observation on implementation of EMP Sub Plan 13 on Physical Cultural Resources Management	Quarterly	The contractor kept in consideration this aspect during the excavation activities. There was no Archeological site present in the current construction area.
14	Drinking water and sanitation	In construction sites and construction camps	Ensure the construction workers are provided with safe water and sanitation facilities on the site	Weekly	Monitored. The contractor provided water coolers to the workers at the sites.

9.7 Key Performance Indicators

The key performance indicators identified in the ESA¹⁰ of DHP to mitigate the environmental impacts and risks during construction can be summarized into five categories, as shown in the following table.

Table 9.10: Key Performance Indicators for compliance with mitigation measures

Sr. No	Key Performance Indicator	Description of the Indicator
1	Number of any non-compliance reports	The number of non-compliances noticed and reported to the Contractor.
2	Number of public complaints or grievances	The number of complaints or grievances received from the communities on the construction-related nuisances such as traffic, dust, noise and vibration, or any other construction-related activities
3	Number of accidents/incidents	The number of accidents or incidents, or near misses involving construction activities and construction vehicles
4	Number of exceeding values against NEQS	The number of parameters in ambient air and noise quality, drinking water, wastewater discharges and surface waters found beyond the national standards.
5.	Other Indicators	Any other indicators that are not covered in the above categories are given in 'other indicators.' This includes the number of times chance finds are noticed, the number of trainings conducted, etc.

A detailed assessment of the status of compliance with the performance indicators and their status during the reporting period is given in the following table. Any indicators related to OHS and social aspects are covered in the relevant reports, not in this report.

¹⁰ See Table 8.2: Mitigation Plan for Construction Stage of ESA of Dasu Hydropower Project

Table 9.11: Key Performance Indicators and their Status during the reporting Period

Activity	Environmental Impact/Issue	Number of any non-compliance reports	Number of related incidents	Number of related grievances	Exceeding values against NEQS (air, noise, water, etc.)	Other Indicators	Remarks
1. Design/Pre- Construction Stage							Not relevant
2. Contractor Mobilization and Demobilizations	3.1 Traffic Management	Nil					
	3.2 Soil Erosion and Contamination	Nil					
	3.3 Air Quality	Nil					
	3.4 Noise	Nil					
	3.5 Public Safety	Nil					
	3.6 Damage to Infrastructure	Nil					
3. Contractor's Camp	4.1 Soil and Water Contamination	Nil					
	4.2 Air Quality	Nil					
	4.3 Vegetation loss	Nil					
	4.4 Noise	Nil					
	4.5 Health and Safety	Nil					Covered under OHS Report
	4.6 Social and Gender Issues	Nil					Covered under social report
	4.7 Damage to PCRs	Nil				Number of chance finds: 0	
	4.7 Increased load on local services	Nil					Covered under social report
4. Transportation of Equipment	5.1 Traffic Management	Nil					
	5.2 Soil Erosion and Contamination	Nil					
	5.3 Air Quality	Nil					
	5.4 Noise	Nil					
	5.5 Public Safety	Nil		3		Number of trainings provided:03, oil spill, protection of flora and fauna and waste management.	Three training session were conducted by Contractor in Jan 2023
	5.6 Damage to infrastructure	Nil					
5. Spoil Area Management	8.1 Changes to topography	Nil					
	8.2 Landslide						
	8.3 Soil erosion						
	8.4 Air Quality						
	8.5 Landscape and Visual Intrusion						
	8.6 Vegetation loss						
6. Waste Management	12.1 Soil and water contamination						Not reported during the quarter
	12.2 Odor						
7. EM-01 Camp Construction	7.1 Changes to topography						
	7.2 Landslides	Nil					
	7.3 Soil erosion						

	7.4 Soil and water contamination	Nil	2				Soil was contaminated with oil spill and sewage water directly releasing in to the soil without making a septic tank
	7.5 Air Quality	Nil					Nil
	7.6 Health and Safety						Covered under OHS
	7.7 Noise and Vibration	Nil					
	7.7 Landscape and Visual Intrusion	Nil					
	7.8 Vegetation loss	Nil					
	7.9 Fauna / Wildlife	Nil					Not reported during the quarter
	7.10 Mortality of Fish	Nil					Not reported during the quarter
	7.12 Damage to infrastructure	Nil					Not reported during the quarter
	7.13 Damage to PCRs	Nil					Not reported during the quarter
	7.14 Disturbance of Visual Landscape and Natural Habitats	Nil					Nil
	7.15 Social conflict due to the Influx of Workers and In- migrants						Covered under Social report
	7.16 Conflicts due to culturally inappropriate behaviors by the workers						Covered under Social report
	7.17 Adverse Effects on Health Situation	Nil					Covered under OHS Reports
	7.17 Increased Load on Local Services and Supplies	Nil					Covered under Migration management Report
	Use of Wood as fuel						Use of wood was reported in labor and staff at underconstruction Camp area and existing camp

9.8 Overall Compliance Status- Tri-Partite monthly Meetings

During the quarter, three monthly meetings were held with the Contractor by the Engineer and PMU to discuss pending environmental non-compliance and the actions taken by the Contractor to address these issues. The minutes of these meetings are shown in the Annexure. The major environmental issues discussed during the meeting were:

- Hiring of Environmental Officer
- Submission of Monthly Environmental progress report
- Submission of CEAP
- Dust suppression measures
- Inadequate Housekeeping
- Minor Oil Spills
- Chemical Tank being used for Drinking & Domestic Water Usage in the underconstrcution camp at Kass.
- Trainings for Oil Spills and Waste Management, Protection of Fora and Fauna to all Staff including Labor/ All Chinese Staff either Labor or Management
- Submission of Traffic Management Plan(TMP)
- Burning of Fire Wood by Labor and Security personel in Jan-Feb 2023.

10 Other Environmental Activities

10.1 Visit Conducted during the Quarter

10.1.1 Visit to Kuzabanda Service Area for Preparation Traffic Management Plan(TMP)

The Traffic Engineer, DHC (joined on 25th of Jan, 2023.) along with Sr. Environmentalist, DHC on 04th & 5th of March 2023 visited Kuzabanda Site to re-visit the parking spaces, layby areas, establishment of site offices along route from rest area of Kuzabanda up till Dasu Town as well as explore options like installation of traffic safety markers/signboards, guard railings etc. The whole Right of Way (RoW) was thoroughly checked for over sized vehicles also, over hanging rocks, bottle necks e.g., Jijal and Pattan Bazars. The Team also visited the foundation pile of Keyal Khwar Bridge which was exposed by the floods of July and August 2022.

10.1.2 Meeting with D.G (SS) WAPDA on TMP

There was meeting chaired by D.G SS&E WAPDA held on 13th of Feb 2023 among the WAPDA Environment Team and Environment Team of DHC along with the Traffic Engineer DHC for a discussion on Traffic Management Plan. The D.G (SS) WAPDA directed the Traffic Engineer to make certain changes in the traffic management plan regarding removal of metallic guard rails and introduction of concrete impact barriers even where the road is very narrow. There was another direction regarding identification of parking/layby areas in Dasu when undergoing the loading and unloading operation and changing the traffic management sketch by removing the bridge at Barseen. There were some other issues discussed as well like cost cutting, changing hierarchy and nomenclature of positions, etc.

10.2 Solid Waste Disposal Area

Background: The solid waste disposal site screening report for a SWD Site in Kaigah was submitted on 4th of August 2022 and approval of the report along with the go ahead for Land Acquisition came on 20th of Dec 2022. Land Acquisition section issued a formal request to Revenue Department of Upper Kohistan on 22nd Dec 2022.

In the month of January 2023 the "Revenue Department" of District Upper Kohistan (U.K) tried to follow the short route of acquisition i.e., to acquire land as additional land of KKH-01 24+00 to 24+400 RD. For this purpose a preliminary survey was conducted by the Revenue team in which the Land owners were identified for settling the price at negotiated price. There was a clash between two groups regarding that piece of land near Kaigah. The revenue department of Upper Kohistan tried to settle the issue on their own but all went in vein. After 1st week of March 2023, Land Acquisition Collector(L.A.C) Upper Kohistan(U.K) approached the senior management of DHPP to change the land acquisition procedure by issuing a new section-04 for the proposed SWD Site near Kaigah. This option was refused by the proprietor of DHPP and DHC was again directed to find a new site which is already acquired . The environment section of DHC is now in search of a new SWD Site as per Directions of WAPDA.

10.3 Meetings Conducted During the Quarter

10.3.1 Meeting with Contractors of RAR-01, KKH-01, MW-01, MW-02, RAR-02, KKH-02 and PCI-01R, TL-01, EM-01

Monthly Progress Review meetings for the quarter were conducted in January, February and March 2023, pending issues were discussed, the status of environmental issues were closed which were rectified and new observations regarding environmental non-compliances were made part of the discussion. Later, minutes of meetings were prepared and issued to all contractors.

10.3.2 Meetings with Project Manager KKH-02 (CGGC)

A detailed meeting among the Environment Section of DHC with Mr. Yao PM of KKH-02 was conducted on 14th of March 2023 to discuss the non-compliances at KKH-02. The main agenda which was discussed was the hiring of the Environmental Officer as per contract agreement, Preparation and submission of revised CEAP for KKH-02. The revised CEAP was required as the project design had included 7 tunnels and 6 bridges at different location of KKH-02 right of way. It was cleared to the PM, KKH-02 that non compliances at his sites were because of non hiring of the Environment Officer. The DHC observed a major change in EMAP implementation the upcoming days due to this meeting among Environment Team of DHC and Mr. Yao PM, KKH-02.

10.3.3 Meetings with MW-01 and MW-02 Team of CGGC

- **Air Dispersal & Noise Modeling**

A number of meetings were conducted with CGGC alone for the implementation of EMAP. In February there was a meeting held with Mr. Sun Kang (EHS Director CGGC) for the rectification of Air Dispersal Modeling Report for Seo crusher plant which was prepared by Hagler and Bailey Pakistan. The Air dispersal Modeling Report didn't possess the results as the model was run by Hagler and Bailey based on assumptions. The contractor CGGC didn't provide the actual specifications of the plant to be installed at Seo Village.

- **Sedimentation Tank of Uchar Thoki Crusher Plant**

One of the major issues discussed in different meetings was the sedimentation tank of Uchar Thoki Crusher Plant as DHC had observed that the Uchar Thoki Crusher Plant was releasing waste water with High pH and High turbidity. Therefore three special meetings were conducted on 09th of March 2023, 25th of March 2023 and 27th of March 2023. The first meeting was conducted at the site of Uchar Thoki Crusher Plant in which contractor was guided by DHC Environment Section to construct two new sedimentation tanks for increasing the retention time of the waste water. These new sedimentation tanks were intended to lower down the pH level of the waste water being released by the plant. The second and third meeting chaired by D.G (SS) WAPDA followed by a detailed on site visit by Mr. Asayama (RE MW-01), Mr. Ali Ozbek (Technical Advisor MW-01) and Environment Section of DHC along with Mr. Feng Hui (Planning Director CGGC) and Mr. Yang (Environment Section CGGC). At site there were different options discussed with the contractor and finalized a sketch for the two newly proposed sedimentation tanks to lower down the pH Level and turbidity of the waste water.

10.3.4 Meeting with WAPDA

- (i) Meeting was held among the newly hired Traffic Engineer and D.G SS&E for the updating of Traffic Management Plan (TMP) on 13th of February 2023. The D.G SSE emphasized on the details of staff requirements, Logistics Requirements, Parking Areas, Traffic Safety equipment's, scheduling of inbound and outbound traffic during the construction phase and cost to bear for implementation should be included in the updated TMP.
- (ii) Meeting on 26th of February 2023 with D.G SS&E WAPDA for discussion on presentation to be given to World Bank on 27th of February 2023
- (iii) The Environment Section of DHC attended virtual weekly meeting (dated: 1st of March, 2023) between WAPDA, DHC and World Bank regarding safety issues of DHPP with an additional agenda regarding Environment.
- (iv) Meeting (Dated: 3rd March 2023) with CGGC regarding wastewater discharges from the sedimentation tank of Uchar Thoki Stone Crushing Plant. Due to high turbidity of the wastewater it was violating the DHPP Environmental codes of practices and conditions of the KP-EPA NOC. The contractor was instructed to reduce the freshwater addition, connect the sedimentation discharges with settlement tank of the batching plant.
- (v) A meeting was held on 17th of March 2023 at WAPDA PMU Hall. Environment section was called upon to participate in the meeting to brief WAPDA Advisor project regarding DHPP traffic management plan. The Advisor project instructed to submit the plan by 31st March 2023 after incorporating Basha Dam (DBDP) project logistic data. WAPDA has been requested to provide the data.
- (vi) Meeting on 25th of March 2023 with D.G, SS&E WAPDA for discussion on preparation of new sedimentation tanks to decrease the high suspended load in the wastewater coming from Uchar Thoki Stone Crushing Plant for MW-01 Component.
- (vii) Another meeting and immediate site visit was conducted on 27th of March 2023, on the same agenda of preparation of new sedimentation tanks to decrease the high suspended load in the wastewater coming from Uchar Thoki Stone Crushing Plant for MW-01 Component. The Contractor proposed a sedimentation tank near the entrance of the crusher plant. The Engineer advised the contractor to construct a sedimentation tank adjacent to the existing one and connect it to the proposed sedimentation tank. The design for the proposal is awaited.

10.3.5 Meeting with CGGC EHS and Laboratory Team for bringing pH level of Sedimentation Tank within NEQS

A meeting was conducted with CGGC EHS Team and Laboratory Team on 1st of March 2023 for conducting an experiment on the sedimentation tank of MAT for lowering of pH in the sedimentation Tank with using mild acid dilution in the sedimentation tank. The environment Team of DHC arranged diluted sulfuric acid(H₂SO₄) with 25% V/V of 50 % concentration. There were seven samples which were runned down in which 0.1 ml, 0.3 ml, 0.5ml, 1ml, 2.5ml, 4ml, 5ml, was used. The Sample size was 1000ml. The experiment resulted in reducing the pH level to a range where it was coming within the NEQS limit. The final effective quantity which was 0.3ml in 900ml resulted in a pH level of 7.8. Later on the contractor did his own calculations based on this experimentation and another meeting was held on 14th of March 2023. The EHS Director of MW-01 and 02 presented his calculations and the amount of acid to be used in the sedimentation tanks of MW-01 & MW-02. The total amount required in a month was too costly and might have had some environmental and safety implications. Therefore, this option is still under consideration but not applied on site. It is important to notice that this option is clearly written in the IFC Guidelines to treat the waste water.

10.3.6 Quarterly Environmental progress review meetings with all Contractors

Quarterly Progress Review meeting for the Quarter of January -March 2023 were held during the quarter. Pending issues were discussed and new environmental non-compliances were also part of the discussion. Minutes of Meeting was prepared and issued to all stakeholders.

10.4 Additional Efforts;Joint Inspection of Environment Sections of WAPDA & DHC

10.4.1 Month of February 2023

Joint visits of different components of DHPP were conducted in the reporting month i.e., MW-01&2, EM-01 was conducted on 14th of February 2023 and KKH-01, PCI-01R and TL-01 on 21st of February 2023. The findings of these inspection visits were share vide Walk through Inspection Report to the concerned contractor. The Joint visit of WAPDA and DHC on 29th of February 2023 to KKH-02, RAR-02 was cancelled due to World Bank Implementation Support Mission(ISM)

10.4.2 Month of March 2023

Joint visits of different components of DHPP were conducted in the reporting month i.e., on the 1st of March 2023 there was a Joint Inspection by DHC and WAPDA for conducting of on-site Acid Treatment Tests by the MW-01 and MW-02 Contractor (CGGC) to lower down the pH values by addition of diluted acid in it (NEQS Limit of Waste water is 6-9).

On the 7th of March 2023, there was a visit conducted on MW-01&2, EM-01& RAR-01. Another Visit was conducted on 14th of March 2023 on KKH-01, PCI-01R and TL-01. The joint visit of WAPDA and DHC on 21st of March 2023 to KKH-02, RAR-02 was cancelled due to prior engagement of WAPDA Staff in some other official matters. On 28th of March 2023. There was another joint inspection visit by WAPDA and DHC to MW-01&02 contractor sites. The findings of these inspection visits were share vide Letters as well as walk through inspection report (WTEIR) to the concerned contractors. All these joint visits by WAPDA & DHC Environment staff were concentrated on the environmental non-compliances.

10.5 Meeting with World Bank (WB) Implementation Support Mission (ISM)

The World Bank Mission came to Dasu Hydropower Project in this 1st quarter of 2023. The WB ISM came in February 2023 from 26th– 28th of February 2023 and. The environment team of DHC prepared three presentations for the World Bank Team which are given as follows:

- (i) Presentation on DHPP Traffic management Plan; 27th Feb 2023
- (ii) Presentation on EMAP for WB Mission; 27th Feb 2023

10.5.1 WB Mission Details

The World Bank Environment Team Visited Dasu Hydropower Project in December 2022. The ISM started from 26th of February 2023 and WB Environment Team left on 28th of February 2023. On 27th Feb 2023 “The Engineers” Environment Team delivered presentation to the WB Environment Team. Agenda points are described as follows:

- Organogram for the implementation of EMAP (WAPDA, DHC, Contractors)

- Status of Pending Issues managed since December 2022 WB mission
- Efforts made to resolve the issues
- Air Dispersal Modeling Status
- Stone Crushing Plant of CGGC at Seo Village
- Spoil disposal sites
- Update on Traffic Management Plan

On 26th of Feb 2023 WB team visited Coffe dam, Underground works of MW-01 & 02 and Colony construction sites. (Pictures attached)

10.5.2 NCR issued to the Contractors

Two NCRs were issued to different Contractors regarding failure to mobilize Environmental officer while two NCRs were issued regarding Oil spill. Following Table shows the status of the NCR issued with date.

Sr. No.	Contract	Subject	Issuance Date
1	RAR-02	NCR-Failure to Hire and Mobilize Environmental Officer for RAR-02"	19 th Jan 2023
2	KKH-02	NCR-Failure to Hire and Mobilize Environmental Officer for RAR-02"	19 th Jan 2023
3	MW-01	Persistent Oil Spills at Construction Sites	22 nd Feb 2023
4	MW-02	Persistent Oil Spills at Construction Sites	22 nd Feb 2023
5	MW-01	Dumping of Sludge material on the right bank of the Indus River near coffer dam area and Diversion Tunnel-C.	15 th March 2023

10.6 Letters/ Reports sent to Contractors and WAPDA

Sr. No.	Subject	Date
1.	Request for Issuance of Recommendation Letter for Fuel Storage License (form-II rules 115 Article 5 Petroleum Rules 1937-CCECC	09 Jan 2023
2.	Engineers Reply to Submission of Required Documents for Third Party Environmental Monitoring Laboratory	09 Jan 2023
3.	Engineer's comments on 7th Quarter Environmental Monitoring Schedule-KKH-01	11 Jan 2023
4.	Engineer reply on Approval of Laboratory and 7th Quarterly Environmental Monitoring Plan of CCECC for KKH-01	11 Jan 2023
5.	Comments on the Monthly Environmental Report of the Contractor CGGC for MW-01 & 02	12 Jan 2023
6.	Submission of Utilization Record of coarse and Fine Aggregates till October 2022	12 Jan 2023
7.	Comments on the Monthly Environmental Report of the Contractor CGGC for RAR-2	13 Jan 2023
8.	Air Noise Dispersal Modelling Report Submission	16 Jan 2023
9.	Third Party Environment Monitoring by EPA KPK Approved Laboratory on KKH-01	25 Jan 2023
10.	Ref No: DHC/Dasu/CCECC/KKH-01/zic/23-030; KKH-01-Re-Submission of Construction Environmental Action Plan (CEAP) and Monthly EHS Monitoring Report NO.84 (Reminder-01)	02.02.23
11.	No: DHC/Dasu/PCCCfTL-01/zic/23-15; Re-Submission of Monthly HSE Report No. 74 for the Month of December, 2022	06-02-2023
12.	Ref No: DHC/Dasu/WAPDA/GEN/zic/23-190; Submission of Utilization Record of Coarse and Fine Aggregates till November 2022	07-02-2023
13.	Minutes of Monthly Environmental Progress Meeting PCI-01R held on 31 Jan 2023	11-02- 2023
14.	Minutes of Monthly Environmental Progress Meeting MW-01 &02 held on 31 Jan 2023	11-02-2023
15.	Minutes of Monthly Environmental Progress Meeting KKH-01 held on 31 Jan 2023	09-02-2023
16.	Minutes of Monthly Environmental Progress Meeting KKH-02 held on 31 Jan 2023	11-02-2023

17.	Minutes of Monthly Environmental Progress Meeting RAR-01 held on 31 Jan 2023	09-02-2023
18.	Minutes of Monthly Environmental Progress Meeting RAR-02 held on 31 Jan 2023	11-02-2023
19.	Minutes of Monthly Environmental Progress Meeting TL-01R held on 31 Jan 2023	11-02-2023
20.	Minutes of Monthly Environmental Progress Meeting EM-01 held on 31 Jan 2023	11-02-2023
21.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-106; Engagement of Third Party Environmental Monitoring Laboratory	12-02-2023
22.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-121; Air Dispersion Modeling Report for Stone Crushing Plant at Seo Dasu Performed by Hagler & Bailly on Behalf of CGGC	15-02-2023
23.	Ref No: DHC/Dasu/CCECC/RAR-01/zic/23-020; Walk Through Environmental Inspection -Joint Site Inspection of WAPDA and DHC	17.02.23
24.	Ref No: DHC/Dasu/PCC/TL-01/zic/23-020; Re-Submission of Monthly HSE Report No.75 for the Month of January 2023	18.02.23-
25.	Ref No: DHC/Dasu/CGICOP/PCI-01R/zic/23-047; Re-Submission of Monthly EHS Report of the Month of January 2023	18.02.23-
26.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-128; Environmental Non-Compliances Observation at Site	18-02-23
27.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-129; Inadequate Sedimentation Tank at Thoki Crusher Plant	19-02-23
28.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-130; Engineer Comments on the Air and Noise Dispersion Modelling Reports of Seo Crusher Plant	20-02-23
29.	Ref No: DHC/Dasu/CCECC/RAR-02/zic/23-027; Hiring of Environmental Specialist	21.02.23
30.	Ref No: DHC/Dasu/CCECC/KKH-01/zic/23-057; KKH-01-Review of Monthly EHS Monitoring Report No.84 for the Month of December 2022	21.02.23
31.	Ref No: DHC/Dasu/CCECC/KKH-01/zic/23-058-KKH-01-Review of Monthly EHS Monitoring Report No.85 for the Month of January 2023	21.02.23
32.	Ref No: DHC/Dasu/CCECC/KKH-02/zic/23-037; Hiring of Environmental Specialist	21-02-23
33.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-141; Hiring of Environmental Officer	21-02-23
34.	Ref No: DHC/Dasu/CGGC/MW-02/zic/23-052; Review of Environmental Officer	21-02-23
35.	Ref No: DHC/Dasu/CGGC/MW-01/AO/23-144-MW-01-Environmental Inspection for Thoki Uchar Crushing Plant 1#	22-02-23
36.	Ref No: DHC/Dasu/CCECC/KKH-01/zic/23-062; Submission of Proper Design for the Construction of Sedimentation Tank at Chuchang Batching Plant	22-02-23
37.	Ref No: DHC/Dasu/CCECC/KKH-02/zic/23-39; Submission of Fuel Storage License	22-02-23
38.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-149: Plantation at Thoki Crusher Plant	23-02-23
39.	Ref No: DHC/Dasu/CGGC/MW-01/zic/23-159: Provision of Specification of Seo Crush Plant to Hagler Bailey for Updating of Air Dispersal Modelling Report	25-02-23
40.	Ref No: DHC/Dasu/WAPDA/Gen/zic/23-247: 32nd Environmental Progress Report for the Period from Oct to December 2022	25-02-23
41.	DHC/Dasu/WAPDA/MW-01/zic/23-186; MW-01-Submission of Utilization Record of Coarse and Fine Aggregates till December 2022	05-03-2023
42.	DHC/Dasu/CGICOP/PCI-01R/zic/23-061; Re-Submission of Monthly EHS Report for the Month of January 2023	06-03-2023
43.	DHC/Dasu/GEPC/EM-01/zic/23-072 EM-01-Joint Site Inspection of WAPDA and DHC	08-03-2023
44.	Ref No. DHC/Dasu/CCECC/RAR-01/zic/23-029 RAR-01-Joint Site Inspection of WAPDA and DHC	08-03-2023
45.	DHC/Dasu/WAPDA/MW-01/zic/23-192	09-03-2023
46.	Minutes of Monthly Environmental Progress Review Meeting RAR-01	09-03-2023

	held on 3 rd March 2023	
47.	Minutes of Monthly Environmental Progress Review Meeting KKH-01 held on 3 rd March 2023	09-03-2023
48.	Minutes of Monthly Environmental Progress Review Meeting KKH-02 held on 2 nd March 2023	09-03-2023
49.	Minutes of Monthly Environmental Progress Review Meeting TL-01 held on 3 rd March 2023	09-03-2023
50.	Minutes of Monthly Environmental Progress Review Meeting PCI-01R held on 4 th March 2023	09-03-2023
51.	Minutes of Monthly Environmental Progress Review Meeting KKH-01 held on 3 rd March 2023	09-03-2023
52.	Minutes of Monthly Environment Progress Review Meeting MW-01& MW-02 held on 2 nd March 2023	10-03-2023
53.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23-085; KKH-01-Construction of Crushing Plant at Chuchang	11-03-2023
54.	Ref: DHC/Dasu/WAPDA/MW-01/zic/23-201; MW-01-Walk Through Environmental Inspection - Joint Site Inspection of WAPDA and DHC	11-03-2023
55.	Ref: DHC/Dasu/WAPDA/MW-02/zic/23-083; MW-02-Walk Through Environmental Inspection - Joint Site Inspection of WAPDA and DHC	11-03-2023
56.	Ref: DHC/Dassu/CCECC/KKH-01/zic/23-088; Construction of Uchar Batching Plant	13-03-2023
57.	NCR No. CGGC/MW -01 /Env/23-02; MW-01-NCR-Disposal of Sludge Near Right Bank of Indus River	15-03-2023
58.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23- 096; KKH-01-Environmental - Joint Site Inspection of WAPDA and DHC	16-03-2023
59.	Ref: DHC/Dasu/ CGGC/MW-01/zic/23-212; MW-01-Environmental Non-Compliance at Starter Dam Site	16-03-2023
60.	Ref.: DHC/Dasu/PCCCF TL-01/zic/23-072; TL-01-Joint Site Inspection of WAPDA and DHC	17-03-2023
61.	Ref : DHC/Dasu/CGGC/MW-01/zic/23-217; MW-01-Submission of Detailed Traffic Management Plan	18-03-2023
62.	Ref: DHC/Dasu/ CGICOP/PCI-01R/zic/23-074; PCI-01R-Joint Site Inspection of WAPDA and DHC	18-03-2023
63.	Ref: DHC/Dasu/ CGGC/MW-01/zic/23-219; MW-01-Design Details of Sedimentation Tanks for Uchar Crushing and Batching Plant	18-03-2023
64.	DHC/Dasu/CCECC/KKH-0 1/zic/23-100; KKH-01-Detail Design of Sedimentation Tank of K-6 Batching Plant	18-03-2023
65.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23-107; KKH-01-Washing of Concrete Transit Mixer in Chuchang Nullah	19-03-2023
66.	Ref: DHC/Dasu/CGGC/KKH-02/zic/23-066; KKH-02-Submission of Fuel Storage License	19-03-2023
67.	Ref: DHC/Dasu/CGGC/MW-01/zic/23-220; MW-01-Engineer Reply on Initiation of Tree Plantation Under the Contract	19-03-2023
68.	10.7 Ref: DHC/Dasu/CGICOP/PCI-01 R/zic/23-080; PCI-01R-Washing of Concrete Transit Mixer in Chuchang Nullah	19-03-2022
69.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23-109; KKH-01-Detail Design of Sedimentation Tank of K-9 Tunnel	20-03-2023
70.	Ref: DHC/Dasu/CGGC/MW-01/zic/23-222; MW-01-Mitigation Measures for Waste Water From Thoki Crusher Plant	20-03-2023
71.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23-112; KKH-01-Approval of Construction Environmental Action Plan (CEAP)	20-03-2023
72.	Ref: DHC/Dasu/WAPDA/GEN/zic/23-342: Request for Performance Review of Newly Hired Traffic Engineer at DHPP	25-03-2023
73.	Ref: DHC/Dasu/CCECC/KKH-01/zic/23-114: KKH-01-Engineer Reply on ES-PAK Laboratory Environmental Approval	26-03-2023
74.	Ref: DHC/Dasu/PCC/TL-01/zic/23-037: TL-01-Reply on Submission of Water Quality Test Report	27-03-2023
75.	Ref No: DHC/Dasu/CGGC/MW-01/ zic/23-240: Requirement of Two Sedimentation Tanks As Mitigation Measures For Waste Water From	28-03-2023

	Thoki Crusher Plant	
76.	Ref: DHC/Dasu/CGGC/MW-01/zic/23-244; MW-01-Engineer Reply on the Apply for Approval of Environmental Officers	29-03-2023
77.	Ref: DHC/Dasu/CGGC/KKH-02/zic/23-082; Submission of Revised Contractor Environmental Action Plan CEAP for KKH-02	29-03-2023
78.	Ref: DHC/Dasu/CGICOP/PCI-01R/zic/23-084; PCI-01R-Request for Water Quality Testing at WAPDA Colony Chuchang	29-03-2023

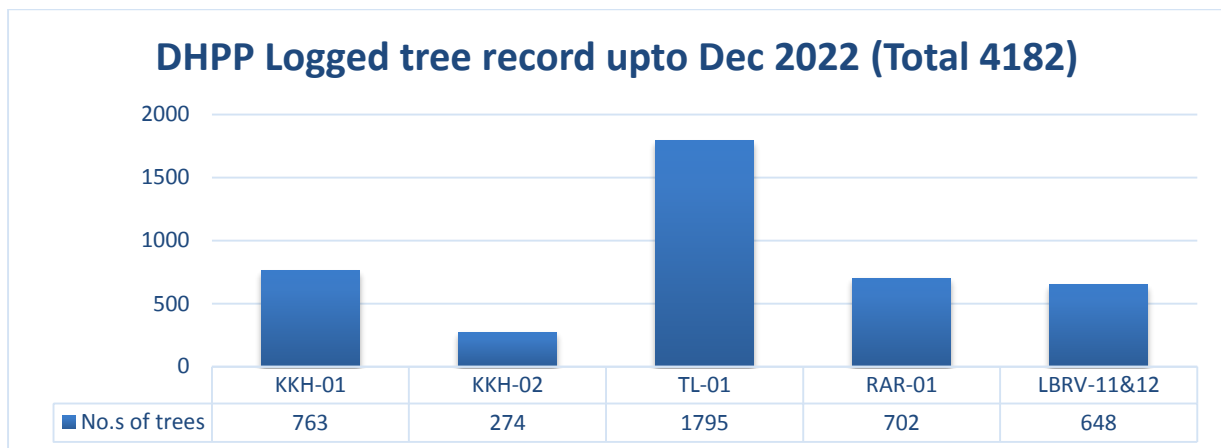
10.8 Joint Inspection by EHS Teams of WAPDA and DHC

The Joint Inspections were mutually agreed between EHS Teams of WAPDA and DHC in January that these Inspections will be conducted on regular basis. The Joint Inspections started on 14th of February and scheduled up to till June 2023 for all contractor sites as per an agreed schedule. Following Inspection Visits are completed as per schedule.

Sr. No.	Contract Name	Date Scheduled	Status of Inspection (Done/Not Done)
01	MW-01	14 Feb 2023, 7 & 28 March 2023	Done
02	MW-02	14 Feb 2023, 7 & 28 March 2023	Done
03	KKH-01	21 Feb 2023 and 14 March 2023	Done
04	PCI-01 & TL-01	21 Feb 2023 and 14 March 2023	Done
05	RAR-01	14 Feb 2023, 7 & 28 March 2023	Done
06	RAR-02	28th Feb 2023 & 21 st March 2023	Done
07	KKH-02	28th Feb 2023 & 21 st March 2023	Done

10.9 Tree Removal Data

Total trees cut down due to construction of DHPP components or associated activities are 4182 up till Dec 2022. The contractors has not shared Tree cutting data in the reporting period from January to March 2023.



10.10 Physical Cultural Resources (PCR)

No Physical Cultural Resources found on any construction site of DHPP till date..



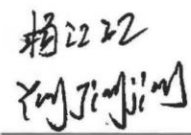
10.11 Grievance Redressal Mechanism

There is a one tier Independent Grievance Redressal Committee which is headed by a retired Additional Deputy Commissioner (A.D.C). The Engineer's Environment Section is in close liaison with this IGRC and till date there has been no registered grievances regarding Environmental component of DHPP.

Annexures

Annexure A: Minutes of Monthly Environmental Progress Meetings
(MW-01 & 2, KKH-01 & 02, RAR01 & 02, TL-01, PCI-01R & EM-01)

(Minutes of Meeting for Month of January 2023)

DASU HYDROPOWER PROJECT MINUTES OF MEETING (MW-01& MW-02) January 2023		31 st Jan 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezhouba Group Co., LTD (CGGC)		
Subject: Monthly Environment Progress Review Meeting for MW-01&02. Date: 31 st Jan 2023 Time: 09:00 am-09:50 am Place: DHC meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of MW-01&02.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE MW-01&02, Dasu		3. Contractor, CGGC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date:	<u>Engineer</u> Date: 01-02-2023	<u>Contractor</u> Date:
 Representative of Employer- WAPDA (DHPP)	 Representative of Engineer (DHC)	 Representative of Contractor(CGGC)

Minutes of the Monthly Environmental Progress Review Meeting (MW-01& MW-02) January 2023



Project	MW-01& MW-02		Location		DHC Office		
Employer	WAPDA		Date of Meeting		31 st Jan 2023		
Engineer	DHC		Place of meeting		DHC Meeting Hall		
Contractor	CGGC		Time		09:00 am-09:50 am		
Sr. #	Checked Items and Actions Planned	Action By			Target Date for Action	Action Confirm Date	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con.			
23	Status of 3 rd party Quarterly environmental monitoring as per contract specifications			√	20/05/2021	02/06/2021 02/07/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022	<p>In process. In process. The contractor informed that the contract with the laboratory is in process by CGGC commercial department.</p> <p>Not done.</p> <p>Not done. The contractor was instructed to immediately arrange 3rd party quarterly environmental monitoring.</p> <p>Partially done. The Contractor mobilized <i>Bureau Veritas</i> environmental monitoring laboratory to site but their equipment were not as per the monitoring specifications. The Laboratory was demobilized and were asked to come up with all the calibrated analyzers and instruments. The contractor informed that the laboratory will be remobilized to site by 10th January 2021.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share profile before mobilization of the environmental laboratory.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share</p>

				√		<p>profile before mobilization of the environmental laboratory</p> <p>05/04/2022 “The Engineer” will write a letter to contractor for updated status about the Third-Party Monitoring Laboratory Hiring Status.</p> <p>28/05/2022 Not Done: Contractor shared its decision that SGS Laboratory is finalized by the CGGC but number of parameters is still under discussion.</p> <p>30/06/2022 Not done. The Contractor informed that their contract section wants clarification regarding the number of parameters to be tested. A meeting in this regard will be scheduled by the Engineer.</p> <p>29/09/2022 The contractor has decided to take SGS on board for the third party monitoring purpose but there is a meeting scheduled in 13th October 2022 in order to discuss and finalize the Parameters to be performed.</p> <p>02/11/2022 Not Done: The contractor informed that the certification and equipment list of another lab will be shared with the Engineer for their approval by 12th Nov 2022.</p> <p>30/11/2022 Not Done: The contractor informed that they are in search of a lab and they will submit by 12th of Dec 2022.</p> <p>29/12/2022 Not Done: CGGC has again come up with Bureau Veritas Environmental Laboratory. The contractor has agreed to re submit the technical profile of M/s Bureau Veritas with all requisite documents especially certificate of registration from PK EPA. The engineer with consent from WAPDA has agreed to re consider this organization with all complete documentation and proof of all statutory</p>
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						31/01/2023	<p>requirements to be submitted by CGGC up till 25th of January 2022.</p> <p>Not done. The contractor has sought new timeline for himself i.e., up to 16th of Feb 2023 for sorting this issue. The contractor will pursue the matter with their Bureau Veritas (B.V) Laboratory. If the B.V Lab doesn't share its Certificate of Registration from EPA, KPK than CGGC has to share a new KP EPA Approved Laboratory profile up till 16th of Feb 2023.</p>
36	Appointment of Environment Director			√	16 th January 2021	<p>07/02/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 25th February 2022.</p> <p>01/03/2022 Not done. Contractor informed that search for suitable candidate is still in progress.</p> <p>28/05/2022 Not Done: The matter is still pending; Contractor has assured to share CV of suitable candidate who has some practical experience.</p> <p>30/06/2022 Not done. Contractor verbally discussed about a potential candidate Mr. Afzal who was engaged in Neelum Jehlum. The Engineer instructed the contractor to submit the CV officially to proceed further in this matter.</p> <p>29/09/2022 Note Done: The contractor will submit the resume of the nominated person 14th Oct 2022</p> <p>02/11/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 17th November 2022.</p> <p>30/11/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 12th December 2022.</p>	



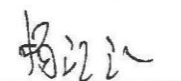
						29/12/2022	Not Done: The contractor was informed that this matter is also discussed with WB and the WB is also of the view that in case of non-availability of 15 years' experienced person the experience may be reduced to 10 years. On this issue the Engineer has already sought approval from WAPDA. The contractor has agreed to find a suitable candidate and submit his/her resume before 23 rd of Jan 2023.
						31/01/2023	WAPDA has sought guidance from World Bank and World Bank has reduced the Experience up to 08 years. Therefore, On these basis CGGC MW-01 and MW-02 contracts has sought time up till 15 th of Feb 2023
53	Ensure Water Sprinkling in the Khoshe Area previously managed by Zhongmei			√	Immediate	02/11/2022	Partially Done: Ensure Water Sprinkling in the Khoshe area allocated to CGGC as well as Zhongmei
						30/11/2022	Partially Done Ensure Water Sprinkling in the Khoshe area allocated to CGGC as well as Zhongmei
						29/12/2022	Partially Done: Contractor has agreed to ensure compliance of Water Sprinkling. Ongoing activity,
						31/01/2023	Partially done: Contractor has agreed to ensure compliance of Water Sprinkling. Ongoing activity,
54	Oil Spills: Work Shop area @ CR-09 near bailey bridge			√	Immediate	29/12/2022	It has been observed that the mechanics in workshops drain hydraulic fluids as well as used oils directly on open soil. This practice must be stopped immediately by contractor staff. Therefore, CGGC contractor have agreed to impart training to 100% of their staff regarding oil spill before 25 th of January 2022. If the oil spill practice is still observed on the sites than the person responsible for oil spill will be fined. Fines will be collected by the

57	Inadequate Housekeeping @ CR-09; Work shop adjacent to aggregate storage area inside CR-09, almost 100m from the gate.			√	Immediate	29/12/2022	The contractor has agreed to ensure good housekeeping @ CR-09 Store and Workshop areas.
						31/01/2023	Done
58	CR-09 Batching Plant			√	Immediate	29/12/2022	Concrete Mixer trucks are washed up at MW-02 Batching plant adjacent to CR-09 soil disposal area. The waste water is directly going in to the Indus River. This practice is strictly prohibited. All waste water should be released after appropriate retention in the sedimentation ponds as well as the pH of the Waste water should be under NEQS Limit i.e., 6-9
						31/01/2023	Done.
59	Contractors Local Staff Residential Facility Inspection required			√	Immediate	29/12/2022	The engineer will conduct meeting among Environment and OHS Sections and then decide that who will be conducting this inspection and with what frequency. During the inspection Workers Welfare facilities will be monitored as per provisions in the contract.
						31/01/2023	Not Done: The Engineer conducted the inspection in Jan 2023 and found the discrepancies regarding provision of hot water, overcrowding and filthiness of toilets, waste management is still existing. Therefore Contractor has agreed to rectify the situation in the Labor camp of Pakistani staff and raise an AFI up till 10 th of Feb 2023 to the Engineer.
60	Sedimentation Tank @ Uchar Crush Plant			√	Immediate	29/12/2022	The sedimentation Tank is very dirty and contains lot of sediments and sludgy froth is on top of the water. Therefore contractor has to clear the sedimentation tank before 16 th of Jan 2023 and submit an AFI to The Engineer for inspection
						31/01/2023	Not Done Therefore Contractor has agreed to rectify the situation by cleaning the sedimentation tank on daily basis and ensuring

							of addition of fresh water in large quantities, at the sedimentation tank and raise an AFI up till 10 th of Feb 2023 to the Engineer.
61	Installation of Wet Scrubbers on Uchar Crush Plant			√	Immediate	29/12/2022	The contractor has agreed to install sprinkling system on the conveyor belt of the Uchar Crushing Plant(wet scrubbers) Therefore contractor has agreed to install Wet scrubbers before 23 rd of Jan 2023 and submit an AFI to The Engineer for inspection
						31/01/2023	Not Done Therefore Contractor has agreed to rectify the situation at the Uchar Crush Plant and install water sprinklers (Wet scrubbers) and raise an AFI up till 10 th of Feb 2023 to the Engineer.
62	Zero Tolerance policy for animals at site			√	Immediate	29/12/2022	No animal are allowed on the construction site by any staff member of CGGC at any construction site. The contractor has agreed to remove all animals from all construction sites before 16 Jan, 2023. {*Note: If Chinese Nationals want to keep dogs, they should be kept in special cages in Chinese part of Barseen Camp) and properly vaccinated for rabies and other communicable diseases.}
						31/01/2023	Partially Done: Contractor has removed some of the animals from construction sites but still there are some animals like pigeon and chicken on CR-09 site, dogs on CR-02 site etc.
63	Welfare facilities @ CR-02			√	Immediate	29/12/2022	The contractor has agreed to hire a dedicated janitor for every site who will be responsible for cleaning the toilets at least three time a day in one shift. Additionally the Toilet at CR-02 are choked up, therefore they will be cleared of any sludge and the septic tank will also be cleared along with the toilets. The contractor

						31/01/2023	has also agreed to install flushing system at CR-02. Not Done: The contractor has agreed to rectify the situation by 10 th of Feb 2023.
64.	Use of wood as fuel is still going on the switchyard site.			√	Immediate	31/01/2023	The contractor was told to immediately stop use of wood as fuel and contractor has agreed to provide LPG Gas cylinders to its staff.
65	Use of chemical tank for human use.			√	Immediate	31/01/2023	Contractor has agreed to replace this chemical tank with a new Water Tank as empty chemical tank is being used for store water for human consumption.

Confirmed by:


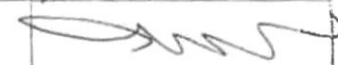
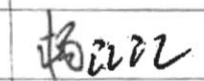
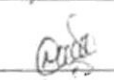
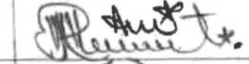

		
The Employer	The Engineer/Consultant	The Contractor
Name: <u>Waseem Ali</u>	Name: <u>Awais H. Khan</u>	Name: <u>Eng. Mujib</u>
Position: <u>AD/ (ECO)</u>	Position: <u>Sr. Environment Sp</u>	Position: <u>Environment Director</u>
Date: <u>06/02/2023</u>	Date: <u>01-02-2023</u>	Date: <u>2023.2.13</u>

Annexure-01: Attendance Sheet

Dasu Hydropower Project
Dasu Hydropower Consultants
Meeting Attendance Sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/LBRV-11&12/PCI-01R/RAR-02/KKH-02

Date: 31-01-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Awaiz Hassan Khan	DHC	Sr Env Specialist		
2	SAEED UL HASSAN	CGGC H&ED	OT&O MW 01		
3.	Yang Jiming	Ch4C H&ED	Environment Mgmt		
4	Nasir Khan	DHC	Field Inspector		
5-	RAHMAT ALI	CGGC	Env. Supervisor	03554279961	
6.	Farhat Ali	WAPDA	Dy. Director	0344 9596 431	

DASU HYDROPOWER PROJECT
MINUTES OF MEETING (RAR-01) January 2023

31st January 2023

Employer:
WAPDA (DHPP)

Engineer:
Dasu Hydropower Consultants (DHC)

Contractor:
China Civil Engineering Construction Co., LTD (CCECC)

Subject: Monthly Environmental Progress
Review Meeting for RAR-01.
Date: 31st January 2023
Time: (11:02 am-11:35 am)
Place: DHC Meeting Hall
Pages: 01
Exhibit: Attendance Sheet

Agenda:
Monthly Environmental Progress Review
Meeting of RAR-01.

Attendees
See the attached attendance sheet

Distributed (Softcopy) to:
1. Employer
- DHP WAPDA GM/PD, Dasu
- DHP WAPDA Director (Environment), Dasu
2. Engineer
- DHC RE Roads, Dasu

3. Contractor, CCECC
4. Office File / Circulation

Agreed by:

Employer

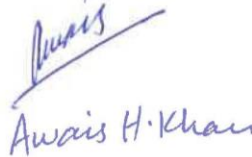
Date:



Representative of
Employer- WAPDA (DHPP)

Engineer

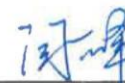
Date: 01-02-2023



Representative of
Engineer (DHC)

Contractor

Date:



Representative of
Contractor(CCECC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-01) January 2023



Project		RAR-01		Location		DHC Office	
Employer		WAPDA		Date of Meeting		31/01/2023 (11:02 am-11:35 am)	
Engineer		DHC		Place of meeting		DHC Meeting Hall	
Contractor		CCECC		Attendance		Attendance Sheet Attached*	
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
36	Fugitive Dust Suppression Measures during Drilling			√	Immediate	05/11/2022 29/12/2022 31/01/2023	Not Done Partially Done: This is a continuous activity and should be continued till the end of the project. Partially Done: This is a continuous activity and should be continued till the end of the project.
37	Oil Spill			√	Immediate	29/12/2022 31/01/2023	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023. Done: The contractor has agreed to share the record with the Engineer.
38	Inspection of Welfare Facilities		√		15 th of Jan 2022	29/12/2022 31/01/2023	To be conducted by "The Engineer" Done: The contractor was informed about the discrepancies at the Zaal Camp
39	Concrete Mixer / Truck Washing at Nearby Nullah/ Water body			√	Immediate	29/12/2022 31/01/2023	The contractor agreed to train their drivers and maintenance staff not to wash their concrete mixers and other dumping vehicles in or Nearby Nullah/ Water body Partially Done: The contractor has agreed to impart training to their drivers/ mechanics and other staff regarding this issue and promised to share record of trainings with the Engineer. In case of non-compliance the respective driver/ conductor will be fined.

Confirmed by:

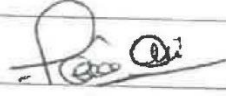



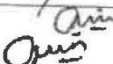
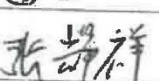
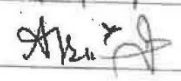
	The Employer	The Engineer/Consultant	The Contractor
Name:	<u>Liagat Ali</u>	<u>Awasi H Khan</u>	<u>江峰</u>
Position:	<u>AD (ECC)</u>	<u>Sr. Environment Specialist</u>	<u>PM</u>
Date:	<u>06/02/2023</u>	<u>01-02-2023</u>	<u>01-02-2023</u>

Annexure: Attendance Sheet of the Participants

Dasu Hydropower Project
Dasu Hydropower Consultants
Meeting Attendance Sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/LBRV-11&12/PCI-01R/RAR-02/KKH-02

Date: 31-01-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
01	Farhat Ali	WAPDA	Dy. Director ENV	0344 9596 431	
02	Awais Hassan Khan	DHC	Sr. Env Specialist	0333-6563675	
03	Nasir Khan	DHC	Field Inspector	0345-9577742	
034	MANZOOR HUSSAIN	CCECL	HSE Manager	0345-5887751	
05	JUNAID Ahmed	CCECL	HSE Manager	0345-9601987	
06	Zhang Huixiang	CCECL	HSE Director		
07	ARIF HUSSAIN	CCECL	EHS	0345-2848920	

DASU HYDROPOWER PROJECT
MINUTES OF MEETING (RAR-02) January 2023

31st January, 2023

Employer:
WAPDA (DHPP)

Engineer:
Dasu Hydropower Consultants (DHC)

Contractor:
China Gezouba Group Co., LTD (CGGCC)

Subject: Monthly Environmental Progress
Review Meeting for RAR-02.
Date: 31st January 2023
Time: (09:55am-10:25am)
Place: DHC Meeting Hall
Pages: 01
Exhibit: Attendance Sheet

Agenda:
Monthly Environmental Progress Review
Meeting of RAR-02.

Attendees
See the attached attendance sheet

Distributed (Softcopy) to:
1. Employer
- DHP WAPDA GM/PD, Dasu
- DHP WAPDA Director (Environment), Dasu
2. Engineer
- DHC RE Roads, Dasu

3. Contractor, CGGC
4. Office File / Circulation

Agreed by:

Employer

Date:



Representative of
Employer- WAPDA (DHPP)

Engineer

Date: 01-02-2023



Representative of
Engineer (DHC)

Contractor

Date: 14-02-2023



Representative of
Contractor(CGGC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-02) January 2023



Project	RAR-02	Location	DHC Office				
Employer	WAPDA	Date of Meeting	31/01/2023 (09:50am-10:25am)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	CGGCC	Attendance	Attendance Sheet Attached*				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for RAR-02 Component			√	5 th of June 2022	30/06/2022 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023	Not done. The Contractor informed that they will share CV of a relevant candidate to be considered for the post. Not Done; Contractor is instructed to submit the resume by 17 th of Oct 2022. Not Done; Contractor is instructed to submit the resume by 17 th of Nov 2022. Not Done; Contractor is instructed to submit the resume by 15 th of Dec 2022, otherwise an NCR will be issued against this non-compliance. Not Done: The contractor has been shared with grave concern by the Engineer to submit a suitable candidate resume by 17 th of Jan 2023. Already an NCR is issued on 10 th of Dec 2022. Not Done: The contractor has agreed to share a qualified and experienced candidate resume by 14 th of Feb 2023.
03	Fugitive Dust Suppression measures to be taken at site on regular basis with at least 3 time a day and additional if required because summer season has already started.			√	Immediate	30/06/2022 29/09/2022	Partially done. The contractor informed that a dedicated water sprinkler is deputed at site which not only sprinkle along the access road but also at the excavated material before disposal. Not Done: The contractor informed that the track to the working faces is narrow and dumper and water bowser cannot reach the working face of the site therefore contractor is given time up till 30 th of Oct 2022 to improve accessibility of the track.

						02/11/2022	Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 14 th of Nov 2022.
						30/11/2022	Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 27 th of Dec 2022.
						29/12/2022	Not Done: The excavated material is rolled down the slope by the contractor creating a huge dust cloud. The contractor has agreed to install water pumps which will lift water from nearby stream/river to sprinkle it upon the slopes as well as the excavated material so that there is no fugitive dust.
						31/01/2023	Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, and Environmentalist. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023.
04	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated site of Kass disposal site on RAR-01.			√	Immediate	30/06/2022	Not done. The Contractor is strictly instructed to ensure haulage of the spoil to designated spoil disposal area
						29/09/2022	Not Done; The contractor informed that at the moment the spring which was nearby is dried up and the path to the working face is narrow, due to which the dumper cannot reach the exact working face. As soon as the dumper can reach the working face the haulage of excavated material will be started.
						02/11/2022	Not Done: The contractor is instructed to haul the excavated material to the designated spoil

09	Designated Spoil disposal Plan submission required by the Contractor			√	16 th of Jan 2023	30/11/2022 29/12/2022 31/01/2023	The contractor is instructed to submit the spoil disposal plan up till 15 th of Dec 2022. Not Done: The contractor has agreed to submit Spoil Disposal Plan by 16 th of Jan 2023 Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHs Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023. The spoil Disposal plan will be submitted after the joint visit and will be based on its technical decisions.
10	Oil Spillage Training			√	23 Jan 2023	29/12/2022 31/01/2023	Submit record for oil spillage at RAR-02 (Sigloo Side). {Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023.} Partially Done: The contractor has conducted training of its staff but record is not yet shared with The Engineer. Done: RAR-02 EHS team will share the record in the January 2023 MPR.
11	Drinking Water Supply Record Submission required by RAR-02 EHS Team for all working faces.			√	09 th Jan 2023	29/12/2022	The contractor has agreed to submit by 09 Jan 2023. Not Done: The contractor has shared that the labor has not been consuming their supplied water because of availability of spring water nearby but as per contractual obligation the contractor has agreed to supply drinking water.
12	Spoil Disposal Plan			√	20 th Jan 2023	29/12/2022	The contractor has agreed to submit a proper spoil disposal plan which will not only highlight the location map of spoil disposal areas but complete methodology that which work faces will use which spoil disposal site and what amount of

						<p>disposal site and not to roll down any spoil material along the slope</p> <p>30/11/2022 Not Done: The contractor has requested to give him time up till 27th of Dec 2022 which was agreed by the Engineer.</p> <p>29/12/2022 Not Done: The contractor is instructed to haul the excavated material to the designated spoil disposal site and not to roll down any spoil material along the slope endangering habitat along the slopes as well as aquatic life form and Nearby Human Settlements.</p> <p>31/01/2023 Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14th of Feb 2023.</p>
05	Oil spill should be removed				√	<p>29/09/2022 Not Done</p> <p>02/11/2022 Partially Done: The contractor agreed to submit Environment incident Report by 14th Nov 2022</p> <p>30/11/2022 Partially Done: The oil spill is removed but the Environment Incident report is still pending from contractor side.</p> <p>29/12/2022 Not Done: Contractor has agreed to impart training to all staff especially mechanics and before 23rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30th of Jan 2023.</p> <p>31/01/2023 Done: RAR-02 EHS team will share the record in the January 2023 MPR.</p>

DASU HYDROPOWER PROJECT
MINUTES OF MEETING (KKH-01) January 2023

31st Jan 2023

Employer:
WAPDA (DHPP)

Engineer:
Dasu Hydropower Consultants (DHC)

Contractor:
China Civil Engineering Construction Co., LTD (CCECC)

Subject: Monthly Environment Progress Review
Online Meeting for KKH-01.
Date: 31st Jan 2023
Time: 11:40am-12:10 pm
Place: DHC Meeting Hall
Pages: 02
Exhibit: Attendance Sheet

Agenda:
Monthly Environmental Progress Review
Meeting of KKH-01.

Attendees
See the attached attendance sheet

Distributed (Softcopy) to:

- Employer
 - DHP WAPDA GM/PD, Dasu
 - DHP WAPDA Director (Environment), Dasu
- Engineer
 - DHC RE Roads, Dasu

- Contractor, KKH-01
- Office File / Circulation

Agreed by:

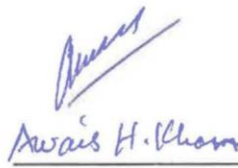
Employer
Date:

Engineer
Date: 01-02-2023

Contractor
Date:



Representative of
Employer- WAPDA (DHPP)



Representative of
Engineer (DHC)



Representative of
Contractor(CCECC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-01) January 2023



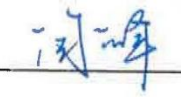


Project	KKH-01			Location	DHC Dasu Office		
Employer	WAPDA			Date of Meeting	31/1/2023 (11:40am-12:10 pm)		
Engineer	DHC			Place of Meeting	DHC Meeting Hall		
Contractor	CCECC			Attendance	Attendance Sheet Attached		
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially closed
		Emp.	Eng.	Con.			
44	Ensure permanent water sprinkler for Khohse access road and KKH portion as summer has arrived therefore increase the frequency of sprinkling.			√	Immediate	04/04/2022	The contractor is instructed to continue the water sprinkling with enhanced frequency.
						28/05/2022	The Contractor CCECC is instructed to allocate separate Water Bowsers for different locations at KKH-01 allocated portions due to long haulage of water i.e. Uchar Camp.
						30/06/2022	Partially done
						29/09/2022	Partially done
						02/11/2022	The employer instructed DHC to Re-send designated area to KKH-01.
						30/11/2022	The Engineer will share the re allocation of the area.
						29/12/2022	The contractor has agreed to ensure water sprinkling on regular basis on all allocated sites. These will also include 200 m portion of Zhongmei contractor.
47	Proper Disposal of Used Engine/ Equipment Oils and other chemicals			√	Immediate	31/01/2023	Done
						28/05/2022	Please add details of this activity in the MPR of May 2022 with photographic records as well for before spillage and after spillage.
						30/06/2022	Note Done; Photographic record should be maintained by the contractor and proper write up should be added to the next month's MPR.
					29/09/2022	Not Done;	

						02/11/2022	Partially Done
						30/11/2022	Not Done: The contractor will share record by 5 th of Dec 2022
						29/12/2022	Partially Done: The area where the used engine oil is temporarily stored should be bounded with at least 12 inch barricading so that the in case of leakage of oil from drums it will not go outside the storage area.
						31/01/2023	Not Done: K-04 and K-09 Bounding of the storage areas for used engine oils is still pending.
53	Construction of Septic Tank at K4			√	Immediate	02/11/2022	Not Done
						30/11/2022	Done: Formal submission to be made by the contractor up till 05 th of Dec 2022
						29/12/2022	Not Done: Contractor has agreed to comply by 16 th of January 2023
						31/01/2023	Done: Septic tank construction is finished.
56	Scrap Removal from K-09 up till 20 th Dec 2022			√	Immediate	30/11/2022	Contractor will do the compliance up till 20 th of Dec 2022
						29/12/2022	Not Done The scrap is not removed yet
						31/01/2023	Done: Scrap is removed from the K-09 ssite
58	Cleaning of Washing Rooms frequency to be increased at least 3 times a day at K-4 and K-9			√	Immediate	29/12/2022	Note Done
						31/01/2023	Done
59	Housekeeping is inadequate K-9			√	Immediate	29/12/2022	Note Done
						31/01/2023	Done: Housekeeping record will be shared by the contractor with The Engineer.
60	License for fuel storage at K-9			√	Immediate	29/12/2022	Not Done
						31/01/2023	Not Done: The contractor promised to follow up the matter with the concerned authorities and update by 10 th of Feb 2023.
61	Hiring of Dedicated Environmental Manager and Environmental Supervisor for KKH-01 Site.			√	Immediate	29/12/2022	Not Done
						31/01/2023	Not Done: The contractor will share qualified and experienced person resume up till 15 th of Feb 2023

62	Batching Plant washing/ waste water effluent just releasing in Chuchang Nullah. Concrete Mixer washing in Chuchang Nullah(K4 & K9)		√	Immediate	29/12/2022 31/01/2023	Not Done Partially Done: The batching plant is closed and removed from the site and
63	All generators do not have canopies. Noise levels should remain under NEQS i.e., 85 dB		√	Immediate	29/12/2022 31/01/2023	Not Done Not Done @ K-09: The contractor has agreed to install canopies for the generators by 20 th of Feb 2023.
64	Batteries are to be installed inside generators and not outside or on open soil.K4 & K9.		√	Immediate	29/12/2022 31/01/2023	Not Done Done: After verification by The Engineer This matter will be cleared.
65	Used Oil Filters Storage & record to be shared by 6 th Jan 2023.		√	Immediate	29/12/2022 31/01/2023	Not Done Not Done: The record will be shared up till 7 th of Feb 2023.
66	Common Dinning Hall should be provided to the labor/ staff of K-09 and K-04.		√	Immediate	31/01/2023	Not Done

Confirmed by:





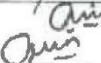
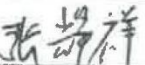
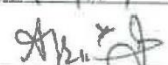
 _____ The Employer Name: <u>Uzgat Ali</u> Position: <u>Ap (Eco)</u> Date: <u>06/02/2023</u>	 _____ The Engineer Name: <u>Awaiz H. Khan</u> Position: <u>Sr. Environment Specialist</u> Date: <u>01-02-2023</u>	_____ The Contractor  _____ PM Date: <u>01-02-2023</u>
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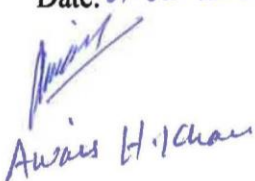
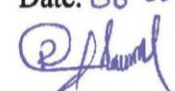
Annexure-01: Attendance Sheet

Dasu Hydropower Project
Dasu Hydropower Consultants
Meeting Attendance Sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/LBRV-11&12/PCI-01R/RAR-02/KKH-02

Date: 31-01-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
01	Farhat Ali	WAPDA	Dy. Director ENV	0344 9596 431	
02	Awais Hassan Khan	DHC	Sr. Env Specialist	0333-6563675	
03	Nasir Khan	DHC	Field Inspector	0345-9577742	
034	MANZOOR HUSSAIN	CCECC	HSE Manager	0345-5887751	
05	JUNAID Ahmed	CCECC	HSE Manager	0345-9601987	
06	Zhang HuiXiang	CCECC	HSE Director		
07	ARIF HUSSAIN	CCECC	EHS	0345-2848920	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (KKH-02) January, 2023		31 st Jan, 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezouba Group Co., LTD (CGGCC)		
Subject: Monthly Environmental Progress Review Meeting for KKH-02. Date: 31 st Jan 2023 Time: (10:30am-11:00am) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of KKH-02.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu		3. Contractor, CGGC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 	<u>Engineer</u> Date: 01-02-2023  Anwar H. Khan	<u>Contractor</u> Date: 06-02-2023  Dr. Fozal ur Rehman
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGGC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-02) January 2023



Project		KKH-02		Location		DHC Office	
Employer		WAPDA		Date of Meeting		31/01/2023 (10:30am-11:00am)	
Engineer		DHC		Place of meeting		DHC Meeting Hall	
Contractor		CGGCC		Attendance		Attendance Sheet Attached*	
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for KKH-02 Component			√	20/07/2022	29/-09/2022	Not Done
						02/11/2022	Not Done: The employer instructed the Engineer to issue NCR to contractor for Non compliance
						30/11/2022	Not Done: NCR has been Issued by the Engineer
						29/12/2022	Not Done The contractor has agreed to share Resume of Suitable candidate by 23 rd of Jan 2023 so that NCR closure procedure can be proceeded with.
						31/01/2023	Note Done: The contractor has agreed to share a qualified and experienced persons resume up till 15 th of Feb 2023
02	Submission of CEAP as per the Engineers Comments			√	16 th of Jan 2023	29/09/2022	Not Done
						02/11/2022	Not Done
						30/11/2022	Partially Done: The contractor needs to update the CEAP as per new design changes
						29/12/2022	Not Done: The contractor needs to update the CEAP as per new design changes i.e. addition of New Tunnels and Bridges and improve the shortcomings in the CEAP as commented by the Engineer by 20 th of Jan 2023.
						31/01/2023	Note Done: The contractor has agreed to submit up till revised CEAP up till 15 th of Feb 2023.

04	Fugitive Dust Suppression measures to be taken at site on regular basis with at least 3 time a day and additional if required because summer season has already started.			√	Immediate	29/-09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023	<p>Not Done</p> <p>Not Done The Contractor was instructed to submit spoil disposal and sprinkling plan by 14th of Nov 2022</p> <p>Partially Done: The contractor needs to cover the Jeep able tracks as well during the water sprinkling activity. The Information has been added to the MPR but the information is in adequate as The Engineer want to have a clear picture about Spoil disposal, and Water Sprinkling Therefore it is instructed to the contractor to re write the Spoil Disposal and Water Sprinkling Plan.</p> <p>Not Done: The contractor is advised by the Engineer to prepare a Water Tank along the existing KKH and pump water from that tank at lower elevation to the higher elevations for fugitive dust suppression works. Timeline for this implementation is 23/01/2023</p> <p>Done:</p>
05	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated disposal site only			√	Immediate	29/-09/2022 02/11/2022 30/11/2022	<p>The contractor informed that the passage to the site is very narrow and the dumper cannot reach in that very location resulting in some of the material being rolled over the slope. In future as the path is widened enough that the dumper can reach at the very location of where work is under progress haulage activity will start immediately.</p> <p>Not Done: The Contractor was instructed to submit spoil disposal and sprinkling plan by 14th of Nov 2022</p> <p>Partially Done: The Information has been added to the MPR but the information is in adequate as The Engineer want to have a clear picture about Spoil disposal, and Water Sprinkling issues.</p>

						29/12/2022	Therefore it is instructed to the contractor to re write the Spoil Disposal and Water Sprinkling Plan.
						31/ 01/2023	Not Done: New date for compliance of slope protection and haulage of excavated material is agreed with the contractor as 23 rd of Jan 2023 Not Done: Share the new methodology agreed with Technical Team (Road Design Engineers)
06	Ensure environmental topics to be covered in TBT			√	Immediate	29/-09/2022	Not Done
						02/11/2022	Not Done The contractor informed that TBT will be covered in the MPR which will be submitted by 14 th of November 2022
						30/11/2022	Partially Done: The contractor has given information in the MPR i.e. Table 2 of Introduction Chapter but This table should have separate explanation and proper write up should be developed for it.
						29/12/2022	Not Done: The contract have to comply by 16 th of Jan 2023 especially, oil Spills, Waste Management, Housekeeping, dust suppression measures, cleanliness and hygiene among workers, communicable diseases, protection of flora and fauna, Protection of Water Bodies from Pollution. Soil Protection, Slope Protection.
						31 /01/2023	Partially Done: The contractor has agreed to share fortnightly with cover letter and in the MPR of every month also.
07	Solid Waste Management procedures especially segregation should be ensured at site with proper reporting in the next MPR.			√	Next MPR of Sep 2022	29/-09/2022	Not Done
						02/11/2022	Not Done: The contractor informed that solid waste management procedures will be covered in the MPR which will be submitted by 14 th of November 2022
						30/11/2022	Partially Done: The information is provided in the MPR but the write up needs a strong review and re phrasing.

						29/12/2022	Partially Done: The information is provided in the MPR but the write up needs a strong review and re phrasing.
						31/01/2023	Done
09	The contractor is instructed to coordinate with other contractor for ease of local community passing through the road. Traffic management Plan should also be reflected in MPR of Oct 2022			√	Immediate	30/11/2022	Partially Done: Only K45 & K47 still possess traffic closure issues.
						29/12/2022	Partially Done: Traffic Management especially closing of traffic and release of traffic should be synchronized within KKH-02 jurisdiction as well as RAR-02 Kandia Side so that it may not hinder movement of the traffic on the existing KKH. Contractor has agreed to undertake the above measures after resumption of work.
						31/01/2023	Done
10	Loose Material from Slopes			√	Immediate	29/12/2022	Contractor has agreed to remove all boulders and other loose rock from the slopes by 23 rd of January 2023.
						31/01/2023	Partially Done: The contractor has agreed to share the photographic evidence along with location maps and report.
11	Oil Spill			√	Immediate	29/12/2022	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023.
						31/01/2023	Partially Done: The contractor has agreed to share the training record in the January 2023 MPR.
12	Used Drums, Spill Sheets, Drip trays procurement			√	Immediate	29/12/2022	KKH-02 Representative Mr. Hou Fei has agreed to conduct procurement of Drip trays, Spill Sheets, Spill Kits, PPE's Necessary for Oil Change and Spillage for KKH-02 contract. Training of all staff is required by 23 rd of Jan 2023 for all staff having topic: " In case of Oil/Chemical Spillage, how to use Spill Kit on site"

						31/01/2023	The contractor has agreed to raise an AFI up till 8 th of Feb 2023 on this issue.
13	Provision of Portable toilet on the KKH-02 Sites as well as container offices.			√	Immediate	31/01/2023	The contractor has agreed to place portable toilets as well as container offices for the site staff for their perusal.
14	Wood Burning at different locations of KKH-02			√	Immediate	31/01/2023	Wood Burning is strictly prohibited as per ECP's provided in the contract.

Confirmed by:



The Employer



The Engineer/Consultant



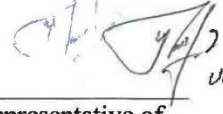


The Contractor

Name: Liakat Ali
Position: ADD (EO)
Date: 06/02/2023

Awaiz H. Khan
Sr. Environment Specialist
01-02-2023

Dr. Fozal ur Rehman
Env. Manager (acting)
06-02-2023

DASU HYDROPOWER PROJECT MINUTES OF MEETING (PCI-01R) JANUARY 2023		31 st Jan 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gansu Co., LTD (CGICOP)		
Subject: Monthly Environmental Progress Review Meeting for PCI_01R. Date: 31 st Jan 2023 Time: 12:15 pm- 12:50 pm Place: DHC Meeting Hall Pages: 02 Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of PCI-01R.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Addl Chief Engineer (Environment Dasu 2. Engineer - DHC RE Infrastructure, Dasu		3. Contractor, CGICOP 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date:  Representative of Employer- WAPDA (DHPP)	<u>Engineer</u> Date: 01-02-2023  Awas H. Khan Representative of Engineer (DHC)	<u>Contractor</u> Date:  Representative of Contractor(CGICOP) 07/02/2023

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (PCI-01R) JANUARY 2023





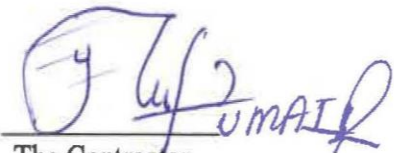
Project	PCI-01R			Location	DHC Office		
Employer	WAPDA			Date of Meeting	31/01/2023 (12:15 pm- 12:50 pm)		
Engineer	DHC			Place of meeting	DHC Meeting Hall		
Contractor	CGICOP			Attendance	Attendance Sheet Attached		
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con			
19	Submission of NOC and License for fuel storage at site.			√	15/08/2021	02/06/2021 03/07/2021 29/09/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022 01/04/2022 27/05/2022	<p>Not done. The Contractor was instructed to quickly initiate the process.</p> <p>In process Engineer requested WAPDA through letter dated 12th July 2021 to issue a recommendation letter to district administration for CGICOP to grant them an NOC for fuel storage which is a prerequisite for license apply to Chief inspector of explosives. The Employer is requested to pursue the matter please.</p> <p>Not done Not done. The Employer was again requested to send a letter to the district administration for NOC.</p> <p>Not done. The Employer is again requested to send a letter to district administration.</p> <p>Employer sent letter to DC to provide NOC to contractor. Contractor was asked to pursue the matter to get the NOC for onward apply for license.</p> <p>Not Done. Still pending but contractor has promised to submit it by 07th February 2022</p> <p>Not Done. Still pending contractor has agreed to share the NOC by 20th of April 2022</p> <p>Partially Done. NOC from Deputy Commissioner Office has been granted but License is still not granted</p>

						30/06/2022	Partially done. The Engineer instructed the contractor to proceed further in the matter and send application to KP Inspector of Explosives for grant of license.
						01/08/2022	Not Done: The Engineer will issue a reminder letter to the contractor regarding NOC from Inspector of Explosives.
						29/09/2022	Partially Done: The contractor has agreed to pursue the case and up till 15 th of Oct 2022 he will submit.
						02/11/2022	Partially Done: An NCR will be issued to the contractor for the non-compliance.
						30/11/2022	Not Done: NCR is issued on 7 th of Nov 2022. The contractor has not closed the NCR yet.
						29/12/2022	Not Done:
						31/01/2023	Not Done: The Engineer has already issued an NCR on this long awaited and outstanding issue.
47	Water Sprinkling Issue. Contractor is instructed to ensure adequate water sprinkling inside the colony area as well as the allocated portion of Khoshe access road.			√	Immediate	29/09/2022	Not Done;
						02/11/2022	Partially Done: Contractor agreed that Increase in frequency of water sprinkling is much need
						30/11/2022	Partially Done; The sprinkling issue is partially resolved by contractor i.e., half of the road is always dry as well as the frequency needs to be increased.
						29/12/2022	Partially Done: The contractor agreed to increase the frequency and coverage of the Water sprinkling area.
						31/01/2023	
48	MPR Should reflect Waste/ discarded materials section describing used batteries and tires and used oil with their quantities and disposal method /vendor details.			√	Immediate	29/09/2022	Not Done;
						02/11/2022	Partially done The details of used tires and Batteries are not provided in the MPR of Oct 2022

						30/11/2022 29/12/2022 31/01/2023	Not Done: The contractor has agreed to submit by 08 th of Dec 2022 Partially Done: The write up needs to be updated and the record needs to be shared by the contractor with cover letter to which the contractor has agreed upon to share by 10 th of January 2023.
52	Hot Water Availability for Labor , Security and all other Staff			√	12 Dec 2022	30/11/2022 29/12/2022 31/01/2023	The contractor has agreed to install Geysers in the Camp Not Done
53	Availability of More Wash rooms for Camp area			√	15 Dec 2022	30/11/2022 29/12/2022 31/01/2023	The contractor has agreed to provide more toilets to the Labor, Staff and other employees up till 15 th of Dec 2022 Not Done: Not Done: The contractor has not complied by the engineers instructions
55	Oil Spills Training			√		29/12/2022 31/01/2023	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023. Partially Done: Some staff is still pending, Therefore the contractor will impart to rest of its labor and staff and submit record to the Engineer by 15 th of Feb 2023
56	Living Conditions (Welfare Facilities)			√		29/12/2022 31/01/2023	The Environment Section and OHS Section of DHC will decide this matter after an internal meeting that which section of DHC will do the monthly inspections. Not Done: The contractor has agreed to upgrade the following issues by 20 th of Feb 2023: Bunk Beds, Over crowdedness, Cleanliness and Hygienic conditions in the Kitchen, Proper Drainage of Sewage pipes, Preparation of

							dedicated Dinning Hall, Availability of Hot Water in Kitchen and Wash Rooms, Scarcity of Toilet, and use of Wood as fuel in the Camp areas.
57	Treatment of Sedimentation Pond water before release inn to the drain.			√		29/12/2022 31/01/2023	The contractor has agreed to treat its sedimentation pod water before its release in to the drain.
58	Concrete Mixer Truck Washing at Chuchang Nullah			√		29/12/2022 31/01/2023	The contractor agreed to train their drivers and maintenance staff not to wash their concrete mixers and other dumping vehicles in or near the Chuchang Nullah.

Confirmed by:

 _____ The Employer	 _____ The Engineer	 _____ The Contractor
Name: <u>Asif Ali</u>	Name: <u>Awas H. Khan</u>	Name: <u>unair</u>
Position: <u>Asst. Eng.</u>	Position: <u>Sr. Environment Specialist</u>	Position: <u>HSEIS</u>
Date: <u>06/02/2023</u>	Date: <u>01-02-2023</u>	Date: <u>07/02/2023</u>

DASU HYDROPOWER PROJECT
MINUTES OF MEETING (TL-01) January 2023

31st January 2023

Employer:
WAPDA (DHPP)

Engineer:
Dasu Hydropower Consultants (DHC)

Contractor:
Power China Construction Co., LTD (PCCC)

Subject: Monthly Environmental Progress
Review Meeting for TL-01.
Date: 31st January, 2023
Time: (04:00 pm-04:30 pm)
Place: DHC Meeting Hall
Exhibit: Attendance Sheet

Agenda:
Monthly Environmental Progress Review
Meeting of TL-01.

Attendees
See the attached attendance sheet

Distributed (Softcopy) to:
1. Employer
- DHP WAPDA GM/PD, Dasu
- DHP WAPDA Director (Environment), Dasu
2. Engineer
- DHC RE TL-01, Dasu

3. Contractor, PCCC
4. Office File / Circulation

Agreed by:

Employer
Date:



Representative of
Employer- WAPDA (DHPP)

Engineer
Date: 01/02/2023



Representative of
Engineer (DHC)

Contractor
Date: 2023.2.01



Representative of
Contractor(PCCC)


MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (TL-01) JANUARY 2023



Project	132 KV TL-01	Location	DHC Office				
Employer	WAPDA	Date of Meeting	31/01/2023 (04:00 pm-04:30 pm)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	PCCC	Attendance	Attendance Sheet Attached				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
37	Establishment of Newly hired camp building as per EMAP and ECPs. The Engineer will inspect the newly hired camp building on 3 rd June 2022.			√	Immediate	30/06/2022 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023	The contractor informed that full shifting to the camp has not yet started. Inspection done but the camp is still under construction therefore will require a new inspection. Contractor failed to attend meeting Contractor failed to attend meeting Therefore NCR is issued by the Engineer. The Joint Inspection will be done by the Engineer and WAPDA Environment Teams on 11 th of Jan 2023. The camp inspection will be conducted by the Engineer and WAPDA on 01 st of Feb 2023.
38	Ensure water sprinkling with in the TL-01 Sites as well as all allocated and access roads.			√	Immediate	29/09/2022 02/11/2022 30/11/2022 29/12/2022	Partially Done Contractor failed to attend meeting Contractor failed to attend meeting Therefore NCR is issued by the Engineer. Not Done: On-going activity and contractor agreed to conduct it as per previous frequency i.e.

						31/01/2023	3 times a day in winter and 4 times a day in summer. Not Done: The contractor has agreed to hire a Water Bowser for addressing the fugitive dust suppression activity.
41	Waste Management Practices to be reflected in MPR.			√	Immediate	29/09/2022 29/12/2022 31/01/2023	Not Done Not Done: The contractor has agreed to share the record of waste management practices currently being followed at site and for the camp area with cover letter and also to be included in MPR. The timeline for this compliance is 10 th of Jan 2023. Not Done: The contractor has agreed upon doing Submission up till 14 th of Feb 2023
42	Oil Spills			√	Immediate	29/12/2022 31/01/2023	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023. Done: TL-01 EHS team will share the record in the January 2023 MPR.
43	Training on Waste management to all TL-01 Staff			√	Immediate	31/01/2023	
44	Training on protection of Flora and Fauna to all TL-01 Staff			√	Immediate	31/01/2023	

Confirmed by:


The Employer

Name: Waqar Ali

Position: AD (EA)

Date: 06/02/2023


The Engineers Representative

Name: Awas H. Chau

Position: Sr. Environment Specialist

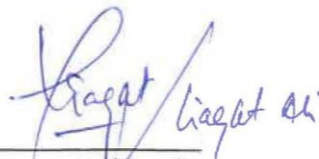


Date: 01-02-2023


The Contractor

Name: Wang Tian

Position: Chief Engineer

Date: 01-02-2023

DASU HYDROPOWER PROJECT MINUTES OF MEETING (EM-01) JANUARY 2023		31 st January 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: Power China Construction Co., LTD (PCCC)		
Subject: Monthly Environmental Progress Review Meeting for TL-01. Date: 31 st January, 2023 <i>FM</i> Time: (04:30 pm-05:00 pm) Place: DHC Meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of TL-01. <i>FM</i>
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE TL-01, Dasu		3. Contractor, PCCC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date:	<u>Engineer</u> Date: 01-02-2023	<u>Contractor</u> Date: 2023.2.1
 Representative of Employer- WAPDA (DHPP)	 Representative of Engineer (DHC)	 Representative of Contractor(PCCC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (EM-01) JANUARY 2023 TC

Project	EM-01	Location	DHC Office				
Employer	WAPDA	Date of Meeting	31/01/2023 (04:30 pm-05:00 pm)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	PCZN- GE JV	Attendance	Attendance Sheet Attached				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
01	In adequate Housekeeping			√	Immediate	31/01/2023	The contractor has agreed to abide by the ECP's and maintain good Housekeeping.
02	Use of Wood As fuel in the Labor Camp on Kass Area			√	Immediate	31/01/2023	As per ECP's burning of wood as fuel is strictly prohibited.
03	Chemical Drum Replacement Required and Kass camp of EM-01			√	Immediate	31/01/2023	The contractor has agreed to replace the used chemical drum with new Water Tank for human Consumption
04	Welfare facilities (EM-01)			√	Immediate	31/01/2023	The contractor has agreed to improve the following conditions as follows: "Improper bedding, over crowdedness, provision of clean drinking water, provision of hot water in toilets and Kitchen, Provision of LPG Gas cylinders with stove for cooking purpose. Provision of a Dining hall for Labour, Hiring a dedicated janitor for the Labor Camp, installation of waste bins with colour coding for green Waste, Hazardous waste, Construction Waste etc.,"
05	Training on Oils spills to all EM-01 Staff			√	Immediate	31/01/2023	The contractor has agreed to impart trainings on oils Spills up till 17 th of Feb 2023 and share the record with the Engineer
06	Training on Waste management to all EM-01 Staff			√	Immediate	31/01/2023	The contractor has agreed to impart trainings on oils Spills up till 20 th of Feb 2023 and share the record with the Engineer

07	Training on protection of Flora and Fauna to all EM-01 Staff		√	Immediate	31/01/2023	The contractor has agreed to impart trainings on oils Spills up till 25 th of Feb 2023
08	Inspection of EM-01 Camp near Mattoo Hotel Main KKH Dasu Town.		√	15 Feb 2023	31/01/2023	

Confirmed by:


The Employer

Name: Ragat AD

Position: AD-(ECO)

Date: 06-02-2023


The Engineers Representative

Name: Awais H Khan

Position: Sr. Environment Specialist

Date: 01-02-2023


The Contractor

Name: Wang Jiy

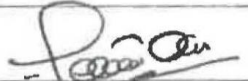


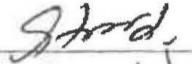
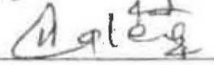
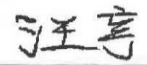
Position: Chief Engineer

Date: 01-02-2023



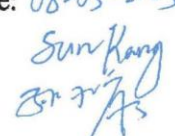


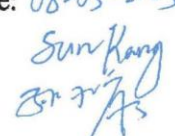


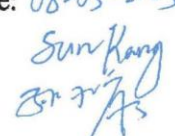
Annexure: Attendance Sheet of Participants
Dasu Hydropower Project
Dasu Hydropower Consultants
EM-01 Meeting Attendance Sheet

Monthly Progress review meeting: KKH-01/RAR-01/~~EM-01~~/MW-01&2/LBRV-11&12/PCI-01R/RAR-02/KKH-02

Date: 31-01-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
01	Fahat Ali	WAPDA	Dy Director	0344 9596 431	
02	Awais Hassan Khan	DHC	Sr Env Specialist	0333-6563675	
03	Nasir Khan	DHC	Field Insp.	0345-9577742	
04	Asad Abbas	HSE/PCZN	EHS Engineer	03427936185	
05	M. Waleed	PCCC	OHSO	0316-5594291	
06	Mr Wang Ting	PCCC	Chief Engineer	—	

(Minutes of Meeting for Month of February 2023)

<p>DASU HYDROPOWER PROJECT MINUTES OF MEETING (MW-01& MW-02) FEBRUARY 2023</p> <p style="text-align: right;">2nd March 2023</p>				
<p>Employer: WAPDA (DHPP)</p> <p>Engineer: Dasu Hydropower Consultants (DHC)</p> <p>Contractor: China Gezhouba Group Co., LTD (CGGC)</p>				
<p>Subject: Monthly Environment Progress Review Meeting for MW-01&02. Date: 2nd March 2023 Time: 09:00 am-10:45 am Place: DHC meeting Hall Exhibit: Attendance Sheet</p>	<p>Agenda: Monthly Environmental Progress Review Meeting of MW-01&02.</p>			
<p>Attendees See the attached attendance sheet</p>				
<p>Distributed (Softcopy) to:</p> <p>1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu</p> <p>2. Engineer - DHC RE MW-01&02, Dasu</p>	<p>3. Contractor, CGGC 4. Office File / Circulation</p>			
<p>Agreed by:</p> <table style="width: 100%;"><tr><td style="text-align: center;"><p><u>Employer</u> Date: 08-03-2023</p> Representative of Employer- WAPDA (DHPP)</td><td style="text-align: center;"><p><u>Engineer</u> Date: 05-03-2023</p> <u>Awais Hassan</u> Representative of Engineer (DHC)</td><td style="text-align: center;"><p><u>Contractor</u> Date: 08-03-2023</p> Representative of Contractor(CGGC)</td></tr></table>		<p><u>Employer</u> Date: 08-03-2023</p>  Representative of Employer- WAPDA (DHPP)	<p><u>Engineer</u> Date: 05-03-2023</p>  <u>Awais Hassan</u> Representative of Engineer (DHC)	<p><u>Contractor</u> Date: 08-03-2023</p>  Representative of Contractor(CGGC)
<p><u>Employer</u> Date: 08-03-2023</p>  Representative of Employer- WAPDA (DHPP)	<p><u>Engineer</u> Date: 05-03-2023</p>  <u>Awais Hassan</u> Representative of Engineer (DHC)	<p><u>Contractor</u> Date: 08-03-2023</p>  Representative of Contractor(CGGC)		

Minutes of the Monthly Environmental Progress Review Meeting (MW-01& MW-02) February 2023



Project	MW-01& MW-02			Location	DHC Office		
Employer	WAPDA			Date of Meeting	2 nd March 2023		
Engineer	DHC			Place of meeting	DHC Meeting Hall		
Contractor	CGGC			Time	09:00 am-10:45 am		
Sr. #	Checked Items and Actions Planned	Action By			Target Date for Action	Action Confirm Date	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con.			
23	Status of 3 rd party Quarterly environmental monitoring as per contract specifications			√	20/05/2021	02/06/2021 02/07/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022	<p>In process. In process. The contractor informed that the contract with the laboratory is in process by CGGC commercial department.</p> <p>Not done.</p> <p>Not done. The contractor was instructed to immediately arrange 3rd party quarterly environmental monitoring.</p> <p>Partially done. The Contractor mobilized <i>Bureau Veritas</i> environmental monitoring laboratory to site but their equipment were not as per the monitoring specifications. The Laboratory was demobilized and were asked to come up with all the calibrated analyzers and instruments. The contractor informed that the laboratory will be remobilized to site by 10th January 2021.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share profile before mobilization of the environmental laboratory.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share</p>

						profile before mobilization of the environmental laboratory
						05/04/2022 “The Engineer” will write a letter to contractor for updated status about the Third-Party Monitoring Laboratory Hiring Status.
				√		28/05/2022 Not Done: Contractor shared its decision that SGS Laboratory is finalized by the CGGC but number of parameters is still under discussion.
						30/06/2022 Not done. The Contractor informed that their contract section wants clarification regarding the number of parameters to be tested. A meeting in this regard will be scheduled by the Engineer.
						29/09/2022 The contractor has decided to take SGS on board for the third party monitoring purpose but there is a meeting scheduled in 13 th October 2022 in order to discuss and finalize the Parameters to be performed.
						02/11/2022 Not Done: The contractor informed that the certification and equipment list of another lab will be shared with the Engineer for their approval by 12 th Nov 2022.
						30/11/2022 Not Done: The contractor informed that they are in search of a lab and they will submit by 12 th of Dec 2022.
						29/12/2022 Not Done: CGGC has again come up with Bureau Veritas Environmental Laboratory. The contractor has agreed to re submit the technical profile of M/s Bureau Veritas with all requisite documents especially certificate of registration from PK EPA. The engineer with consent from WAPDA has agreed to re consider this organization with all complete documentation and proof of all statutory

						<p>requirements to be submitted by CGGC up till 25th of January 2022.</p> <p>31/01/2023 Not done. The contractor has sought new timeline for himself i.e., up to 16th of Feb 2023 for sorting this issue. The contractor will pursue the matter with their Bureau Veritas (B.V) Laboratory. If the B.V Lab doesn't share its Certificate of Registration from EPA, KPK than CGGC has to share a new KP EPA Approved Laboratory profile up till 16th of Feb 2023.</p> <p>02/03/2023 Not Done: The Bureau Veritas (B.V) Lab haven't shared its Certificate of Registration from EPA, KPK. The CGGC contractor has agreed to submit a new Third Party Lab un-till 15th of March 2023.</p>
36	Appointment of Environment Director			√	16 th January 2021	<p>07/02/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 25th February 2022.</p> <p>01/03/2022 Not done. Contractor informed that search for suitable candidate is still in progress.</p> <p>28/05/2022 Not Done: The matter is still pending; Contractor has assured to share CV of suitable candidate who has some practical experience.</p> <p>30/06/2022 Not done. Contractor verbally discussed about a potential candidate Mr. Afzal who was engaged in Neelum Jehlum. The Engineer instructed the contractor to submit the CV officially to proceed further in this matter.</p> <p>29/09/2022 Note Done: The contractor will submit the resume of the nominated person 14th Oct 2022</p> <p>02/11/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 17th November 2022.</p>

						30/11/2022	Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 12 th December 2022.
						29/12/2022	Not Done: The contractor was informed that this matter is also discussed with WB and the WB is also of the view that in case of non-availability of 15 years' experienced person the experience may be reduced to 10 years. On this issue the Engineer has already sought approval from WAPDA. The contractor has agreed to find a suitable candidate and submit his resume before 23 rd of Jan 2023.
						31/01/2023	Not done: WAPDA has sought guidance from World Bank and World Bank has reduced the Experience up to 08 years. Therefore, On these basis CGGC MW-01 and MW-02 contracts has sought time up till 15 th of Feb 2023
						02/03/2023	Partially Done: The contractor has submitted some resume's for the Environmental Manager Position.
53	Ensure Water Sprinkling in the Khoshe Area previously managed by Zhongmei			√	Immediate	02/11/2022	Partially Done: Ensure Water Sprinkling in the Khoshe area allocated to CGGC as well as Zhongmei
						30/11/2022	Partially Done Ensure Water Sprinkling in the Khoshe area allocated to CGGC as well as Zhongmei
						29/12/2022	Partially Done: Contractor has agreed to ensure compliance of Water Sprinkling. Ongoing activity,
						31/01/2023	Partially done: Contractor has agreed to ensure compliance of Water Sprinkling. Ongoing activity,
						02/03/2023	Done

						02/03/2023	Not Done: EMD is recording data for used engine oil. The engineer will visit the switchyard, CR-09 and CR-02.
56	Water Quality of Sedimentation tanks			√	Immediate	29/12/2022	The contractor has agreed to impart methods of introduction of acid to lower the pH of the sedimentation ponds on all sites of MW-01 & MW-02.
						31/01/2023	Not Done: The contractor has agreed to improve the water quality as the pH levels is consistently high Therefore the contractor will be adding higher quantities of fresh water. The contractor has also agreed to conduct an experiment in their lab in which he will come out with a result that how much amount of acid is needed to lower the pH value of Waste water and submit to the Engineer up till 10 th of Feb 2023.
						02/03/2023	Not Done: The contractor has agreed to improve by 16 th of March 2023.
59	Contractors Local Staff Residential Facility Inspection required			√	Immediate	29/12/2022	The engineer will conduct meeting among Environment and OHS Sections and then decide that who will be conducting this inspection and with what frequency. During the inspection Workers Welfare facilities will be monitored as per provisions in the contract.
						31/01/2023	Not Done: The Engineer conducted the inspection in Jan 2023 and found the discrepancies regarding provision of hot water, overcrowding and filthiness of toilets, waste management is still existing. Therefore Contractor has agreed to rectify the situation in the Labor camp of Pakistani staff and raise an AFI up till 10 th of Feb 2023 to the Engineer.
						02/03/2023	Not Done: The contractor has agreed to discontinue use of Wood as fuel and provide

							Gas cylinders. The contractor has also agreed to deploy janitors for washrooms.
60	Sedimentation Tank @ Uchar Crush Plant			√	Immediate	29/12/2022	The sedimentation Tank is very dirty and contains lot of sediments and sludgy froth is on top of the water. Therefore contractor has to clear the sedimentation tank before 16 th of Jan 2023 and submit an AFI to The Engineer for inspection
						31/01/2023	Not Done Therefore Contractor has agreed to rectify the situation by cleaning the sedimentation tank on daily basis and ensuring of addition of fresh water in large quantities, at the sedimentation tank and raise an AFI up till 10 th of Feb 2023 to the Engineer.
						02/03/2023	Done
61	Installation of Wet Scrubbers on Uchar Crush Plant			√	Immediate	29/12/2022	The contractor has agreed to install sprinkling system on the conveyor belt of the Uchar Crushing Plant(wet scrubbers) Therefore contractor has agreed to install Wet scrubbers before 23 rd of Jan 2023 and submit an AFI to The Engineer for inspection
						31/01/2023	Not Done Therefore Contractor has agreed to rectify the situation at the Uchar Crush Plant and install water sprinklers (Wet scrubbers) and raise an AFI up till 10 th of Feb 2023 to the Engineer.
						02/03/2023	Done
62	Zero Tolerance policy for animals at site			√	Immediate	29/12/2022	No animal are allowed on the construction site by any staff member of CGGC at any construction site. The contractor has agreed to remove all animals from all construction sites before 16 Jan, 2023. {*Note: If Chinese Nationals want to keep dogs, they should be kept in special cages in Chinese part of Barseen Camp) and properly

						31/01/2023	vaccinated for rabies and other communicable diseases.}
						02/03/2023	The engineer will verify and close the point
63	Welfare facilities @ CR-02			√	Immediate	29/12/2022	The contractor has agreed to hire a dedicated janitor for every site who will be responsible for cleaning the toilets at least three time a day in one shift. Additionally the Toilet at CR-02 are choked up, therefore they will be cleared of any sludge and the septic tank will also be cleared along with the toilets. The contractor has also agreed to install flushing system at CR-02.
						31/01/2023	Not Done: The contractor has agreed to rectify the situation by 10 th of Feb 2023.
						02/03/2023	Not Done: The contractor has agreed to hire a permanent janitor for CR-02 Site and rectify the situation by 10 th of March 2023.
64.	Use of wood as fuel is still going on the switchyard site.			√	Immediate	31/01/2023	The contractor was told to immediately stop use of wood as fuel and contractor has agreed to provide LPG Gas cylinders to its staff.
						02/03/2023	Note Done: After verification The point will be closed.
65	Use of chemical tank for human use.			√	Immediate	31/01/2023	Contractor has agreed to replace this chemical tank with a new Water Tank as empty chemical tank is being used for store water for human consumption.

						02/03/2023	Not Done: The contractor has agreed to replace all chemical tanks which are in human use with new domestic water supply tank.
66	Scarcity of Toilets			√	Immediate	02/03/2023	No. of Washrooms to be increased from 1-2 up till 10 th of March 2023.
67	Implementation of the Conditions of NOC from EPA, KP for Uchar Thoki Crushing Plant.			√	Immediate	02/03/2023	Plantation of trees are required around the crush plant. (time line before 18 th of March 2023)
68	Submission of TMP			√	Immediate	02/03/2023	Contractor has agreed to submit up till 10 th of March 2023
69	Waste Bins at the construction sites			√	Immediate	02/03/2023	Waste bins to be increased at site up till 10 th of March 2023

Confirmed by:



The Employer

Name:

Fakhad Ali

Position:

Dy. Director.

Date:

08-03-2023.



The Engineer/Consultant

Awais Hassan

Sr. Environment Specialist

05-02-2023



The Contractor

Sun Kang

CGGC PSE Director

08-03-2023


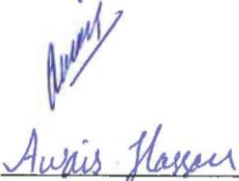

Annexure-01: Attendance Sheet

Dasu Hydropower Project
Dasu Hydropower Consultants
Meeting attendance sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/PCI-01R/RAR-02/KKH-02/EM-01

Date: 02-03-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	IMRAN TARIQ	WAPDA	D. Director	0321-518 1114	
2	SAEED UL HASSAN	HSED CGGL	DHSO MW01	0321 981 2722	
3	Sun Kang	HSED CGGL	HSE Director	0342 8508635	
4	YunJinJin	HSED CGGL	HSE asst. Dir	03428508619	
5	Feng Min	SD CGGL	SD Director	0342 8508742	
6	AWAIS HASSAN	SR. ENVIRONMENT SPECIALIST	DHC	09336563675	
7	SARDAR ALAM	"	"	0333-9290609	
8	T. Miyazawa	DHC	DPM	0345-8454861	
9	Nasir Khan	DHC	Field Inspector	0345-9577742	

<p>DASU HYDROPOWER PROJECT MINUTES OF MEETING (RAR-02) FEBRUARY 2023</p>		<p>02nd March, 2023</p>
<p>Employer: WAPDA (DHPP)</p>		
<p>Engineer: Dasu Hydropower Consultants (DHC)</p>		
<p>Contractor: China Gezouba Group Co., LTD (CGGCC)</p>		
<p>Subject: Monthly Environmental Progress Review Meeting for RAR-02. Date: 02nd March, 2023 (10:50 am-11:35 am) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet</p>	<p>Agenda: Monthly Environmental Progress Review Meeting of RAR-02.</p>	
<p>Attendees See the attached attendance sheet</p>		
<p>Distributed (Softcopy) to:</p> <ol style="list-style-type: none">Employer<ul style="list-style-type: none">- DHP WAPDA GM/PD, Dasu- DHP WAPDA Director (Environment), DasuEngineer<ul style="list-style-type: none">- DHC RE Roads, Dasu	<ol style="list-style-type: none">Contractor, CGGCOffice File / Circulation	
<p>Agreed by:</p>		
<p><u>Employer</u> Date: 08-03-2023.</p> 	<p><u>Engineer</u> Date: 05-03-2023</p> 	<p><u>Contractor</u> Date: 08-03-2023</p> 
<p>Representative of Employer- WAPDA (DHPP)</p>	<p>Representative of Engineer (DHC)</p>	<p>Representative of Contractor(CGGC)</p>

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-02) FEBRUARY 2023



Project	RAR-02	Location	DHC Office				
Employer	WAPDA	Date of Meeting	02 nd March, 2023 (10:50am-11:35am)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	CGGCC	Attendance	Attendance Sheet Attached*				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for RAR-02 Component			√	5 th of June 2022	30/06/2022 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023 02/03/2023	Not done. The Contractor informed that they will share CV of a relevant candidate to be considered for the post. Not Done; Contractor is instructed to submit the resume by 17 th of Oct 2022. Not Done; Contractor is instructed to submit the resume by 17 th of Nov 2022. Not Done; Contractor is instructed to submit the resume by 15 th of Dec 2022, otherwise an NCR will be issued against this non-compliance. Not Done: The contractor has been shared with grave concern by the Engineer to submit a suitable candidate resume by 17 th of Jan 2023. Already an NCR is issued on 10 th of Dec 2022. Not Done: The contractor has agreed to share a qualified and experienced candidate resume by 14 th of Feb 2023. Partially Done: Resume's submitted by CGGC(PM, RAR-02)
03	Fugitive Dust Suppression measures to be taken at site on regular basis with at least 3 time a day and additional if required because summer season has already started.			√	Immediate	30/06/2022 29/09/2022	Partially done. The contractor informed that a dedicated water sprinkler is deputed at site which not only sprinkle along the access road but also at the excavated material before disposal. Not Done: The contractor informed that the track to the working faces is narrow and dumper and water bowser cannot reach the working face of the

						02/11/2022	site therefore contractor is given time up till 30 th of Oct 2022 to improve accessibility of the track. Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 14 th of Nov 2022.
						30/11/2022	Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 27 th of Dec 2022.
						29/12/2022	Not Done: The excavated material is rolled down the slope by the contractor creating a huge dust cloud. The contractor has agreed to install water pumps which will lift water from nearby stream/ river to sprinkle it upon the slopes as well as the excavated material so that there is no fugitive dust.
						31/01/2023	Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, and Environmentalist. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023.
						02/03/2023	Not Done: Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
04	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated site of Kass disposal site on RAR-01.			√	Immediate	30/06/2022	Not done. The Contractor is strictly instructed to ensure haulage of the spoil to designated spoil disposal area
						29/09/2022	Not Done; The contractor informed that at the moment the spring which was nearby is dried up

						02/11/2022	and the path to the working face is narrow, due to which the dumper cannot reach the exact working face. As soon as the dumper can reach the working face the haulage of excavated material will be started. Not Done: The contractor is instructed to haul the excavated material to the designated spoil disposal site and not to roll down any spoil material along the slope
						30/11/2022	Not Done: The contractor has requested to give him time up till 27 th of Dec 2022 which was agreed by the Engineer.
						29/12/2022	Not Done: The contractor is instructed to haul the excavated material to the designated spoil disposal site and not to roll down any spoil material along the slope endangering habitat along the slopes as well as aquatic life form and Nearby Human Settlements.
						31/01/2023	Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023.
						02/03/2023	Not Done: Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
09	Designated Spoil disposal Plan submission required by the Contractor			√	16 th of Jan 2023	30/11/2022	The contractor is instructed to submit the spoil disposal plan up till 15 th of Dec 2022.
						29/12/2022	Not Done: The contractor has agreed to submit Spoil Disposal Plan by 16 th of Jan 2023
						31/01/2023	Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS

						02/03/2023	Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023. The spoil Disposal plan will be submitted after the joint visit and will be based on its technical decisions. Not Done: The plan will be submitted after Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
11	Drinking Water Supply Record Submission required by RAR-02 EHS Team for all working faces.			√	09 th Jan 2023	29/12/2022 31/01/2023 02/03/2023	The contractor has agreed to submit by 09 Jan 2023. Not Done: The contractor has shared that the labor has not been consuming their supplied water because of availability of spring water nearby but as per contractual obligation the contractor has agreed to supply drinking water. Done: Record has been submitted by the contractor
12	Spoil Disposal Plan			√	20 th Jan 2023	29/12/2022 31/01/2023 02/03/2023	The contractor has agreed to submit a proper spoil disposal plan which will not only highlight the location map of spoil disposal areas but complete methodology that which work faces will use which spoil disposal site and what amount of excavated material will be excavated as well as what number of dumpers are required to haul the spoil material. Date for submission of Spoil Disposal Plan is 20 th Jan 2023 Not Done: This plan will be updated and submitted Not Done: The plan will be submitted after the Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.

13	Use of Wood as fuel on the RAR-02 sites.			√	Immediate	31/01/2023 02/03/2023	The use of wood as fuel is strictly prohibited as per ECP's provided in the contract. Done: LPG cylinders are provided to the labor and kitchen will be shifted to another location
14	Introduction of Reward and punishment system to tackle repeated offense of Environmental Non compliances			√	Immediate	02/03/2023	The contractor has agreed to implement the reward and punishment system starting from 8 th of March 2023.(i.e., Imposing fines on repeated offenders of environmental non compliances)
15	Under construction camp facilities Layout with sewage, drinking water supply sources and pipe lines design, drainage pattern			√	Immediate	02/03/2023	The contractor has agreed to share details by 12 th of March 2023.

Confirmed by:



The Employer

Name: Fashat Ali

Position: Dy. Director

Date: 08-03-2023



The Engineer/Consultant

Sr. Environment Specialist

05-03-2023



The Contractor

Liaqat Ali Khan

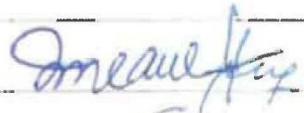





EHSD RAR-02



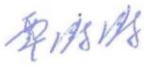
08-03-2023

Annexure-01: Attendance Sheet
Dasu Hydropower Project
Dasu Hydropower Consultants
Meeting attendance sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/PCI-01R/RAR-02/KKH-02/EM-01

Date: 02-03-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
	IMRAN TARIQ	D. Director (Wapda)		0321-5181114	
	AWAIS HASSAN	Sr. Environment Specialist	(DHC)	0333-6563675	
	SARDAR ALAM	"	"	0333-9190609	
	SHI FENG	CGGC	P.M		
	LIAQAT ALI	CGGC	EHS Officer	0344-9734735	
	Shi Feng	CGGC	PM - RAR-02	0342850848	
	Nasir Khan	DHC	Field Inspector	0345-9577742	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (EM-01) February 2023		3 rd of March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: Power China Construction Co., LTD (PCCC)		
Subject: Monthly Environmental Progress Review Meeting for EM-01. Date: 3 rd March, 2023 Time: (10:30 am-11:35am) Place: DHC Meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of EM-01.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE TL-01, Dasu		3. Contractor, PCCC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 08-03-2023.  Representative of Employer- WAPDA (DHPP)	<u>Engineer</u> Date: 06-03-2023  Awaiz Hassan Representative of Engineer (DHC)	<u>Contractor</u> Date: 2023.3.6  Representative of Contractor(PCCC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (EM-01) FEBRUARY 2023








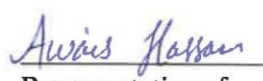

Project	EM-01		Location	DHC Office			
Employer	WAPDA		Date of Meeting	03/03/2023 (10:30 am-11:35am)			
Engineer	DHC		Place of meeting	DHC Meeting Hall			
Contractor	PCZN- GE JV		Attendance	Attendance Sheet Attached			
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
01	In adequate Housekeeping			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to abide by the ECP's and maintain good Housekeeping. Done:
02	Use of Wood As fuel in the Labor Camp on Kass Area			√	Immediate	31/01/2023 03/03/2023	As per ECP's burning of wood as fuel is strictly prohibited. Done:
03	Chemical Drum Replacement Required and Kass camp of EM-01			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to replace the used chemical drum with new Water Tank for human Consumption Done:
04	Welfare facilities (EM-01)			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to improve the following conditions as follows: " Improper bedding, over crowdedness, provision of clean drinking water, provision of hot water in toilets and Kitchen, Provision of LPG Gas cylinders with stove for cooking purpose. Provision of a Dining hall for Labour, Hiring a dedicated janitor for the Labor Camp, installation of waste bins with colour coding for green Waste, Hazardous waste, Construction Waste etc.," Done:
05	Training on Oils spills to all EM-01 Staff			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to impart trainings on oils Spills up till 17 th of Feb 2023 and share the record with the Engineer Done:

**Dasu Hydropower Project
Environmental Quarterly Progress Report No. 33 (Jan to March 2023)**

Annex-A [310 of 96]

06	Training on Waste management to all EM-01 Staff			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to impart trainings on oils Spills up till 20 th of Feb 2023 and share the record with the Engineer Done:
07	Training on protection of Flora and Fauna to all EM-01 Staff			√	Immediate	31/01/2023 03/03/2023	The contractor has agreed to impart trainings on oils Spills up till 25 th of Feb 2023 Done:
08	Inspection of EM-01 Camp near Mattoo Hotel Main KKH Dasu Town.		√		15 Feb 2023	31/01/2023 03/03/2023	The engineer will conduct the Inspection of EM-01 camp up till 15 th of Feb 2023 Done: The camp was inspected on 14 th of Feb 2023 and the observations were shared on 17 Feb 2023. The contractor agreed to share record of the compliance done on the site of EM-01 by 15 th of March 2023.
09	Hiring of Environment Manager			√	Immediate	03/03/2023	Contractor has agreed to ensure compliance by 20 th of March 2023
10	Minor Oil Spill			√	Immediate	03/03/2023	Contractor has agreed to ensure training of staff again and ensure compliance by introduction of reward and punishment system.(introduction of fines for repeated offenders of environmental non-compliance
11	Littering on the construction site			√	Immediate	03/03/2023	Contractor has agreed to ensure training and placement of waste bins at site by 11 th of March 2023
12	Wood Burning by F.C personnel.			√	Immediate	03/03/2023	Contractor has agreed to ensure provision of LPG cylinders and heaters/ cooking stoves to F.C Staff
13	Cleanliness of Camp			√	Immediate	03/03/2023	Contractor is unable to find a suitable janitor in Dasu therefore it will look for a proper janitor from outside Dasu and hire them for cleaning activity.

Confirmed by:		
 The Employer	 The Engineers Representative	 The Contractor
Name: <u>Falhat Ali,</u>	<u>Awaiz Hassan</u>	<u>Qim Jaoao</u>
Position: <u>Dy. Director.</u>	<u>Sr. Environment Specialist</u>	<u>Perce</u>
Date: <u>08-03-2023,</u>	<u>06-03-2023</u>	<u>6-3-2023</u>

DASU HYDROPOWER PROJECT MINUTES OF MEETING (KKH-01) FEBRUARY 2023		03 rd March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Civil Engineering Construction Co., LTD (CCECC)		
Subject: Monthly Environment Progress Review Online Meeting for KKH-01. Date: 3 rd March, 2023 Time: 03:30pm-04:40 pm Place: DHC Meeting Hall Pages: 02 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of KKH-01.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu	3. Contractor, KKH-01 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 08-03-2023 	<u>Engineer</u> Date: 06-02-2023  	<u>Contractor</u> Date: 08-03-2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CCECC)



MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-01) February 2023

Project	KKH-01			Location	DHC Dasu Office		
Employer	WAPDA			Date of Meeting	03/03/2023 (03:30pm-04:40 pm)		
Engineer	DHC			Place of Meeting	DHC Meeting Hall		
Contractor	CCECC			Attendance	Attendance Sheet Attached		
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially closed
		Emp.	Eng.	Con.			
47	Proper Disposal of Used Engine/ Equipment Oils and other chemicals			√	Immediate	28/05/2022 30/06/2022 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023 03/03/2023	<p>Please add details of this activity in the MPR of May 2022 with photographic records as well for before spillage and after spillage.</p> <p>Note Done; Photographic record should be maintained by the contractor and proper write up should be added to the next month's MPR.</p> <p>Not Done;</p> <p>Partially Done</p> <p>Not Done: The contractor will share record by 5th of Dec 2022</p> <p>Partially Done: The area where the used engine oil is temporarily stored should be bounded with at least 12 inch barricading so that the in case of leakage of oil from drums it will not go outside the storage area.</p> <p>Not Done: K-04 and K-09 Bounding of the storage areas for used engine oils is still pending.</p> <p>Not Done: The contractor has agreed to comply by 15th of March 2023</p>
60	License for fuel storage at K-9			√	Immediate	29/12/2022 31/01/2023 03/03/2023	<p>Not Done</p> <p>Not Done: The contractor promised to follow up the matter with the concerned authorities and update by 10th of Feb 2023.</p> <p>Not Done: The contractor has requested to ensure compliance up till 31st of March 2023</p>
61	Hiring of Dedicated Environmental Manager and Environmental Supervisor for KKH-01 Site.			√	Immediate	29/12/2022	Not Done


						31/01/2023 03/03/2023	Not Done: The contractor will share qualified and experienced person resume up till 15 th of Feb 2023 Done: The contractor has shared CV's with The Engineer on 3 rd of March 2023.
62	Batching Plant washing/ waste water effluent just releasing in Chuchang Nullah. Concrete Mixer washing in Chuchang Nullah(K4 & K9)			√	Immediate	29/12/2022 31/01/2023 03/03/2023	Not Done Partially Done: The batching plant is closed and removed from the site Not Done: The contractor was shown pictures of Concrete mixers being washed inside the Chuchang nullah near K5 to which contractor has agreed to impose fines on repeated offenders and share record with the Engineer up till 12 th of March 2023.
63	All generators do not have canopies. Noise levels should remain under NEQS i.e., 85 dB			√	Immediate	29/12/2022 31/01/2023 03/03/2023	Not Done Not Done @ K-09: The contractor has agreed to install canopies for the generators by 20 th of Feb 2023. Not Done: The contractor has agreed to install canopies and shed over the generator sets by 20 th of March 2023
65	Used Oil Filters Storage & record to be shared by 6 th Jan 2023.			√	Immediate	29/12/2022 31/01/2023 03/03/2023	Not Done Not Done: The record will be shared up till 7 th of Feb 2023. Not Done: The Shared data is not having details of the Used Oil Filters specifically Therefore contractor has to re submit the details of used oil filters to the Engineer's office.
66	Common Dinning Hall should be provided to the labor/ staff of K-09 and K-04.			√	Immediate	31/01/2023 03/03/2023	Not Done Not Done: The contractor has requested timeline of 20 th of March 2023 for the compliance of this point.
67	Dirty Toilets and Residential Rooms			√	Immediate	03/03/2023	Cleaning of Wash rooms , residential Rooms, at least 3 times a day at K4 and K-09 Pakistani Labor camp by deploying a dedicated janitor one for each site
68	Housekeeping @ K-09 and K-04 Area.			√	Immediate	03/03/2023	The CCECC Sites of K-09 and K-04, Dugah Tunnel and Logro-B, all have this issue, which needs to be addressed by 12 th of March 2023

69	Hazardous waste			√	Immediate	03/03/2023	Hazardous waste register to be maintained regularly. All vendor receiving waste should be on their letter heads with clear name of their companies and their addresses.
70	Septic Tank design for K-6 Batching plant			√	Immediate	03/03/2023	Septic Tank design at K-6 Batching plant to be revised and re-submitted.
71	Forced Ventilation System			√	Immediate	03/03/2023	Forced Ventilation system is having only one pipe where as it is mandatory to have two pipes one for exhaust and one for in flow of air. The existing single inflow pipe is damaged and needs to be replaced. The contractor has agreed to comply by 20 th of March 2023.
72	Access Control to K-09 Tunnel.			√	Immediate	03/03/2023	The contractor needs to establish the access control system at K-09 and K-04 tunnel otherwise in case of emergency there will be no record of personnel which are inside the tunnels.
73	Aggregate Crushing Plant @ K-05			√	Immediate	03/03/2023	All the EMAP procedures for environmental compliances, ECP's provided in the contract, World Bank Policies, All local land laws are to be applied to this crush plant whether this crush plant is in the ownership of CCECC or not. All pre-requisite procedures, approvals from relevant Government departments like NOC's from, Forest Department KPK, Environment Protection Agency KPK, and Industries Department NOC should be with the plant operations managers/owners for ready inspection.
74	Underground Fuel Storage is still open from back side (i.e., Switchyard of MW-02 component of CCGCC)			√	Immediate	03/03/2023	The contractor needs to immediately close the back side entrance of the fuel storage area @ K-09 Tunnel outlet. The contractor has agreed to complete construction of this storage area and install breathing pipes in this storage area.
75	Effluent from Sedimentation tank @ K-09 Tunnel is being released to natural water body			√	Immediate	03/03/2023	Effluent from Sedimentation tank @ K-09 Tunnel is being released to natural water body without treatment of highly alkaline pH. The contractor has agreed to re-use the Waste water for water sprinkling on the Khoshe Access road (Dirt Road)

							The practice will be starting from 8 th of March 2023 by the contractor.
76	Introduction of Reward and punishment system (i.e., repeated offenders of environmental noncompliance will be liable to fines by the CCECC Management)			√	Immediate	03/03/2023	The contractor has agreed to ensure compliance starting from 8 th of March 2023
77	Dugah Tunnel: Site issues of Environmental compliance			√	Immediate	03/03/2023	There are environmental Non-compliances on Non availability of Drinking Water, Cleanliness of site and waste management and availability of Toilets
78	Environmental Non Compliances have increased on CCECC Sites of KKH-01			√	Immediate	03/03/2023	The contractor has hired two new EHS Officers Mr. Rahat Hameed and Mr. Yasser Hussain as well as a Chinese Staff Mr. Ren Jianjun in addition to Mr. Manzoor, Mr. Sajid and Mr. Arif. The contractor has promised to increase their on-site presence in the field as well as increase on site environmental compliance as per description given in ECP's and expedite closing of all NCR's in time.
79	Construction of Sedimentation Pond for Batching plant being installed at K-6			√	Immediate	03/03/2023	The contractor agreed to submit three chambered Sedimentation tank at K-6 Batching Plant Site to the Engineer by 12 th of March 2023.
80	Construction of third chamber for sedimentation pond at K-09			√	Immediate	03/03/2023	The contractor agreed to comply by 20 th of March 2023 after meeting with higher management of CCECC.

Confirmed by:


The Employer


The Engineer


The Contractor

Name: Fashat Ali.

Awaiz Hassan

Zhao Qing

Position: Dy. Director.

Sr. Environment Specialist

-

Date: 08-03-2023.

06-03-2023

08-03-2023

Annexure-01: Attendance Sheet






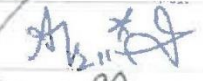
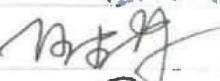

Dasu Hydropower Project




Dasu Hydropower Consultants

Meeting attendance sheet

Monthly Progress review meeting. KKH-01/RAR-01/TL-01/MW-01&2/PCI-01R/RAR-02/KKH-02/EM-01

Date: 03-03-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Sardar Alam	DHC	Sr. Environmentalist	0333-9290609	
2	Awaiz Hassan	DHC	Sr. Environmentalist	03336563675	
3	Fachat Ali	WAPDA/Env.	Dy. Director	0344 9596481	
4	JUNAID Ahmed	HSE/CCECC	HSE Manager	0345-9601987	
45	MANZOOR HUSSAIN	HSE/CCECC	HSE Manager	0345-5687751	
6	ARIF HUSSAIN	HSE/CCECC	Environmentalist	0345-2848920	
7	Ren Jianjun	HSE/CCECC	HSE manager	0355 4960527	
8	Nasir Khan	DHC	Field Inspector	0395-9577742	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (RAR-01) FEBRUARY 2023		03 rd March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Civil Engineering Construction Co., LTD (CCECC)		
Subject: Monthly Environmental Progress Review Meeting for RAR-01. Date: 03 rd March 2023 Time: (04:30 pm-05:05 pm) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of RAR-01.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu	3. Contractor, CCECC 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 08-03-2023. 	<u>Engineer</u> Date: 05-03-2023 	<u>Contractor</u> Date: 08-03-2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CCECC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-01) FEBRUARY 2023



Project		RAR-01		Location		DHC Office		
Employer		WAPDA		Date of Meeting		03/03/2023 (04:30 pm-05:05 pm)		
Engineer		DHC		Place of meeting		DHC Meeting Hall		
Contractor		CCECC		Attendance		Attendance Sheet Attached*		
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed	
		Emp.	Eng.	Con.				
36	Fugitive Dust Suppression Measures during Drilling			√	Immediate	05/11/2022	Not Done	
						29/12/2022		Partially Done: This is a continuous activity and should be continued till the end of the project.
						31/01/2023		Partially Done: This is a continuous activity and should be continued till the end of the project.
						03/03/2023		Done:
39	Concrete Mixer / Truck Washing at Nearby Nullah/ Water body			√	Immediate	29/12/2022	The contractor agreed to train their drivers and maintenance staff not to wash their concrete mixers and other dumping vehicles in or Nearby Nullah/ Water body Partially Done: The contractor has agreed to impart training to their drivers/ mechanics and other staff regarding this issue and promised to share record of trainings with the Engineer. In case of non-compliance the respective driver/ conductor will be fined.	
						31/01/2023		
						03/03/2023		Done
40	Provision of Clean drinking water to All contractor Staff at site and Zaal Camp					03/03/2023	The contractor has agreed to resolve this issue by 8 th of March 2023.	

Confirmed by:



The Employer

Name: Faehat Ali

Position: Dy. Director

Date: 08-03-2023



The Engineer/Consultant

Awais Hassan

Sr. Environment. Specialist

05-03-2023



The Contractor

Zhao Qinyang

-

08-03-2023

Annexure: Attendance Sheet of the Participants






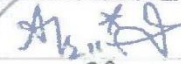


Dasu Hydropower Project


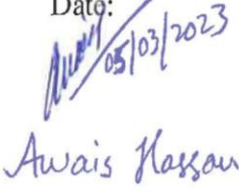
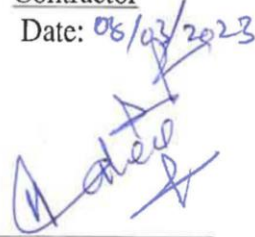
Dasu Hydropower Consultants

Meeting attendance sheet

Monthly Progress review meeting. KKH-01/RAR-01/TL-01/MW-01&2/PCI-01R/RAR-02/KKH-02/EM-01

Date: 03-03-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Sardar Alam	DHC	Sr. Environmentalist	0333-9290609	
2	Awais Hassan	DHC	Sr. Environmentalist	03336563675	
3	Fachat Ali	WAPDA/Env.	Dy. Director	03449596431	
4	JUNAID Ahmed	HSE/CCECC	HSE Manager	0345-9601987	
4.5	MANZOR HUSSAIN	HSE/CCECC	HSE Manager	0345-5687751	
6	ARIF HUSSAIN	HSE/CCECC	Environmentalist	0345-2848920	
7	任建军 / Ren Jianjun	HSE/CCECC	HSE manager	03554960527	
8	Nasir Khan	DHC	Field Inspector	03459577742	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (TL-01) FEBRUARY 2023		03 rd March, 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: Power China Construction Co., LTD (PCCC)		
Subject: Monthly Environmental Progress Review Meeting for TL-01. Date: 03 rd March, 2023 Time: (09:20 am-10:10 am) Place: DHC Meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of TL-01.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE TL-01, Dasu		3. Contractor, PCCC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 08-03-2023. 	<u>Engineer</u> Date: 05/03/2023 	<u>Contractor</u> Date: 06/03/2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(PCCC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (TL-01) FEBRUARY 2023



Project	132 KV TL-01R	Location			DHC Office		
Employer	WAPDA	Date of Meeting			03/03/2023 (09:20 am-10:10 am)		
Engineer	DHC	Place of meeting			DHC Meeting Hall		
Contractor	PCCC	Attendance			Attendance Sheet Attached		
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
37	Establishment of Newly hired camp building as per EMAP and ECPs. The Engineer will inspect the newly hired camp building on 3 rd June 2022.			√	Immediate	30/06/2022	The contractor informed that full shifting to the camp has not yet started.
						29/09/2022	Inspection done but the camp is still under construction therefore will require a new inspection.
						02/11/2022	Contractor failed to attend meeting
						30/11/2022	Contractor failed to attend meeting Therefore NCR is issued by the Engineer.
						29/12/2022	The Joint Inspection will be done by the Engineer and WAPDA Environment Teams on 11 th of Jan 2023.
						31/01/2023	The camp inspection will be conducted by the Engineer and WAPDA on 01 st of Feb 2023.
						03/03/2023	Done
38	Ensure water sprinkling with in the TL-01 Sites as well as all allocated and access roads.			√	Immediate	29/09/2022	Partially Done
						02/11/2022	Contractor failed to attend meeting
						30/11/2022	Contractor failed to attend meeting Therefore NCR is issued by the Engineer.
						29/12/2022	

						31/01/2023	Not Done: On-going activity and contractor agreed to conduct it as per previous frequency i.e. 3 times a day in winter and 4 times a day in summer.
						03/03/2023	Not Done: The contractor has agreed to hire a Water Bowser for addressing the fugitive dust suppression activity. Done:
41	Waste Management Practices to be reflected in MPR.			√	Immediate	29/09/2022	Not Done
						29/12/2022	Not Done: The contractor has agreed to share the record of waste management practices currently being followed at site and for the camp area with cover letter and also to be included in MPR. The timeline for this compliance is 10 th of Jan 2023.
						31/01/2023	Not Done: The contractor has agreed upon doing Submission up till 14 th of Feb 2023
						03/03/2023	Done:
43	Training on Waste management to all TL-01 Staff			√	Immediate	31/01/2023	Not Done
						03/03/2023	Done on 21 Feb 2023
44	Training on protection of Flora and Fauna to all TL-01 Staff			√	Immediate	31/01/2023	Not Done
						03/03/2023	Done on 17 Feb 2023
45	Drinking Water is taken by TL-01 contractor from a spring in front of UBL Building in Dasu			√	Immediate	03/03/2023	The contractor has agreed to drinking water tests results share the results of the spring by 15 th of March 2023.
46	Oil Spillage in TL-01 Camp			√	Immediate	03/03/2023	Bunding around the Generators is required as well as a maintenance register to be kept by the contractor


Confirmed by:


The Employer

Name: Farhat Ali

Position: Dy. Director

Date: 08-03-2023


The Engineers Representative

Name: Amis Hassan

Position: Sn. Environment Specialist




Date: 05-03-2023


The Contractor

Name: M. Waleed

Position: OH&S - TL-01

Date: 08-03-2023

DASU HYDROPOWER PROJECT MINUTES OF MEETING (PCI-01R) FEBRUARY 2023		04 th of March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gansu Co., LTD (CGICOP)		
Subject: Monthly Environmental Progress Review Meeting for PCI_01R. Date: 04 March, 2023 Time: 10:45 am- 12:00 pm Place: DHC Meeting Hall Pages: 02 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of PCI-01R.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Addl Chief Engineer (Environment Dasu 2. Engineer - DHC RE Infrastructure, Dasu	3. Contractor, CGICOP 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 08-03-2023	<u>Engineer</u> Date: 06-03-2023	<u>Contractor</u> Date: 08/03/2023
 Representative of Employer- WAPDA (DHPP)	 Representative of Engineer (DHC)	 Representative of Contractor(CGICOP)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (PCI-01R) FEBRUARY 2023






Project	PCI-01R		Location	DHC Office			
Employer	WAPDA		Date of Meeting	04/03/2023 (10:45 am- 12:00 pm)			
Engineer	DHC		Place of meeting	DHC Meeting Hall			
Contractor	CGICOP		Attendance	Attendance Sheet Attached			
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con			
19	Submission of NOC and License for fuel storage at site.			√	15/08/2021	02/06/2021 03/07/2021 29/09/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022 01/04/2022 27/05/2022	<p>Not done. The Contractor was instructed to quickly initiate the process.</p> <p>In process</p> <p>Engineer requested WAPDA through letter dated 12th July 2021 to issue a recommendation letter to district administration for CGICOP to grant them an NOC for fuel storage which is a prerequisite for license apply to Chief inspector of explosives. The Employer is requested to pursue the matter please.</p> <p>Not done</p> <p>Not done. The Employer was again requested to send a letter to the district administration for NOC.</p> <p>Not done. The Employer is again requested to send a letter to district administration.</p> <p>Employer sent letter to DC to provide NOC to contractor. Contractor was asked to pursue the matter to get the NOC for onward apply for license.</p> <p>Not Done. Still pending but contractor has promised to submit it by 07th February 2022</p> <p>Not Done. Still pending contractor has agreed to share the NOC by 20th of April 2022</p> <p>Partially Done. NOC from Deputy Commissioner Office has been granted but License is still not granted</p>

						30/06/2022	Partially done. The Engineer instructed the contractor to proceed further in the matter and send application to KP Inspector of Explosives for grant of license.
						01/08/2022	Not Done: The Engineer will issue a reminder letter to the contractor regarding NOC from Inspector of Explosives.
						29/09/2022	Partially Done: The contractor has agreed to pursue the case and up till 15 th of Oct 2022 he will submit.
						02/11/2022	Partially Done: An NCR will be issued to the contractor for the non-compliance.
						30/11/2022	Not Done: NCR is issued on 7 th of Nov 2022. The contractor has not closed the NCR yet.
						29/12/2022	Not Done:
						31/01/2023	Not Done: The Engineer has already issued an NCR on this long awaited and outstanding issue.
						04/03/2023	Not Done: The contractor is not serious in implementing this issue therefore contractor was issued an NCR and still no response from the contractor.
47	Water Sprinkling Issue. Contractor is instructed to ensure adequate water sprinkling inside the colony area as well as the allocated portion of Khoshe access road.			√	Immediate	29/09/2022	Not Done;
						02/11/2022	Partially Done: Contractor agreed that Increase in frequency of water sprinkling is much need
						30/11/2022	Partially Done; The sprinkling issue is partially resolved by contractor i.e., half of the road is always dry as well as the frequency needs to be increased.
						29/12/2022	Partially Done: The contractor agreed to increase the frequency and coverage of the Water sprinkling area.
						31/01/2023	Not Done: The contractor has agreed to ensure this activity throughout the contractual term except rainy days.

48	MPR Should reflect Waste/ discarded materials section describing used batteries and tires and used oil with their quantities and disposal method /vendor details.			√	Immediate	04/03/2023 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023 04/03/2023	Done Not Done; Partially done The details of used tires and Batteries are not provided in the MPR of Oct 2022 Not Done: The contractor has agreed to submit by 08 th of Dec 2022 Partially Done: The write up needs to be updated and the record needs to be shared by the contractor with cover letter to which the contractor has agreed upon to share by 10 th of January 2023. Not Done: Done:
52	Hot Water Availability for Labor , Security and all other Staff			√	12 Dec 2022	30/11/2022 29/12/2022 31/01/2023 04/03/2023	The contractor has agreed to install Geysers in the Camp Not Done: The contractor has agreed to implement this point by 12 th of January 2023 Not Done The contractor has agreed to implement this point by 15 th of February 2023 Not Done:
53	Availability of More Wash rooms for Camp area			√	15 Dec 2022	30/11/2022 29/12/2022 31/01/2023 04/03/2023	The contractor has agreed to provide more toilets to the Labor, Staff and other employees up till 15 th of Dec 2022 Not Done: Not Done: The contractor has not complied by the engineers instructions Not Done: The contractor has agreed to build more toilets up till 20 th of March 2023.
55	Oil Spills Training			√		29/12/2022	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will

						31/01/2023	be responsible of oil spillage after 30 th of Jan 2023. Partially Done: Some staff is still pending, Therefore the contractor will impart to rest of its labor and staff and submit record to the Engineer by 15 th of Feb 2023
						04/03/2023	Done:
56	Living Conditions (Welfare Facilities)		√		Immediate	29/12/2022	The Environment Section and OHS Section of DHC will decide this matter after an internal meeting that which section of DHC will do the monthly inspections.
						31/01/2023	Not Done: The contractor has agreed to upgrade the following issues by 20 th of Feb 2023: Bunk Beds, Over crowdedness, Cleanliness and Hygienic conditions in the Kitchen, Proper Drainage of Sewage pipes, Preparation of dedicated Dinning Hall, Availability of Hot Water in Kitchen and Wash Rooms, Scarcity of Toilet, and use of Wood as fuel in the Camp areas.
						04/03/2023	Partially Done: The contractor has failed to provide proper drainage for sewage water, Dining Hall/ Common Room, availability of Hot water in Toilets/ Bath Rooms and LPG Cylinders with stoves.
57	Treatment of Sedimentation Pond water before release inn to the drain.			√	Immediate	29/12/2022	The contractor has agreed to treat its sedimentation pod water before its release in to the drain.
						31/01/2023	Not Done:
						04/03/2023	Not Done: The contractor has agreed to comply by 18 th of March 2023.
58	Concrete Mixer Truck Washing at Chuchang Nullah			√	Immediate	29/12/2022	The contractor agreed to train their drivers and maintenance staff not to wash their concrete mixers and other dumping vehicles in or near the Chuchang Nullah.

						31/01/2023	Not Done:
59	Introduction of Reward and Punishment to Repeated offenders on Environmental Non-Compliances			√	Immediate	04/03/2023 04/03/2023	Done: Training conducted The contractor has agreed to implement this management technique on all sites of PCI-01R.
Confirmed by:							
							
The Employer		The Engineer		The Contractor			
Name: <u>Fashat Ali</u>		Name: <u>Awaiz Hassan</u>		Name: <u>Fozal Mubarek</u>			
Position: <u>Dy. Director</u>		Position: <u>Sr. Environment Specialist</u>		Position: <u>EHS Manager</u>			
Date: <u>08-03-2023</u>		Date: <u>06-02-2023</u>		Date: <u>08/03/2023</u>			

DASU HYDROPOWER PROJECT MINUTES OF MEETING (KKH-02) February, 2023		02 nd of March, 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezouba Group Co., LTD (CGGCC)		
Subject: Monthly Environmental Progress Review Meeting for KKH-02. Date: 2 nd of March 2023 Time: (11:45am-12:40pm) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of KKH-02.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu		3. Contractor, CGGC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 08-03-2023 	<u>Engineer</u> Date: 06-03-2023  Awaiz Hassan	<u>Contractor</u> Date: 08-03-2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGGC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-02) February 2023



Project	KKH-02	Location		DHC Office			
Employer	WAPDA	Date of Meeting		02/03/2023 (11:45am-12:40 pm)			
Engineer	DHC	Place of meeting		DHC Meeting Hall			
Contractor	CGGCC	Attendance		Attendance Sheet Attached*			
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for KKH-02 Component			√	20/07/2022	29/-09/2022	Not Done
						02/11/2022	Not Done: The employer instructed the Engineer to issue NCR to contractor for Non compliance
						30/11/2022	Not Done: NCR has been Issued by the Engineer
						29/12/2022	Not Done The contractor has agreed to share Resume of Suitable candidate by 23 rd of Jan 2023 so that NCR closure procedure can be proceeded with.
						31/01/2023	Note Done: The contractor has agreed to share a qualified and experienced persons resume up till 15 th of Feb 2023
						02/03/2023	Partially Done: The contractor has submitted CV's of some candidates for the said position.
02	Submission of CEAP as per the Engineers Comments			√	16 th of Jan 2023	29/09/2022	Not Done
						02/11/2022	Not Done
						30/11/2022	Partially Done: The contractor needs to update the CEAP as per new design changes
						29/12/2022	Not Done: The contractor needs to update the CEAP as per new design changes i.e. addition of New Tunnels and Bridges and improve the shortcomings in the CEAP as commented by the Engineer by 20 th of Jan 2023.

						31/01/2023	Note Done: The contractor has agreed to submit up till revised CEAP up till 15 th of Feb 2023.
						02/03/2023	Note Done: The contractor has agreed to submit up till revised CEAP up till 20 th of March 2023.
05	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated disposal site only			√	Immediate	29/-09/2022	The contractor informed that the passage to the site is very narrow and the dumper cannot reach in that very location resulting in some of the material being rolled over the slope. In future as the path is widened enough that the dumper can reach at the very location of where work is under progress haulage activity will start immediately.
						02/11/2022	Not Done: The Contractor was instructed to submit spoil disposal and sprinkling plan by 14 th of Nov 2022
						30/11/2022	Partially Done: The Information has been added to the MPR but the information is inadequate as The Engineer want to have a clear picture about Spoil disposal, and Water Sprinkling issues. Therefore it is instructed to the contractor to re write the Spoil Disposal and Water Sprinkling Plan.
						29/12/2022	Not Done: New date for compliance of slope protection and haulage of excavated material is agreed with the contractor as 23 rd of Jan 2023
						31/ 01/2023	Not Done: Share the new methodology agreed with Technical Team (Road Design Engineers)
						02/03/2023	Partially Done: Method statement for spoil material dumping is submitted to the Engineer.
06	Ensure environmental topics to be covered in TBT			√	Immediate	29/-09/2022	Not Done
						02/11/2022	Not Done The contractor informed that TBT will be covered in the MPR which will be submitted by 14 th of November 2022

						30/11/2022	<p>Partially Done: The contractor has given information in the MPR i.e. Table 2 of Introduction Chapter but This table should have separate explanation and proper write up should be developed for it.</p> <p>Not Done: The contract have to comply by 16th of Jan 2023 especially, oil Spills, Waste Management, Housekeeping, dust suppression measures, cleanliness and hygiene among workers, communicable diseases, protection of flora and fauna, Protection of Water Bodies from Pollution. Soil Protection, Slope Protection.</p> <p>Partially Done: The contractor has agreed to share fortnightly with cover letter and in the MPR of every month also.</p> <p>Done</p>
						29/12/2022	
						31 /01/2023	
						02/03/2023	
10	Loose Material from Slopes			√	Immediate	29/12/2022	<p>Contractor has agreed to remove all boulders and other loose rock from the slopes by 23rd of January 2023.</p> <p>Partially Done: The contractor has agreed to share the photographic evidence along with location maps and report.</p> <p>Done: Contractor has removed major boulders and other loose rock from the slopes in February 2023 (Shared the Data vide letter 356 Ref No. having subject of Method statement of spoil material removal.)</p>
						31/01/2023	<p>Partially Done: The contractor has agreed to share the training record in the January 2023 MPR.</p> <p>Not Done: The contractor has agreed to introduce reward and punishment system (i.e., introduction</p>
						02/03/2023	
11	Oil Spill			√	Immediate	29/12/2022	<p>Contractor has agreed to impart training to all staff especially mechanics and before 23rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30th of Jan 2023.</p>
						31/01/2023	
						02/03/2023	

							of fines to repeated offenders of environmental noncompliance)
12	Used Drums, Spill Sheets, Drip trays procurement			√	Immediate	29/12/2022 31/01/2023 02/03/2023	KKH-02 Representative Mr. Zhang Jun (QHSE Manager of KKH-02 Contract, CGGC) has agreed to conduct procurement of Drip trays, Spill Sheets, Spill Kits, PPE's Necessary for Oil Change and Spillage for KKH-02 contract. Training of all staff is required by 23 rd of Jan 2023 for all staff having topic: " In case of Oil/Chemical Spillage, how to use Spill Kit on site" Not Done: The contractor has agreed to raise an AFI up till 8 th of Feb 2023 on this issue. Not Done: The contractor has agreed to ensure compliance up till 10 th of March 2023 on this issue.
13	Provision of Portable toilet on the KKH-02 Sites as well as container offices.			√	Immediate	31/01/2023 02/03/2023	The contractor has agreed to place portable toilets as well as container offices for the site staff for their perusal. Not Done: The contractor has agreed to ensure compliance by 20 th of March 2023.
14	Wood Burning at different locations of KKH-02			√	Immediate	31/01/2023 02/03/2023	Wood Burning is strictly prohibited as per ECP's provided in the contract. Not Done: Record to be shared for training of staff/labor as well as provision of LPG cylinders/ Heaters by 09 th March 2023
15	Submission of Fuel Storage License in KKH-02 Camp area			√	Immediate	02/03/2023	The contractor and Engineer has discussed on this matter and contractor has been given timeline up to 05 th of April 2023.
16	Reward and Punishment system			√	Immediate	02/03/2023	The contractor has agreed to introduce reward and punishment system for effective compliance of environmental aspects on their sites.

Confirmed by:



The Employer

Name: Fashat Ali

Position: Dy. Director

Date: 08-03-2023



The Engineer/Consultant

Name: Awaiz Hassan

Position: Sr. Environment sp

Date: 06-03-2023

The Contractor

Name: Syed Usman Iftikhar

Position: OHSO

Date: 08-03-2023

Annexure-01: Attendance Sheet

Dasu Hydropower Project

Dasu Hydropower Consultants




Meeting attendance sheet

Monthly Progress review meeting: KKH-01/RAR-01/TL-01/MW-01&2/PCI-01R/RAR-02/KKH-02/EM-01

Date: 02-03-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Zhang Jun	DHSE/KKH-02	OHS director	0348777959	21/17 3/22/23
	Fozal ur Rahman	EHS(KKH-02)	ESS	03474846528	(Signature)
	Imroan Tariq	Wapda	Dy. Director	0321-5181114	(Signature)
	Awasia Hassan	DHC	Sh. Esw. Specialist		(Signature)
	Sardar Alam	"	"		
	Nasir Khan	DHC	Field inspector	0345-957742	(Signature)

Monthly Progress Review Minutes for March 2023

DASU HYDROPOWER PROJECT MINUTES OF MEETING (MW-01& MW-02) MARCH 2023		30 th March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezhouba Group Co., LTD (CGGC)		
Subject: Monthly Environment Progress Review Meeting for MW-01&02. Date: 30 th March 2023 Time: 08:45 am-10:30 am Place: DHC meeting Hall Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of MW-01&02.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE MW-01&02, Dasu	3. Contractor, CGGC 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 07-04-2023	<u>Engineer</u> Date: 06-04-23	<u>Contractor</u> Date:
		 4.9/23
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGGC)

Minutes of the Monthly Environmental Progress Review Meeting (MW-01& MW-02) MARCH 2023



Project	MW-01 & MW-02			Location	DHC Office		
Employer	WAPDA			Date of Meeting	30 th March 2023		
Engineer	DHC			Place of meeting	DHC Meeting Hall		
Contractor	CGGC			Time	08:45 am-10:30 am		
Sr. #	Checked Items and Actions Planned	Action By			Target Date for Action	Action Confirm Date	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con.			
23	Status of 3 rd party Quarterly environmental monitoring as per contract specifications			√	20/05/2021	02/06/2021 02/07/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022	<p>In process. In process. The contractor informed that the contract with the laboratory is in process by CGGC commercial department.</p> <p>Not done.</p> <p>Not done. The contractor was instructed to immediately arrange 3rd party quarterly environmental monitoring.</p> <p>Partially done. The Contractor mobilized <i>Bureau Veritas</i> environmental monitoring laboratory to site but their equipment were not as per the monitoring specifications. The Laboratory was demobilized and were asked to come up with all the calibrated analyzers and instruments. The contractor informed that the laboratory will be remobilized to site by 10th January 2021.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share profile before mobilization of the environmental laboratory.</p> <p>The Contractor informed that they are considering new environmental laboratory for the environmental monitoring which may be mobilized by 20th February 2022. Employer and Engineer instructed the Contractor to share</p>

						profile before mobilization of the environmental laboratory
					05/04/2022	“The Engineer” will write a letter to contractor for updated status about the Third-Party Monitoring Laboratory Hiring Status.
					28/05/2022	Not Done: Contractor shared its decision that SGS Laboratory is finalized by the CGGC but number of parameters is still under discussion.
					30/06/2022	Not done. The Contractor informed that their contract section wants clarification regarding the number of parameters to be tested. A meeting in this regard will be scheduled by the Engineer.
					29/09/2022	The contractor has decided to take SGS on board for the third party monitoring purpose but there is a meeting scheduled in 13 th October 2022 in order to discuss and finalize the Parameters to be performed.
					02/11/2022	Not Done: The contractor informed that the certification and equipment list of another lab will be shared with the Engineer for their approval by 12 th Nov 2022.
					30/11/2022	Not Done: The contractor informed that they are in search of a lab and they will submit by 12 th of Dec 2022.
					29/12/2022	Not Done: CGGC has again come up with Bureau Veritas Environmental Laboratory. The contractor has agreed to re submit the technical profile of M/s Bureau Veritas with all requisite documents especially certificate of registration from PK EPA. The engineer with consent from WAPDA has agreed to re consider this organization with all complete documentation and proof of all statutory

						<p>requirements to be submitted by CGGC up till 25th of January 2022.</p> <p>31/01/2023 Not done. The contractor has sought new timeline for himself i.e., up to 16th of Feb 2023 for sorting this issue. The contractor will pursue the matter with their Bureau Veritas (B.V) Laboratory. If the B.V Lab doesn't share its Certificate of Registration from EPA, KPK than CGGC has to share a new KP EPA Approved Laboratory profile up till 16th of Feb 2023.</p> <p>02/03/2023 Not Done: The Bureau Veritas (B.V) Lab haven't shared its Certificate of Registration from EPA, KPK. The CGGC contractor has agreed to submit a new Third Party Lab un-till 15th of March 2023.</p> <p>15/04/2023 30/03/2023 Not Done: The contractor is given timeline up to 15th of April 2023.</p>
36	Appointment of Environment Director			√	16 th January 2021	<p>07/02/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 25th February 2022.</p> <p>01/03/2022 Not done. Contractor informed that search for suitable candidate is still in progress.</p> <p>28/05/2022 Not Done: The matter is still pending; Contractor has assured to share CV of suitable candidate who has some practical experience.</p> <p>30/06/2022 Not done. Contractor verbally discussed about a potential candidate Mr. Afzal who was engaged in Neelum Jehlum. The Engineer instructed the contractor to submit the CV officially to proceed further in this matter.</p> <p>29/09/2022 Note Done: The contractor will submit the resume of the nominated person 14th Oct 2022</p> <p>02/11/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be</p>

						<p>shared with the Engineer for approval most probably by 17th November 2022.</p> <p>30/11/2022 Not done. The Contractor informed that search for the candidate is in progress and CV will be shared with the Engineer for approval most probably by 12th December 2022.</p> <p>29/12/2022 Not Done: The contractor was informed that this matter is also discussed with WB and the WB is also of the view that in case of non-availability of 15 years' experienced person the experience may be reduced to 10 years. On this issue the Engineer has already seeked approval from WAPDA. The contractor has agreed to a find a suitable candidate and submit his her resume before 23rd of Jan 2023.</p> <p>31/01/2023 Not done: WAPDA has sought guidance from World Bank and World Bank has reduced the Experience up to 08 years. Therefore, On these basis, CGGC MW-01 and MW-02 contracts has sought time up till 15th of Feb 2023</p> <p>02/03/2023 Partially Done: The contractor has submitted six resume's for the Environmental Manager Position.</p> <p>30/03/2023 Partially Done: The contractor has been provided with approval of one candidate named Mr. Tariq Jan for MW-01 contract. The contractor agreed to take on board the new Environmental Officer (MW-01) and report to the Engineer's office via letter. The Environmental Officer for MW-02 is still pending.</p>
55	Used oil and New Oil Storage Training			√	Immediate	29/12/2022 Contractor has agreed to imparted training to all off its staff on how to handle/ change the oil of different equipment's/ vehicles/ machinery on site and off site. Similarly special bounded

						<p>storage areas (having concrete foundations) will be established by the contractor in-order to avoid any oil spillage. All used oils will be stored in 200 liter drums which will be placed on concrete foundations and bounded with at least the capacity of the oil storage vessels itself.</p> <p>31/01/2023 Partially Done: The contractor has conducted trainings on the oil spillage issue but has not imposed any fines yet on the polluters. Therefore, contractor has agreed to share record of the trainings up till 8th of Feb 2023.</p> <p>02/03/2023 Not Done: The contractor has informed that their EMD section is recording data for used engine oil. The engineer will visit the switchyard, CR-09 and CR-02 and verify the situation and then close the point.</p> <p>30/03/2023 Not Done: The engineer verified the situation by inspecting the sites on 28th of March 2023 under Main works and found that record is not maintained neither the record was shared with The Engineer.</p>
56	Water Quality of Sedimentation tanks			√	Immediate	<p>29/12/2022 The contractor has agreed to impart methods of introduction of acid to lower the pH of the sedimentation ponds on all sites of MW-01 & MW-02.</p> <p>31/01/2023 Not Done: The contractor has agreed to improve the water quality as the pH levels is consistently high Therefore the contractor will be adding higher quantities of fresh water. The contractor has also agreed to conduct an experiment in their lab in which he will come out with a result that how much amount of acid is needed to lower the pH value of Waste water</p>

						02/03/2023	and submit to the Engineer up till 10 th of Feb 2023.
						30/03/2023	Not Done: The contractor has agreed to improve water quality issue by 16 th of March 2023. Not Done: The contractor raised an AFI on 1 st of March 23 to conduct a sample test for lowering of pH. It was found that almost 0.25 ml of dilute acid is needed for 1 litre of water (the acid used was diluted H ₂ SO ₄). After that contractor shared in the meeting that dosage of diluted acid to the sedimentation Tanks required large quantities. The matter is still pending. The contractor agreed to put the fresh water pipe to the tertiary outlet of the sedimentation tank.
59	Contractors Local Staff Residential Facility Inspection required		√		Immediate	29/12/2022	The engineer will conduct meeting among Environment and OHS Sections and then decide that who will be conducting this inspection and with what frequency. During the inspection Workers Welfare facilities will be monitored as per provisions in the contract.
						31/01/2023	Not Done: The Engineer conducted the inspection in Jan 2023 and found the discrepancies regarding provision of hot water, overcrowding and filthiness of toilets, waste management is still existing. Therefore Contractor has agreed to rectify the situation in the Labor camp of Pakistani staff and raise an AFI up till 10 th of Feb 2023 to the Engineer.
						02/03/2023	Not Done: The contractor has agreed to discontinue use of Wood as fuel and provide Gas cylinders. The contractor has also agreed to deploy janitors for washrooms.

						30/03/2023	Not Done: The contractor has agreed to improve Welfare facilities for the Pakistani staff as well, which is provision of LPG cylinders instead of wood as fuel, provision of more washrooms/toilets, etc. (This matter is already inspected by the OHS Team)
62	Zero Tolerance policy for animals at site			√	Immediate	29/12/2022	No animal are allowed on the construction site by any staff member of CGGC at any construction site. The contractor has agreed to remove all animals from all construction sites before 16 Jan, 2023. {*Note: If Chinese Nationals want to keep dogs, they should be kept in special cages in Chinese part of Barseen Camp) and properly vaccinated for rabies and other communicable diseases.}
						31/01/2023	Partially Done: Contractor has removed some of the animals from construction sites but still there are some animals like pigeon and chicken on CR-09 site, dogs on CR-02 site etc.
						02/03/2023	The engineer will verify and close the point
						30/03/2023	Not Done: The engineer has verified this issue and found that stray dogs with full families are residing inside CR-02, CR-09, Switch yard, CT-02 area. The contractor will write a letter to The Engineer for taking help in removing of stray dogs from the site with the help of municipal committee.
63	Welfare facilities @ CR-02			√	Immediate	29/12/2022	The contractor has agreed to hire a dedicated janitor for every site who will be responsible for cleaning the toilets at least three time a day in one shift. Additionally the Toilet at CR-02 are choked up, therefore they will be cleared of any sludge and the septic tank will also be cleared along with the toilets. The contractor

						31/01/2023	has also agreed to install flushing system at CR-02. Not Done: The contractor has agreed to rectify the situation by 10 th of Feb 2023.
						02/03/2023	Not Done: The contractor has agreed to hire a permanent janitor for CR-02 Site and rectify the situation by 10 th of March 2023.
						30/03/2023	Not Done: The engineer has conducted joint inspection with WAPDA but the situation is still the same as previous
64.	Use of wood as fuel is still going on the switchyard site.			√	Immediate	31/01/2023	The contractor was told to immediately stop use of wood as fuel and contractor has agreed to provide LPG Gas cylinders to its staff.
						02/03/2023	Not Done: After verification The point will be closed.
65	Use of chemical tank for human use.			√	Immediate	31/01/2023	Contractor has agreed to replace this chemical tank with a new Water Tank as empty chemical tank is being used for store water for human consumption.
						02/03/2023	Not Done: The contractor has agreed to replace all chemical tanks which are in human use with new domestic water supply tank.
						30/03/2023	Not Done: The contractor has agreed to rectify the issue, raise an AFI for this issue and close NCR
66	Scarcity of Toilets			√	Immediate	02/03/2023	No. of Washrooms to be increased from 1-2 up till 10 th of March 2023.
						30/03/2023	Not Done: The scarcity of toilets will be dealt with specifying the location wise plan as well as, the contractor has agreed to rectify by 10 th of April 2023

67	Implementation of the Conditions of NOC from EPA, KP for Uchar Thoki Crushing Plant.			√	Immediate	02/03/2023 30/03/2023	Plantation of trees are required around the crush plant. (time line before 18 th of March 2023) Partially Done: The condition of tree plantation is implemented by the contractor but the sedimentation tank is still pending.
68	Submission of TMP			√	Immediate	02/03/2023 30/03/2023	Contractor has agreed to submit up till 10 th of March 2023 The contractor's higher management will be contacted by the Engineer to submit TMP up till 16 th of April 2023.
69	Waste Bins at the construction sites			√	Immediate	02/03/2023 30/03/2023	Waste bins to be increased at site up till 10 th of March 2023. Done
70	Expedite NCR's Closure			√	16/04/2023	30/03/2023	The contractor has agreed to expedite the process and respond to all NCR's by 16 th of April 2023.
71	Air Dispersal Modeling Report			√	15/04/2023	30/03/2023	The contractor has agreed to submit the Air Dispersal Modeling report by 16 th of April 2023.

Confirmed by:



The Employer
Farhat Ali

Name:

Dy Director

Position:

Date:

07-04-2023



The Engineer/Consultant

Anwar Hassan Khan

SA Environmentalist

06-04-2023

The Contractor

Zahid Ali

2023.4.9

Annexure-01: Attendance Sheet

Dasu Hydropower Project

DHC Office, Dasu

Meeting attendance sheet

Monthly Environmental Progress review: KKH-01/RAR-01/TL-01/MW-01/MW-02/LBRV_11&12/PCI-01R

Date 30/03/2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
01	Imran Tariq	Wapda	Dy. Director	0321-5181114	
02	Awas Hassan	DHC	Sr. Environment		
03	Sardar Alam	DHC	Sr. Environment		
04	Zafar Sehal Ch.	DHC	Chief Environment	0300-9460132	
05	Nasir Khan	DHC	Field Inspector	0345-9577742	
06	Zhangke	CGC	HSED	0347/088309	
07	Wu	CGCL	Translator	03554639197	
08	Saeed-ul-Hassan	CGGC	HSED	0321 9812728	
09	RAHMAT ALI	CGGC	HSED Env. Supervisor	03554279961	
10	Yousaf Khan	DHC	DPM	03005716345	
11	Fahad Ali	WAPDA	Dy. Director	0344 9596 431	

DASU HYDROPOWER PROJECT
MINUTES OF MEETING (RAR-01) MARCH 2023

30th March 2023

Employer:
WAPDA (DHPP)

Engineer:
Dasu Hydropower Consultants (DHC)

Contractor:
China Civil Engineering Construction Co., LTD (CCECC)

Subject: Monthly Environmental Progress
Review Meeting for RAR-01.
Date: 30th March 2023
Time: (02:40 pm-03:25 pm)
Place: DHC Meeting Hall
Pages: 01
Exhibit: Attendance Sheet

Agenda:
Monthly Environmental Progress Review
Meeting of RAR-01.

Attendees
See the attached attendance sheet

Distributed (Softcopy) to:
1. Employer
- DHP WAPDA GM/PD, Dasu
- DHP WAPDA Director (Environment), Dasu
2. Engineer
- DHC RE Roads, Dasu

3. Contractor, CCECC
4. Office File / Circulation

Agreed by:

Employer

Date: 07-04-2023



Representative of
Employer- WAPDA (DHPP)

Engineer

Date: 06/04/2023



Representative of
Engineer (DHC)

Contractor

Date: 08-04-2023



Representative of
Contractor(CCECC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-01) MARCH 2023



Project		RAR-01		Location		DHC Office	
Employer		WAPDA		Date of Meeting		30/03/2023 (02:40 pm-03:25 pm)	
Engineer		DHC		Place of meeting		DHC Meeting Hall	
Contractor		CCECC		Attendance		Attendance Sheet Attached*	
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
40	Provision of Clean drinking water to All contractor Staff at site and Zaal Camp			√		03/03/2023 30/03/2023	The contractor has agreed to resolve this issue by 8 th of March 2023. Done
41	Bunding of pavement under the Generator sets			√	10 April 2023	30/03/2023	The contractor has agreed to ensure compliance by 10/4/23
42	Door for Toilets and Wash Rooms			√	10 th of April 2023	30/03/2023	The contractor has agreed to ensure compliance by 10/4/23

Confirmed by:

The Employer

Name: _____

Position: _____

Date: _____

The Engineer/Consultant

Awais Hassan Khan

Sr. Environment Sp

06-04-2023

The Contractor

REN Jianjun

A.HSED

08-04-2023

Annexure: Attendance Sheet of the Participants

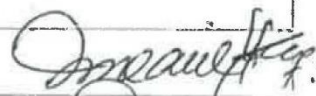
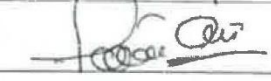

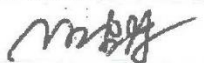




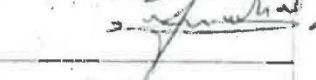

Dasu Hydropower Project



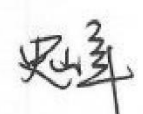
DHC Office, Dasu

Meeting attendance sheet

BAR-01/TL-01/MW-01/MW-02/LBRV_11&12/PCI-MR

Date 30/03/2023

No	Name	Organisation	Designation	Contact No.	Signature
1.	Imran Tariq	wapda	Dy. Director	0321-5181114	
2.	Faehat Ali	WAPDA	Dy. Director		
3.	Junaid Ahmed	HSE/CCECL	HSE Manager	0345-9601987	
4.	任建军	HSE/CCECL	HSE Manager	0355-4987000	
5.	Imran Khan	intepretor ccecl	CCCL	03467833437	
6.	Junaid Iftikhar	wapda	SUB-Engineer	0305-5961458	
7.	Awais Hassan	DHC	SA. Environmentalist		
8.	Sardar Alam	DHC	SA. Environmentalist		
9.	Zafar Iqbal Ch.	DHC	Chief Environmentalist	0300-7460132	
10.	Nasir Khan	DHC	Field Inspector	0345-9577742	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (RAR-02) MARCH 2023		11 th of April, 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezouba Group Co., LTD (CGGCC)		
Subject: Monthly Environmental Progress Review Meeting for RAR-02. Date: 11 th April, 2023 (09:00 am-10:05 am) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of RAR-02.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu	3. Contractor, CGGC 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 15.04.23 	<u>Engineer</u> Date: 11-04-23 	<u>Contractor</u> Date: 20.4.23 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGGC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (RAR-02) MARCH 2023



Project	RAR-02	Location		DHC Office			
Employer	WAPDA	Date of Meeting		11 April, 2023 (09:00 am-10:05 am)			
Engineer	DHC	Place of meeting		DHC Meeting Hall			
Contractor	CGGCC	Attendance		Attendance Sheet Attached*			
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for RAR-02 Component			√	5 th of June 2022	30/06/2022	Not done. The Contractor informed that they will share CV of a relevant candidate to be considered for the post.
						29/09/2022	Not Done; Contractor is instructed to submit the resume by 17 th of Oct 2022.
						02/11/2022	Not Done; Contractor is instructed to submit the resume by 17 th of Nov 2022.
						30/11/2022	Not Done; Contractor is instructed to submit the resume by 15 th of Dec 2022, otherwise an NCR will be issued against this non-compliance.
						29/12/2022	Not Done: The contractor has been shared with grave concern by the Engineer to submit a suitable candidate resume by 17 th of Jan 2023. Already an NCR is issued on 10 th of Dec 2022.
						31/01/2023	Not Done: The contractor has agreed to share a qualified and experienced candidate resume by 14 th of Feb 2023.
						02/03/2023	Partially Done: Resume's submitted by CGGC(PM, RAR-02)
						11/04/2023	Partially Done: The contractor has agreed to submit the relevant candidate CV by 15 th April 2023 (as advised by the Dep. Director WAPDA six years or seven years relevant experience will be considered by The Engineer)
03	Fugitive Dust Suppression measures to be taken at site on regular basis with at least 3			√	Immediate	30/06/2022	Partially done. The contractor informed that a dedicated water sprinkler is deputed at site which

<p>time a day and additional if required because summer season has already started.</p>					<p>29/09/2022</p>	<p>not only sprinkle along the access road but also at the excavated material before disposal. Not Done: The contractor informed that the track to the working faces is narrow and dumper and water bowser cannot reach the working face of the site therefore contractor is given time up till 30th of Oct 2022 to improve accessibility of the track.</p>
	<p>02/11/2022</p>	<p>Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 14th of Nov 2022.</p>				
	<p>30/11/2022</p>	<p>Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 27th of Dec 2022.</p>				
	<p>29/12/2022</p>	<p>Not Done: The excavated material is rolled down the slope by the contractor creating a huge dust cloud. The contractor has agreed to install water pumps which will lift water from nearby stream/river to sprinkle it upon the slopes as well as the excavated material so that there is no fugitive dust.</p>				
	<p>31/01/2023</p>	<p>Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, and Environmentalist. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14th of Feb 2023.</p>				
	<p>02/03/2023</p>	<p>Not Done: Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.</p>				

<p>time a day and additional if required because summer season has already started.</p>						<p>29/09/2022</p>	<p>not only sprinkle along the access road but also at the excavated material before disposal. Not Done: The contractor informed that the track to the working faces is narrow and dumper and water bowser cannot reach the working face of the site therefore contractor is given time up till 30th of Oct 2022 to improve accessibility of the track.</p>
						<p>02/11/2022</p>	<p>Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 14th of Nov 2022.</p>
						<p>30/11/2022</p>	<p>Not Done: The contractor is instructed to ensure water sprinkling on all working faces of all the sites. The narrow track issue is still prevailing and contractor has been given time up till 27th of Dec 2022.</p>
						<p>29/12/2022</p>	<p>Not Done: The excavated material is rolled down the slope by the contractor creating a huge dust cloud. The contractor has agreed to install water pumps which will lift water from nearby stream/river to sprinkle it upon the slopes as well as the excavated material so that there is no fugitive dust.</p>
						<p>31/01/2023</p>	<p>Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, and Environmentalist. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14th of Feb 2023.</p>
						<p>02/03/2023</p>	<p>Not Done: Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.</p>

						11/04/2023	The contractor informed that except K35 of RAR-02 all other work faces are closed due to Land Acquisition/compensation Issues. The contractor has agreed to comply with Water Sprinkling once the Work is resumed.
04	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated site of Kass disposal site on RAR-01.			√	Immediate	30/06/2022	Not done. The Contractor is strictly instructed to ensure haulage of the spoil to designated spoil disposal area
						29/09/2022	Not Done; The contractor informed that at the moment the spring which was nearby is dried up and the path to the working face is narrow, due to which the dumper cannot reach the exact working face. As soon as the dumper can reach the working face the haulage of excavated material will be started.
						02/11/2022	Not Done: The contractor is instructed to haul the excavated material to the designated spoil disposal site and not to roll down any spoil material along the slope
						30/11/2022	Not Done: The contractor has requested to give him time up till 27 th of Dec 2022 which was agreed by the Engineer.
						29/12/2022	Not Done: The contractor is instructed to haul the excavated material to the designated spoil disposal site and not to roll down any spoil material along the slope endangering habitat along the slopes as well as aquatic life form and Nearby Human Settlements.
						31/01/2023	Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023.
						02/03/2023	Not Done: Joint visit by the Engineer's representatives like geologist, RE for RAR-02

					11/04/2023	component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
09	Designated Spoil disposal Plan submission required by the Contractor			√	16 th of Jan 2023	<p>30/11/2022 The contractor informed that except K35 of RAR-02 all other work faces are closed due to Land Acquisition Issues. The contractor has agreed to comply with Water Sprinkling once the Work is resumed.</p> <p>29/12/2022 The contractor is instructed to submit the spoil disposal plan up till 15th of Dec 2022.</p> <p>31/01/2023 Not Done: The contractor has agreed to submit Spoil Disposal Plan by 16th of Jan 2023 Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14th of Feb 2023. The spoil Disposal plan will be submitted after the joint visit and will be based on its technical decisions.</p> <p>02/03/2023 Not Done: The plan will be submitted after Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.</p> <p>11/04/2023 Not Done: The contractor has agreed to submit by 16th of April 2023</p>
12	Site Specific Spoil Disposal Plan			√	20 th Jan 2023	<p>29/12/2022 The contractor has agreed to submit a proper spoil disposal plan which will not only highlight the location map of spoil disposal areas but complete methodology that which work faces will use which spoil disposal site and what amount of excavated material will be excavated as well as what number of dumpers are required to haul the</p>

					11/04/2023	component, Environment & OHS sections to be scheduled to sort out the mitigation measures. The contractor informed that except K35 of RAR-02 all other work faces are closed due to Land Acquisition Issues. The contractor has agreed to comply with Water Sprinkling once the Work is resumed.	
09	Designated Spoil disposal Plan submission required by the Contractor			√	16 th of Jan 2023	30/11/2022 29/12/2022 31/01/2023	The contractor is instructed to submit the spoil disposal plan up till 15 th of Dec 2022. Not Done: The contractor has agreed to submit Spoil Disposal Plan by 16 th of Jan 2023 Not Done: The contractor has requested to conduct a joint visit of The Engineer, WAPDA and CGGC RAR-02 Team in which Road Engineers, Geologists, Environmentalist and OHS Staff. The Engineer and WAPDA has agreed to this request and the joint visit will be carried out on 14 th of Feb 2023. The spoil Disposal plan will be submitted after the joint visit and will be based on its technical decisions.
						02/03/2023	Not Done: The plan will be submitted after Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
						11/04/2023	Not Done: The contractor has agreed to submit by 16 th of April 2023
12	Site Specific Spoil Disposal Plan			√	20 th Jan 2023	29/12/2022	The contractor has agreed to submit a proper spoil disposal plan which will not only highlight the location map of spoil disposal areas but complete methodology that which work faces will use which spoil disposal site and what amount of excavated material will be excavated as well as what number of dumpers are required to haul the

						31/01/2023	spoil material. Date for submission of Spoil Disposal Plan is 20 th Jan 2023 Not Done: This plan will be updated and submitted
						02/03/2023	Not Done: The plan will be submitted after the Joint visit by the Engineer's representatives like geologist, RE for RAR-02 component, Environment & OHS sections to be scheduled to sort out the mitigation measures.
						11/04/2023	Same status as point no. 09
13	Use of Wood as fuel on the RAR-02 sites.			√	Immediate	31/01/2023	The use of wood as fuel is strictly prohibited as per ECP's provided in the contract.
						02/03/2023	Done: LPG cylinders are provided to the labor and kitchen will be shifted to another location
14	Introduction of Reward and punishment system to tackle repeated offense of Environmental Non compliances			√	Immediate	02/03/2023	The contractor has agreed to implement the reward and punishment system starting from 8 th of March 2023.(i.e., Imposing fines on repeated offenders of environmental non compliances)
						11/04/2023	Not Done: The PM RAR-02 ensured to implement the mechanism before next meeting and record will be shared before 27 th of April 2023
15	Under construction camp facilities Layout with sewage, drinking water supply sources and pipe lines design, drainage pattern			√	Immediate	02/03/2023	The contractor has agreed to share details by 12 th of March 2023.
						11/04/2023	Not Done: The contractor has agreed to submit by 15 th of April 2023.
16	Working Methodology to be shared by Contractor (including the spoil disposal option.)			√	Immediate	11/04/2023	The contractor has agreed to submit by 16 th of April 2023.
17	Training session required to all RAR-02 Staff as well as sub-contractors and Vendors of RAR-02(CGGC) for Not using Wood as Fuel, Oil Spills, Waste management			√	Immediate	11/04/2023	The contractor has agreed to submit by 16 th of April 2023.

Confirmed by:



The Employer

Name:


Noman Qadeer

Position:

ADDS

Date:

15.04.23



The Engineer/Consultant

Awaiz Hassan

SA-Environmentalist

11-04-23



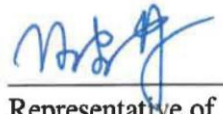


The Contractor

Shi Fang

PM-RAR-2

2023.4.18

DASU HYDROPOWER PROJECT MINUTES OF MEETING (KKH-01) MARCH 2023		30 th March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Civil Engineering Construction Co., LTD (CCECC)		
Subject: Monthly Environment Progress Review Online Meeting for KKH-01. Date: 30 th March, 2023 Time: 01:30pm-03:00 pm Place: DHC Meeting Hall Pages: 02 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of KKH-01.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu	3. Contractor, KKH-01 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 07-04-2023	<u>Engineer</u> Date: 06-04/2023	<u>Contractor</u> Date: 08-04-2023
 _____ Representative of Employer- WAPDA (DHPP)	 _____ Representative of Engineer (DHC)	 _____ Representative of Contractor(CCECC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-01) MARCH 2023



Project		KKH-01			Location		DHC Dasu Office	
Employer		WAPDA			Date of Meeting		30/03/2023 (01:30pm-03:00 pm)	
Engineer		DHC			Place of Meeting		DHC Meeting Hall	
Contractor		CCECC			Attendance		Attendance Sheet Attached	
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially closed	
		Emp.	Eng.	Con.				
47	Proper Disposal of Used Engine/ Equipment Oils and other chemicals			√	Immediate	28/05/2022 30/06/2022 29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023 15/03/2023 16/04/2023	<p>Please add details of this activity in the MPR of May 2022 with photographic records as well for before spillage and after spillage. Note Done; Photographic record should be maintained by the contractor and proper write up should be added to the next month's MPR. Not Done; Partially Done Not Done: The contractor will share record by 5th of Dec 2022 Partially Done: The area where the used engine oil is temporarily stored should be bounded with at least 12 inch barricading so that the in case of leakage of oil from drums it will not go outside the storage area. Not Done: K-04 and K-09 Bounding of the storage areas for used engine oils is still pending. Not Done: The contractor has agreed to comply by 15th of March 2023 Not Done:</p>	
60	License for fuel storage at K-9			√	Immediate	29/12/2022 31/01/2023 03/03/2023	<p>Not Done Not Done: The contractor promised to follow up the matter with the concerned authorities and update by 10th of Feb 2023. Not Done: The contractor has requested to ensure compliance up till 31st of March 2023</p>	

61	Hiring of Dedicated Environmental Manager and Environmental Supervisor for KKH-01 Site.			√	Immediate	29/12/2022 31/01/2023 03/03/2023 30/03/2023	Not Done Not Done: The contractor will share qualified and experienced person resume up till 15 th of Feb 2023 Done: The contractor has shared CV's with The Engineer on 3 rd of March 2023. Partially Done: The contractor has agreed to share the CV of Environmental Manager by 12 April 2023.(The Environmental Supervisors are already hired by the contractor)
62	Batching Plant washing/ waste water effluent just releasing in Chuchang Nullah. Concrete Mixer washing in Chuchang Nullah(K4 & K9)			√	Immediate	29/12/2022 31/01/2023 03/03/2023 30/03/2023	Not Done Partially Done: The batching plant is closed and removed from the site Not Done: The contractor was shown pictures of Concrete mixers being washed inside the Chuchang nullah near K5 to which contractor has agreed to impose fines on repeated offenders and share record with the Engineer up till 12 th of March 2023. Partially Done: The contractor has complied on the K9 Tunnel.Area but not on the
63	All generators do not have canopies. Noise levels should remain under NEQS i.e., 85 dB			√	Immediate 20-02-23 20/03/23 15-04-23	29/12/2022 31/01/2023 03/03/2023 30/03/2023	Not Done Not Done @ K-09: The contractor has agreed to install canopies for the generators by 20 th of Feb 2023. Not Done: The contractor has agreed to install canopies and shed over the generator sets by 20 th of March 2023 Not Done: The contractor has agreed to install canopies and shed over the generator sets @K-09 by 15 th of April 2023, while at K-04 the aforementioned instructions are complied with.
65	Used Oil Filters Storage & record to be shared by 6 th Jan 2023.			√	Immediate	29/12/2022 31/01/2023 03/03/2023	Not Done Not Done: The record will be shared up till 7 th of Feb 2023. Not Done: The Shared data is not having details of the Used Oil Filters specifically Therefore contractor has to

						30/03/2023	re submit the details of used oil filters to the Engineer's office. Done
66	Common Dinning Hall should be provided to the labor/ staff of K-09 and K-04.			√	Immediate	31/01/2023	Not Done
						03/03/2023	Not Done: The contractor has requested timeline of 20 th of March 2023 for the compliance of this point.
						30/03/2023	Done
67	Dirty Toilets and Residential Rooms			√	Immediate	03/03/2023	Cleaning of Wash rooms , residential Rooms, at least 3 times a day at K4 and K-09 Pakistani Labor camp by deploying a dedicated janitor one for each site
						30/03/2023	Not Done: The contractor has agreed to provide more janitorial staff by 10 th of April 2023.
68	Housekeeping @ K-09 and K-04 Area.			√	Immediate	03/03/2023	The CCECC Sites of K-09 and K-04, Dugah Tunnel and Logro-B, all have this issue, which needs to be addressed by 12 th of March 2023
						30/03/2023	Partially Done: Dugah Tunnel and Logro-B Tunnel still has issues pertaining to Housekeeping.
69	Hazardous waste			√	Immediate	03/03/2023	Hazardous waste register to be maintained regularly. All vendor receiving waste should be on their letter heads with clear name of their companies and their addresses.
						30/03/2023	Not Done
70	Sedimentation Tank design for K-6 Batching plant			√	Immediate	03/03/2023	Sedimentation Tank design at K-6 Batching plant to be revised and re-submitted.
					12-04-23	30/03/2023	Not Done: The contractor has been provided with a letter on 18 th of March with a timeline of 28 th of March 2023 to submit revised design for the K-6 Batching Plant. The contractor has agreed to resolve the issue by 12 th of April 2023.
71	Forced Ventilation System			√	Immediate	03/03/2023	Forced Ventilation system is having only one pipe where as it is mandatory to have two pipes one for exhaust and one for in flow of air. The existing single inflow pipe is damaged and needs to be replaced. The contractor has agreed to comply by 20 th of March 2023.
						30/03/2023	Done:

73	Aggregate Crushing Plant @ K-05			√	Immediate	03/03/2023 30/03/2023	<p>All the EMAP procedures for environmental compliances, ECP's provided in the contract, World Bank Policies, All local land laws are to be applied to this crush plant whether this crush plant is in the ownership of CCECC or not. All pre-requisite procedures, approvals from relevant Government departments like NOC's from, Forest Department KPK, Environment Protection Agency KPK, and Industries Department NOC should be with the plant operations managers/owners for ready inspection.</p> <p>Not Done: The contractor has denied the ownership of the K-05 Crushing Plant therefore the Engineer directed the contractor to submit agreement between CCECC and Local community resident.</p>
74	Underground Fuel Storage is still open from back side (i.e., located at an elevation above Switchyard of MW-02 component of CCGCC)			√	Immediate	03/03/2023 30/03/2023	<p>The contractor needs to immediately close the back side entrance of the fuel storage area @ K-09 Tunnel outlet. The contractor has agreed to complete construction of this storage area and install breathing pipes in this storage area.</p> <p>Partially Done: The contractor has closed the back side entrance of the fuel storage area @ K-09 Tunnel outlet but the material is wood which is highly flammable, therefore CCECC is directed by the Engineer to replace the door with fully closed brick/ block wall. The contractor has yet not completed construction of storage area and neither CCECC has installed breathing pipes in this Fuel storage area</p>
75	Effluent from Sedimentation tank @ K-09 Tunnel is being released to natural water body			√	Immediate	03/03/2023	<p>Effluent from Sedimentation tank @ K-09 Tunnel is being released to natural water body without treatment of highly alkaline pH. The contractor has agreed to re-use the Waste water for water sprinkling on the Khoshe Access road (Dirt Road) The practice will be starting from 8th of March 2023 by the contractor.</p>

						30/03/2023	Done: The contractor informed that the said waste water is being used for Khoshe Access Road Water Sprinkling.
76	Introduction of Reward and punishment system (i.e., repeated offenders of environmental noncompliance will be liable to fines by the CCECC Management)			√	Immediate	03/03/2023	The contractor has agreed to ensure compliance starting from 8 th of March 2023
						30/03/2023	Not Done:
77	Dugah Tunnel: Site issues of Environmental compliance			√	Immediate	03/03/2023	There are environmental Non-compliances on the sites as well as Non availability of Drinking Water, Cleanliness of site and waste management and availability of Toilets
					12/04/23	30/03/2023	Not Done: Environmental Non compliances are still pending to be resolved. The contractor has agreed to resolve the issues by 12 th of April 2023.
78	Environmental Non Compliances have increased on CCECC Sites of KKH-01			√	Immediate	03/03/2023	The contractor has hired two new EHS Officers Mr. Rahat Hameed and Mr. Yasser Hussain as well as a Chinese Staff Mr. Ren Jianjun in addition to Mr. Manzoor, Mr. Sajid and Mr. Arif. The contractor has promised to increase their on-site presence in the field as well as increase on site environmental compliance as per description given in ECP's and expedite closing of all NCR's in time.
						30/03/2023	Partially Done: The environmental Non-compliance are still in large number
80	Construction of third chamber for sedimentation pond at K-09			√	Immediate	03/03/2023	The contractor agreed to comply by 20 th of March 2023 after meeting with higher management of CCECC.
						30/03/2023	Not Done:
81	Submission of Design for Uchaar Crushing and Batching Plant sedimentation Tank			√	12-04-23	30/03/2023	The contractor has agreed to submit by 12 th of April 2023.

Confirmed by:



The Employer

Name: Farrat Ali

Position: Dy. Director

Date: 07-04-2023



The Engineer

Name: Awaiz Hassan Khan

Position: Sr. Environmentalist

Date: 06-04-2023



The Contractor

Name: RBN Jianjun

Position: A. HSE D

Date: 08-04-2023



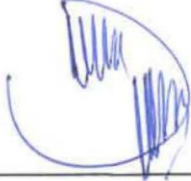
Annexure-01: Attendance Sheet

Dasu Hydropower Project

DHC Office, Dasu

Meeting attendance sheet

Sl. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Imran Tariq	Wapda	Dy. Director	0321-5181114	
2	MANZOOR HUSSAIN	CCECC	HSE Manager	0345-5687051	
3	ARIF HUSSAIN	CCECC	Environmentalist	0345-2848920	
4	Fahad AG	WAPDA	Dy. Director		
5	Junaid Iftikhar	WAPDA	Sub-Engineer	0305-5961458	
6	Zafar Iqbal	DHC	Chief Environmentalist	0300-9460132	
7	Sardar Alam	DHC	Sr. Environmentalist		
8	Awas Hussain	DHC	Sr. Environmentalist		
9	Nasir Khan	DHC	Field Inspector		
10	任建军 Ren Jianjun	CCECC	HSE Manager		

DASU HYDROPOWER PROJECT		
MINUTES OF MEETING (KKH-02) MARCH, 2023		
30th March, 2023		
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gezouba Group Co., LTD (CGGCC)		
Subject: Monthly Environmental Progress Review Meeting for KKH-02. Date: 30 th of March 2023 Time: (10:45am-11:40am) Place: DHC Meeting Hall Pages: 01 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of KKH-02.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE Roads, Dasu	3. Contractor, CGGC 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 07/04/2023 	<u>Engineer</u> Date: 06-04-2023 	<u>Contractor</u> Date: 06-04-2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGGC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (KKH-02) MARCH, 2023



Project	KKH-02	Location	DHC Office				
Employer	WAPDA	Date of Meeting	30/03/2023 (10:45am-11:40am)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	CGGCC	Attendance	Attendance Sheet Attached*				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Action Confirm Date	Status Done/Closed, Not Done/open, In Progress/Partially closed
		Emp.	Eng.	Con.			
01	Hiring of Dedicated Environmental Manager for KKH-02 Component			√	20/07/2022	29/09/2022	Not Done
						02/11/2022	Not Done: The employer instructed the Engineer to issue NCR to contractor for Non compliance
						30/11/2022	Not Done: NCR has been Issued by the Engineer
						29/12/2022	Not Done The contractor has agreed to share Resume of Suitable candidate by 23 rd of Jan 2023 so that NCR closure procedure can be proceeded with.
						31/01/2023	Note Done: The contractor has agreed to share a qualified and experienced persons resume up till 15 th of Feb 2023
						02/03/2023	Not Done: The contractor has submitted CV's of some candidates for the Environmental Manager position in MW-01, As the contractor is same for MW-01 and KKH-02, therefore contractor has requested to consider one of the candidate from that list.
						30/03/2023	Not Done: The candidates CV's shared by MW-01 i.e. CGGC was reviewed and only one candidate was found suitable for the MW-01. The KKH-02 Contract Team of CGGC have yet not share any CV's for the dedicated Environmental Manager.

02	Submission of CEAP as per the Engineers Comments			√	16 th of Jan 2023	29/09/2022 02/11/2022 30/11/2022 29/12/2022 31/01/2023 02/03/2023 30/03/2023	<p>Not Done</p> <p>Not Done</p> <p>Partially Done: The contractor needs to update the CEAP as per new design changes</p> <p>Not Done: The contractor needs to update the CEAP as per new design changes i.e. addition of New Tunnels and Bridges and improve the shortcomings in the CEAP as commented by the Engineer by 20th of Jan 2023.</p> <p>Note Done: The contractor has agreed to submit up till revised CEAP up till 15th of Feb 2023.</p> <p>Note Done: The contractor has agreed to submit up till revised CEAP up till 20th of March 2023.</p> <p>Not Done: The contractor representative shared stance that as soon as the as new dedicated Environment Manager is on board the CEAP will be submitted to the Engineer's office within 15 days.</p>
05	Rolling of Debris/ over burden or any loose material after blasting/ slope cutting activity to be hauled away at the designated disposal site only			√	Immediate	29/09/2022 02/11/2022 30/11/2022	<p>The contractor informed that the passage to the site is very narrow and the dumper cannot reach in that very location resulting in some of the material being rolled over the slope. In future as the path is widened enough that the dumper can reach at the very location of where work is under progress haulage activity will start immediately.</p> <p>Not Done: The Contractor was instructed to submit spoil disposal and sprinkling plan by 14th of Nov 2022</p> <p>Partially Done: The Information has been added to the MPR but the information is inadequate as The Engineer want to have a clear picture about Spoil disposal, and Water Sprinkling issues.</p>

						29/12/2022	Therefore it is instructed to the contractor to re write the Spoil Disposal and Water Sprinkling Plan.
						31/ 01/2023	Not Done: New date for compliance of slope protection and haulage of excavated material is agreed with the contractor as 23 rd of Jan 2023
						02/03/2023	Not Done: Share the new methodology agreed with Technical Team (Road Design Engineers)
						30/03/2023	Partially Done: Method statement for spoil material dumping is submitted to the Engineer.
						30/03/2023	Done
11	Oil Spill			√	Immediate	29/12/2022	Contractor has agreed to impart training to all staff especially mechanics and before 23 rd of Jan, 2023. Contractor has also agreed to impose fines to all of its staff who so ever will be responsible of oil spillage after 30 th of Jan 2023.
						31/01/2023	Partially Done: The contractor has agreed to share the training record in the January 2023 MPR.
						02/03/2023	Not Done: The contractor has agreed to introduce reward and punishment system (i.e., introduction of fines to repeated offenders of environmental noncompliance).
						30/03/2023	Done: The contractor has completed training of their staff working on the sites of KKH-02.
12	Used Drums, Spill Sheets, Drip trays procurement			√	Immediate	29/12/2022	KKH-02 Representative Mr. Zhang Jun (QHSE Manager of KKH-02 Contract, CGGC) has agreed to conduct procurement of Drip trays, Spill Sheets, Spill Kits, PPE's Necessary for Oil Change and Spillage for KKH-02 contract. Training of all staff is required by 23 rd of Jan 2023 for all staff having topic: “ In case of Oil/Chemical Spillage, how to use Spill Kit on site”

						31/01/2023 02/03/2023 30/03/2023	Not Done: The contractor has agreed to raise an AFI up till 8 th of Feb 2023 on this issue. Not Done: The contractor has agreed to ensure compliance up till 10 th of March 2023 on this issue. Not Done: Procurement of Spill Kits and Spill Sheets is still pending and contractor representative promised to complete procurement by 10 th of April 2023.
13	Provision of Portable toilet on the KKH-02 Sites as well as container offices.			√	Immediate	31/01/2023 02/03/2023 30/03/2023	The contractor has agreed to place portable toilets as well as container offices for the site staff for their perusal. Not Done: The contractor has agreed to ensure compliance by 20 th of March 2023. Not Done: The contractor requested more time up till 28 th of April 2023 to complete this agreed task. The request was agreed by The Engineer.
14	Wood Burning at different locations of KKH-02			√	Immediate	31/01/2023 02/03/2023 30/03/2023	Wood Burning is strictly prohibited as per ECP's provided in the contract. Not Done: Record to be shared for training of staff/labor as well as provision of LPG cylinders/ Heaters by 09 th March 2023 Not Done: The contractor was given timeline up to 11 th of April 2023 to complete this task.
15	Submission of Fuel Storage License in KKH-02 Camp area			√	Immediate	02/03/2023 30/03/2023	The contractor and Engineer has discussed on this matter and contractor has been given timeline up to 05 th of April 2023. The KKH-02 contractor will write a letter to The Engineer's office seeking issuance of support letter from WAPDA regarding Fuel Storage License from concerned Government Department under the Government of KPK.

16	Reward and Punishment system			√	Immediate	02/03/2023 30/04/2023	The contractor has agreed to introduce reward and punishment system for effective compliance of environmental aspects on their sites. Not Done: The contractor has yet not implemented this system on their sites.
17.	Absence of Chinese Management in the Monthly meeting.			√	Next monthly meeting for April 2023	30/04/2023	The KKH-02 contractor representative told the Engineer that Mr. Zhang Jun (QHSE Manager of KKH-02 Contract, CGGC) is on leave. It was conveyed to the contractor representative by the Engineer that in the absence of QHSE Manager the PM of KKH-02 contract will join the meeting.

Confirmed by:



The Employer

Name: Fahat Ali
Position: Dy. Director
Date: 07-04-2023



The Engineer/Consultant

Awais Hassan Khan
Sr. Environmentalist
06-04-2023



The Contractor







Syed Usman Afkhar
QHSE KKH-02
08-04-2023




Annexure-01: Attendance Sheet
Dasu Hydropower Project

DHC Office, Dasu

Meeting attendance sheet

Monthly Environmental Progress review: KKH-01/RAR-01/TL-01/MW-01/MW-02/LBRV_11&12/PCI-01R: KKH-02 ✓ Date 30-3-2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1.	Zafar Iqbal Chaudry	DHC	Chief Environment	0360-9460132	
2.	Sardar Alam	DHC	Sr. Env Sp		
3.	Aziz Hassan	DHC	Sr. Environmentalist	03336563675	
4.	Fozhat Ali	UNAPDA.	Dy. Director	03449896431	
5.	Dr. Farid	KKH-2	Environ offcr	03474846528	
6.	Nasir Khan	DHC	Field Inspector	0345-9577742	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (PCI-01R) MARCH 2023		30 th of March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: China Gansu Co., LTD (CGICOP)		
Subject: Monthly Environmental Progress Review Meeting for PCI_01R. Date: 30 th March, 2023 Time: 01:05 pm- 1:40 pm Place: DHC Meeting Hall Pages: 02 Exhibit: Attendance Sheet	Agenda: Monthly Environmental Progress Review Meeting of PCI-01R.	
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Addl Chief Engineer (Environment Dasu 2. Engineer - DHC RE Infrastructure, Dasu	3. Contractor, CGICOP 4. Office File / Circulation	
Agreed by:		
<u>Employer</u> Date: 07.04.2023 	<u>Engineer</u> Date: 07/04/23 	<u>Contractor</u> Date: 8/4/2023 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(CGICOP)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (PCI-01R) MARCH 2023



Project	PCI-01R			Location	DHC Office		
Employer	WAPDA			Date of Meeting	30/03/2023 (10:45 am- 12:00 pm)		
Engineer	DHC			Place of meeting	DHC Meeting Hall		
Contractor	CGICOP			Attendance	Attendance Sheet Attached		
Sr.#	Checked Items and Actions Planned	Action By			Target Date for Action	Date to Confirm Action	Status Closed, Open, Partially Closed
		Emp.	Eng.	Con			
19	Submission of NOC and License for fuel storage at site.			√	15/08/2021	02/06/2021 03/07/2021 29/09/2021 26/10/2021 30/11/2021 30/12/2021 07/02/2022 01/03/2022 01/04/2022 27/05/2022	<p>Not done. The Contractor was instructed to quickly initiate the process.</p> <p>In process</p> <p>Engineer requested WAPDA through letter dated 12th July 2021 to issue a recommendation letter to district administration for CGICOP to grant them an NOC for fuel storage which is a prerequisite for license apply to Chief inspector of explosives. The Employer is requested to pursue the matter please.</p> <p>Not done</p> <p>Not done. The Employer was again requested to send a letter to the district administration for NOC.</p> <p>Not done. The Employer is again requested to send a letter to district administration.</p> <p>Employer sent letter to DC to provide NOC to contractor. Contractor was asked to pursue the matter to get the NOC for onward apply for license.</p> <p>Not Done. Still pending but contractor has promised to submit it by 07th February 2022</p> <p>Not Done. Still pending contractor has agreed to share the NOC by 20th of April 2022</p> <p>Partially Done. NOC from Deputy Commissioner Office has been granted but License is still not granted</p>

						30/06/2022	Partially done. The Engineer instructed the contractor to proceed further in the matter and send application to KP Inspector of Explosives for grant of license.
						01/08/2022	Not Done: The Engineer will issue a reminder letter to the contractor regarding NOC from Inspector of Explosives.
						29/09/2022	Partially Done: The contractor has agreed to pursue the case and up till 15 th of Oct 2022 he will submit.
						02/11/2022	Partially Done: An NCR will be issued to the contractor for the non-compliance.
						30/11/2022	Not Done: NCR is issued on 7 th of Nov 2022. The contractor has not closed the NCR yet.
						29/12/2022	Not Done:
						31/01/2023	Not Done: The Engineer has already issued an NCR on this long awaited and outstanding issue.
						04/03/2023	Not Done: The contractor is not serious in implementing this issue therefore contractor was issued an NCR and still no response from the contractor.
						30/03/2023	Not Done: The contractor is not complying to the license issue.
57	Treatment of Sedimentation Pond water before release inn to the drain.			√	18-03-2023	29/12/2022	The contractor has agreed to treat its sedimentation pod water before its release in to the drain.
						31/01/2023	Not Done:
						04/03/2023	Not Done: The contractor has agreed to comply by 18 th of March 2023.
						30/03/2023	Not Done
59	Introduction of Reward and Punishment to Repeated offenders on Environmental Non-Compliances			√	Immediate	04/03/2023	The contractor has agreed to implement this management technique on all sites of PCI-01R.
						30/03/2023	Not Done:

60	Water Testing of Bore Hole Water			√	Immediate	30/03/2023	Testing of water required for drinking water parameters as per NEQS/ WHO Guidelines, from the bore drilled in the Chcuchang Colony area.
61	Waste Littering			√	Immediate	30/03/2023	The contractor has agreed to rectify the waste littering issue by 9 th of March 2023
62	Housekeeping Issues			√	Immediate	30/03/2023	The contractor has agreed to maintain good housekeeping and submit the record by 10 th of April 2023.

Confirmed by:



The Employer

Name: Fashat Ali

Position: Dy. Director

Date: 07-04-2023

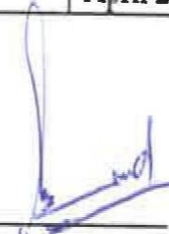


The Engineer

Name: Anwar Hassan Khan

Position: Sr. Environment Sp

Date: 07-04-2023



The Contractor

Name: Fozal Mahmood

Position: HSE Manager

Date: _____

Annexure: Attendance Sheet of Participants

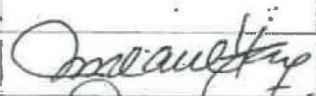
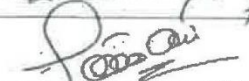





Dasu Hydropower Project



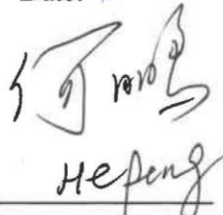
DHC Office, Dasu

Meeting attendance sheet

Project: KKH 01/RAP-01/TL-01/MPN-01/MW-02/LBRV_11&1E/PCI-01R

Date: 30/03/2023

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
1	Imran Tariq	Wapda	Dy. Director	0321-5181114	
2	Farhat Ali	WAPDA	Dy. Director	03449596431	
3	Fazal Nabood	CGICOP	EIS Manager	03441190431	
4	Zafar Iqbal Chaudry	DHC	Chief Environmentalist	0300-9460132	
5	Sardar Alam	DHC	Sr. Env	0333-9290609	
6	Aweis Hassan	DHC	Sr. Environmentalist	03336563675	
7	Junaid Iftikhar	Wapda	Sub-Engineer	0305-5961458	

DASU HYDROPOWER PROJECT MINUTES OF MEETING (EM-01) MARCH 2023		31 st of March 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: Power China Construction Co., LTD (PCCC)		
Subject: Monthly Environmental Progress Review Meeting for EM-01. Date: 31 st March, 2023 Time: (10:50 am-11:30 am) Place: DHC Meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of EM-01.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE TL-01, Dasu		3. Contractor, PCCC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 07-04-2023 	<u>Engineer</u> Date: 06-04-23 	<u>Contractor</u> Date: 4.9.23 
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor



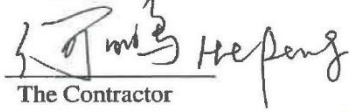
MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (EM-01) MARCH 2023



Project	EM-01	Location	DHC Office				
Employer	WAPDA	Date of Meeting	31/03/2023 (10:50 am-11:30am)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	PCZN- GE JV	Attendance	Attendance Sheet Attached				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
09	Hiring of Environment Manager			√	Immediate	03/03/2023	Contractor has agreed to ensure compliance by 20 th of March 2023
10	Minor Oil Spill			√	Immediate	03/03/2023 31/03/2023	Contractor has agreed to ensure training of staff again and ensure compliance by introduction of reward and punishment system.(introduction of fines for repeated offenders of environmental non-compliance Done
11	Littering on the construction site			√	Immediate	03/03/2023 31/03/2023	Contractor has agreed to ensure training and placement of waste bins at site by 11 th of March 2023 Done
12	Wood Burning by F.C personnel.			√	Immediate	03/03/2023 31/03/2023	Contractor has agreed to ensure provision of LPG cylinders and heaters/ cooking stoves to F.C Staff Partially closed: The Engineer will visit the site and after verification this point will be closed.
13	Cleanliness of Camp			√	Immediate	03/03/2023 31/03/2023	Contractor is unable to find a suitable janitor in Dasu therefore it will look for a proper janitor from outside Dasu and hire them for cleaning activity. Done:
14	Submission of CEAP			√	Immediate	31/03/2023	The contractor is provided with a new timeline of 12 th April 2023

15	Fugitive Dust			√	Immediate	31/03/2023	The contractor is instructed to ensure water sprinkling at least three times a day during the dry season. If required the frequency may be increased. The area inside the EM-01 camp and the existing RAR-01 portion affected by the movement of machinery and trucks should be part of this sprinkling plan.
16	Submission of Traffic Management Plan			√	Immediate	31/03/2023	The contractor has agreed to submit by 15 th of April 2023.
17	Temporary Storage of Solid Waste to be prepared			√	Immediate	31/03/2023	The contractor has agreed to prepare by 20 th of April 2023.

Confirmed by:

<p> _____ The Employer</p> <p>Name: <u>Farhat Ali</u></p> <p>Position: <u>Dy. Director</u></p> <p>Date: <u>07-04-2023</u></p>	<p> _____ The Engineers Representative</p> <p>Name: <u>Aunis Hassan Khan</u></p> <p>Position: <u>Sr. Environmentalist</u></p> <p>Date: <u>06-04-2023</u></p>	<p> _____ The Contractor</p> <p>Name: <u>He Peng</u></p> <p>Position: <u>Supervisor</u></p> <p>Date: <u>08-4-23</u></p>
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Annexure: Attendance Sheet of Participants

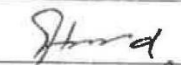
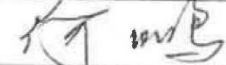


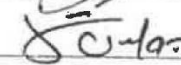

Dasu Hydropower Project



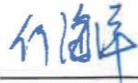
DHC Office, Dasu

Meeting attendance sheet

Monthly Environmental Progress review: KKH-01/RAR-01/TL-01/MW-01/MW-02/LBRV_11&12/PCI-01R/EM-01

Date: 31/03/23

Sr. No	Name of Participant	Dept./Organisation	Designation	Contact No.	Signature
01	ASAD ABBAS	PCZN	HSE Engr.	03427936105	
02	He Peng	PCZN	Site incharge	03477880326	
03	Awais Hassan Khan	DHC	SA. ENVIRONMENTALIST	03336563675	
04	SARDAR ALAM	DHC	SA. ENVIRONMENTALIST	0333-9290209	
05	LUQMAN	PCZN	TRANSLATOR	0343-0630020	
06	Farhat Ali	WAPDA	Dy. Director	0344-9596431	



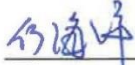
DASU HYDROPOWER PROJECT MINUTES OF MEETING (TL-01) MARCH 2023		31 st March, 2023
Employer: WAPDA (DHPP)		
Engineer: Dasu Hydropower Consultants (DHC)		
Contractor: Power China Construction Co., LTD (PCCC)		
Subject: Monthly Environmental Progress Review Meeting for TL-01. Date: 31 st March, 2023 Time: (10: 00 am-10:45 am) Place: DHC Meeting Hall Exhibit: Attendance Sheet		Agenda: Monthly Environmental Progress Review Meeting of TL-01.
Attendees See the attached attendance sheet		
Distributed (Softcopy) to: 1. Employer - DHP WAPDA GM/PD, Dasu - DHP WAPDA Director (Environment), Dasu 2. Engineer - DHC RE TL-01, Dasu		3. Contractor, PCCC 4. Office File / Circulation
Agreed by:		
<u>Employer</u> Date: 07/04/2023	<u>Engineer</u> Date: 06-04-2023	<u>Contractor</u> Date: 08-04-2023
		
Representative of Employer- WAPDA (DHPP)	Representative of Engineer (DHC)	Representative of Contractor(PCCC)

MINUTES OF THE MONTHLY ENVIRONMENTAL PROGRESS REVIEW MEETING (TL-01) MARCH 2023







Project	132 KV TL-01R	Location	DHC Office				
Employer	WAPDA	Date of Meeting	31/03/2023 (10: 00 am-10:45 am)				
Engineer	DHC	Place of meeting	DHC Meeting Hall				
Contractor	PCCC	Attendance	Attendance Sheet Attached				
Sr.#	Checked Items and Actions Planned	Action by			Target Date for Action	Date to Confirm Action	Status Done/Closed, Not Done/Open, In Progress/Partially Closed
		Emp.	PM	Con			
45	Drinking Water is taken by TL-01 contractor from a spring in front of UBL Building in Dasu			√	Immediate	03/03/2023 31/03/2023	The contractor has agreed to drinking water tests results share the results of the spring by 15 th of March 2023. The contractor informed that they have arranged Bottled Water(19 liters Bottles) for staff and labour, Therefore no need for testing of the spring in front of UBL Building.
46	Oil Spillage in TL-01 Camp			√	Immediate	03/03/2023 31/03/2023	Bunding around the Generators is required as well as a maintenance register to be kept by the contractor The contractor informed that the bunding of the pavement under generator sets to control oil leakage and surface runoff.
47	Fugitive Dust Emission			√	Immediate	31/03/2023	The contractor agreed to ensure water sprinkling during the dry season at least three to four times a day on contractor roads and allocated portion of Road from KKH-01 and Access road to Grid station.

Confirmed by:

		
The Employer	The Engineers Representative	The Contractor
Name: <u>Fahat Ali</u>	<u>Awais Hassan Khan</u>	<u>HZ HAI YANG</u>
Position: <u>Dy. Director</u>	<u>Sr. Environment Specialist</u>	<u>Asst. Ch. Engineer</u>
Date: <u>07-04-2023</u>	<u>06-04-23</u>	<u>08-04-2023</u>

Annexure B: Spot Monitoring Results for Quarter of Jan to March 2023

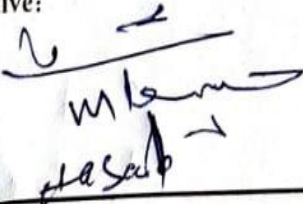

Spot Monitoring Results for Month of January 2023





Contractor	DASU HYDROPOWER PROJECT DASU-MW-001	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>uchal crushing plant outlet Sedimentation pond</i>	
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection <i>10:45 AM.</i>
Sample points No.	<i>02</i>	Report No.

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>>1000</i>
Conductivity	µs/cm	DZB-718L	<i>4.3</i>
PH	/	DZB-718L	<i>9.5</i>
DO	mg/L	DZB-718L	<i>9.9</i>
Temperature	°C	DZB-718L	<i>6.5</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
During inspection fresh water addition was not witnessed. PH value exceeds the NEQS Limiting value. The contractor is instructed to ensure fresh water addition to sedimentation tank.

Contractor Representative: 	Witness by: <i>(The Engineer)</i>  <i>16/1/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality	River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>	
Location	<i>up stream uchar crushing plant</i>		
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection	<i>10:30 AM.</i>
Sample points <small>NO.</small>	<i>01</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>41.0</i>
Conductivity	µs/cm	DZB-718L	<i>190.1</i>
PH	/	DZB-718L	<i>8.5</i>
DO	mg/L	DZB-718L	<i>9.8</i>
Temperature	°C	DZB-718L	<i>6.8</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:




Satisfactory.

Contractor Representative:

[Signature]
HIS/CD

Witness by: *(The Engineer)*


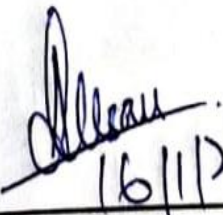
[Signature]
16/1/23





Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 中国能建 ENERGY CHINA		 CGBC	
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>	
Location	<i>U-02 Batching Plant Sedimentation Pond</i>		
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection	<i>11:11 AM</i>
Sample points <small>no.</small>	<i>03</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>116.8</i>
Conductivity	µs/cm	DZB-718L	<i>295</i>
PH	/	DZB-718L	<i>11.1 ↑</i>
DO	mg/L	DZB-718L	<i>9.3</i>
Temperature	°C	DZB-718L	<i>5.9</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

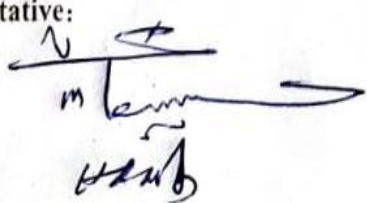

Remarks:
pH value exceeds the NEQS limits. The contractor is instructed to ensure compliance with NEQS.




Contractor Representative: 	Witness by: <i>(The Engineer)</i>  <i>16/1/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Sedimentation pond of MAT cl-09</i>		
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection	<i>11:50 AM</i>
Sample points <small>no.</small>	<i>05</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>407</i>
Conductivity	µs/cm	DZB-718L	<i>27.3</i>
PH	/	DZB-718L	<i>10.7↑</i>
DO	mg/L	DZB-718L	<i>4.60</i>
Temperature	°C	DZB-718L	<i>11.2</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

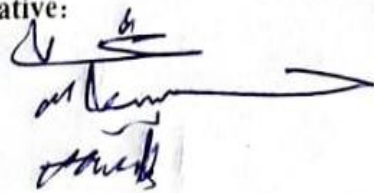
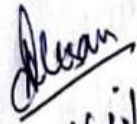
<u>Remarks:</u> <i>During inspection, fresh water addition was not witnessed. The Contractor is instructed to add fresh water. pH value also exceeds the NEQS limits which is not acceptable.</i>	
Contractor Representative: 	Witness by: <i>(The Engineer)</i>  <i>16/1/23</i>





Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Sedimentation pond Adit-1. CL-02</i>		
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection	<i>11:29 Am</i>
Sample points NO.	<i>04</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>968</i>
Conductivity	µs/cm	DZB-718L	<i>317</i>
PH	/	DZB-718L	<i>10.8 ↑</i>
DO	mg/L	DZB-718L	<i>8.2</i>
Temperature	°C	DZB-718L	<i>11.6</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
pH value exceeds the NEQS limits. The contractor is instructed to comply with NEQS and ensure pH value under the limits.

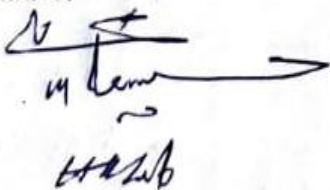

Contractor Representative: 	Witness by: <i>(The Engineer)</i>  <i>16/1/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Sedimentation pond of Batching Plant CR-09.</i>	
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection <i>12:15 PM.</i>
Sample points No.	<i>06</i>	Report No.

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>250</i>
Conductivity	µs/cm	DZB-718L	<i>98.1</i>
PH	/	DZB-718L	<i>9.98 ↑</i>
DO	mg/L	DZB-718L	<i>5.01</i>
Temperature	°C	DZB-718L	<i>7.5</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
pH value exceeds the NEQS limit. Fresh water addition to the Sedimentation Tank was not witnessed. The Contractor is instructed to ensure fresh water addition to wastewater.

Contractor Representative:  <i>H. H. H.</i>	Witness by: (The Engineer)  <i>16/1/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
Surface water quality spot measurements Report			

Surface water quality		River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>
Location	<i>Downstream in dasu river (CF-02)</i>		
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection	<i>12:45 AM</i>
Sample points	<i>08</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>65.4</i>
Conductivity	µs/cm	DZB-718L	<i>195.9</i>
PH	/	DZB-718L	<i>8.3</i>
DO	mg/L	DZB-718L	<i>8.8</i>
Temperature	°C	DZB-718L	<i>6.9</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
During inspection, the results are found satisfactory

Contractor Representative: <i>Hasub</i>	Witness by: <i>(The Engineer)</i> <i>16/1/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
Surface water quality spot measurements Report			

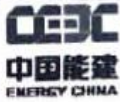



Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>outlet of Sedimentation pond CT-02</i>	
Date Of Inspection	<i>16-01-2023</i>	Time Of Inspection <i>12:30 PM</i>
Sample points No. <i>07</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>330</i>
Conductivity	µs/cm	DZB-718L	<i>1871</i>
PH	/	DZB-718L	<i>11.4↑</i>
DO	mg/L	DZB-718L	<i>7.8</i>
Temperature	°C	DZB-718L	<i>15.4</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
During inspection fresh water addition were not witnessed. PH value exceeds the NEQS Limits. The Contractor is required to comply with NEQS and ensure fresh water addition to Sedimentation Tank

Contractor Representative: 	Witness by: <i>16/1/23</i>
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Spot Monitoring Results for Month of February 2023





Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality	River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>	
Location	<i>Downstream CT-2 Tunnel - River</i>		
Date Of Inspection	<i>16.2.23</i>	Time Of Inspection	<i>1:31 p.m</i>
Sample points <small>NO.</small>	<i>04</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>52.8</i>
Conductivity	µs/cm	DZB-718L	<i>221</i>
PH	/	DZB-718L	<i>8.8</i>
DO	mg/L	DZB-718L	<i>12.3</i>
Temperature	°C	DZB-718L	<i>11.6</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>



Remarks:
Satisfactory.





Contractor Representative: <i>Env. Supervisor</i> <i>CGGC</i> RAHMAT ALI <i>16/02/2023</i>	Witness by: (The Engineer) <i>Ahsan Akhlag</i> <i>Ahsan</i> <i>16/2/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>CR-9 Batching Plant Sedimentation Tank</i>		
Date Of Inspection	<i>16.2.23</i>	Time Of Inspection	<i>12:20 p.m.</i>
Sample points No.	<i>02</i>	Report No.	<i>#</i>

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>317</i>
Conductivity	µs/cm	DZB-718L	<i>130</i>
PH	/	DZB-718L	<i>-10.3 ↑</i>
DO	mg/L	DZB-718L	<i>5.5</i>
Temperature	°C	DZB-718L	<i>11.6°C</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>



<p>Remarks: - pH exceeds limits. - Fresh water was not added. The Contractor is instructed to add adequate amount of fresh water continuously. The Contractor is further instructed that ^{to} quantify the amount of wastewater generated and then add adequate amount of water. The size of sedimentation the tank may be revisited.</p>	
<p>Contractor Representative: Env. Supervisor <i>RAHMAT ALI</i>  16/02/23</p>	<p>Witness by: (The Engineer) <i>Ahsan Akhlag</i>  16/2/23</p>




Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>CI-2 Tunnel Sedimentation Tanks</i>		
Date Of Inspection	<i>16.2.23</i>	Time Of Inspection	<i>1:00 p.m</i>
Sample points <small>No.</small>	<i>03</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>544</i>
Conductivity	µs/cm	DZB-718L	<i>1291</i>
PH	/	DZB-718L	<i>11.4 ↑</i>
DO	mg/L	DZB-718L	<i>6.7</i>
Temperature	°C	DZB-718L	<i>18.7</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: - *fresh water addition was not witnessed.*
 - *PH is on the high side. exceeds NEQS limit.*
The Contractor is instructed to add fresh water continuously.
The Contractor may revisit the S-T design and size ^{by considering} and quantification of wastewater.

Contractor Representative: <i>Env. Supervisor</i> RAHMAT ALI  <i>16/02/23</i>	Witness by: (The Engineer) <i>Ahsan Akhlag</i>  <i>16/2/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 CGGC 中国能建 ENERGY CHINA		 DHC	
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Adit-1 Sedimentation Tank</i>	
Date Of Inspection	<i>16.2.23</i>	Time Of Inspection
		<i>11:20 a.m.</i>
Sample points NO.	<i>04</i>	Report No.




Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>473</i>
Conductivity	µs/cm	DZB-718L	<i>193.8</i>
PH	/	DZB-718L	<i>9.6 ↑</i>
DO	mg/L	DZB-718L	<i>6.0</i>
Temperature	°C	DZB-718L	<i>14.4</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:

- PH is high.
- fresh water addition was ensured.

The contractor is instructed to calculate wastewater inflow and then add adequate quantity of water. If not fruitful, add some acid to control pH.



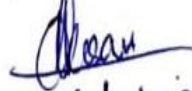
Contractor Representative: <i>Env. Supervisor CGGC RAHMAT ALI</i> <i>Muhammad</i> <i>16/02/23</i>	Witness by: (The Engineer) <i>Ahsan Akhlag</i> <i>Ahsan</i> <i>16/2/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 CGGC 中国能建 ENERGY CHINA			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>MAI Sedimentation Tank</i>		
Date Of Inspection	<i>16.02.23</i>	Time Of Inspection	<i>12:00 p.m</i>
Sample points No.	<i>01</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>966</i>
Conductivity	µs/cm	DZB-718L	<i>503</i>
PH	/	DZB-718L	<i>11.2 ↑</i>
DO	mg/L	DZB-718L	<i>5.8</i>
Temperature	°C	DZB-718L	<i>13.6 °C</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: *PH exceeds NEQS limits - Fresh water addition was not ensured. The contractor is instructed to add fresh water continuously. If PH does not comply with the NEQS, add acidic solution.*

Contractor Representative: <i>Env. Supervisor CGGC RAHMAT ALI</i>  <i>16/02/2023</i>	Witness by: <i>(The Engineers)</i>   <i>16/2/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			




Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>CR-02 Batching Plant Sedimentation Tank</i>		
Date Of Inspection	<i>16.02.23</i>	Time Of Inspection	<i>10:55a.m</i>
Sample points No.	<i>03</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>594</i>
Conductivity	µs/cm	DZB-718L	<i>237</i>
PH	/	DZB-718L	<i>11.0 ↑</i>
DO	mg/L	DZB-718L	<i>8.54</i>
Temperature	°C	DZB-718L	<i>12°C</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: - pH is much higher than prescribed limits. Despite fresh water addition pH is not under limits.



The contractor is instructed to ensure adequate water addition and acidic solution to comply with pH limits.





Contractor Representative: <i>Env. Supervisor</i> <i>RAHMAT Ali</i>  <i>16/2/23</i>	Witness by: <i>(The Engineer)</i> <i>Ahsan Akhlag</i>  <i>16/2/23</i>
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>
Location	Upstream of Uchar Crushing Plant		
Date Of Inspection	16.02.23	Time Of Inspection	9:45 a.m
Sample points No.	01	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	48.2
Conductivity	µs/cm	DZB-718L	203
PH	/	DZB-718L	8.6
DO	mg/L	DZB-718L	5.0
Temperature	°C	DZB-718L	8.2
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: <i>Satisfactory.</i>	
Contractor Representative: Env. Supervisor CGGC RAHMAT ALI 	Witness by: (The Engineer) Ahsan Akhbar  16/2/23

Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			





Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Ucchar Crushing Plant Sedimentation Pond</i>		
Date Of Inspection	<i>16.02.23</i>	Time Of Inspection	<i>10:10 p.m</i>
Sample points No.	<i>02</i>	Report No.	

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	<i>> 1000</i>
Conductivity	µs/cm	DZB-718L	<i>103.3</i>
PH	/	DZB-718L	<i>9.7</i>
DO	mg/L	DZB-718L	<i>4.0</i>
Temperature	°C	DZB-718L	<i>10.2°C</i>
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
*- Turbidity exceeds.
 - PH is just on a higher side. - Fresh water was not being added!
 The contractor is instructed to ensure addition of fresh water.
 Add some acidic solution to control pH.*

Contractor Representative: <i>Env. Supervisor</i> <div style="text-align: center; font-size: 1.2em;"><i>RAHMAT ALI</i></div> <div style="text-align: center;"><i>16/2/23</i></div>	Witness by: <i>(The Engineer)</i> <div style="text-align: center; font-size: 1.2em;"><i>Ahsan Akbar</i></div> <div style="text-align: center;"><i>16/2/23</i></div>
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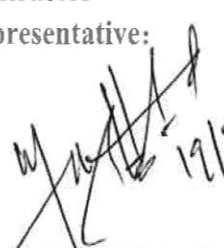

Spot Monitoring Results for Month of March 2023

Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>
Location	Down Stream Indus river (C12)		
Date Of Inspection	2023-03-19	Time Of Inspection	12:45
Sample points	03	Report No.	MW-02/SW-91

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	54.5
Conductivity	µs/cm	DZB-718L	269
PH	/	DZB-718L	8.4
DO	mg/L	DZB-718L	7.5
Temperature	°C	DZB-718L	16.1
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: all results are normal

Contractor Representative:  19/3/23 Engr. M. Shabeer	Witness by:  Mahmood Khan Asst Field Inspector DHC
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
			-
Surface water quality spot measurements Report			

Surface water quality	River Water <input checked="" type="checkbox"/>	Waste Water <input type="checkbox"/>
Location	UP stream of ucheer Wash Plant (River water)	
Date Of Inspection	2023-03-19	Time Of Inspection 13:30
Sample points	01	Report No. MW-01/SW-130

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	47.7
Conductivity	µs/cm	DZB-718L	246
pH	/	DZB-718L	8.4
DO	mg/L	DZB-718L	7.7
Temperature	°C	DZB-718L	14.4
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
All results are normal.

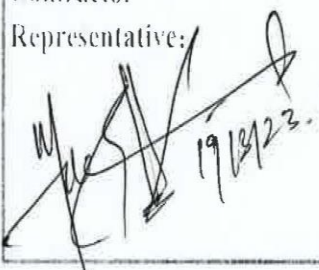

Contractor Representative: Engr. M. Shabeer 19/3/23	Witness by: Mahmood Khan Asst Field Inspector DHC
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Contractor	 DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	Sedimentation Pond of Uchari Crush Plant.		
Date Of Inspection	2023-03-19	Time Of Inspection	13:45
Sample points	02	Report No.	MW-01/SW-131

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	976
Conductivity	µs/cm	DZB-718L	125.8
PH	/	DZB-718I	10.2 ↑
DO	mg/L	DZB-718I	5.1
Temperature	°C	DZB-718I	13.9
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: The contractor will ensure fresh water and chemical addition to bring PH value within limits.



Contractor Representative:  Engr. M. Saheer 19/03/23.	Witness by:  Mahmood Khan ASST Field Inspector DHC
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Sandimankin Pond (Rn Batching Plant)</i>	
Date Of Inspection	<i>2023-03-19</i>	Time Of Inspection <i>14:35</i>
Sample points	<i>03</i>	Report No. <i>MW-01/SW-132</i>

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	135.4
Conductivity	µs/cm	DZB-718L	477
PH	/	DZB-718L	11.2 ↑
DO	mg/L	DZB-718L	6.6
Temperature	°C	DZB-718L	15.9
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks:
The contractor will ensure fresh water and chemical addition to bring PH value within limits.

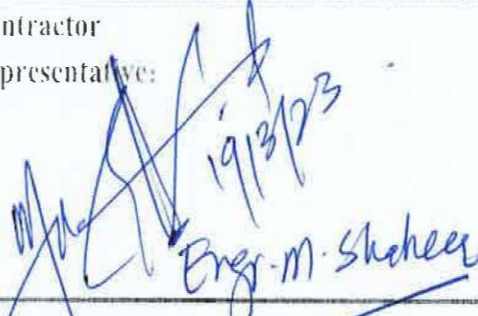

Contractor Representative:  <i>19/3/23</i> Eng. M. Shabeer	Witness by:  Mahmood Khan Asst Field inspector DHC
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Contractor	 DASU HYDROPOWER PROJECT DASU-MW-01	Engineer	Employer
			
Surface water quality spot measurements Report			

Surface water quality	River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	<i>Sedimentation Pond Adit 2 (CR2)</i>	
Date Of Inspection	<i>2023-03-19</i>	Time Of Inspection <i>14:50</i>
Sample points	<i>/</i>	Report No. <i>/</i>

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	/
Conductivity	µs/cm	DZB-718L	
PH	/	DZB-718L	
DO	mg/L	DZB-718L	
Temperature	°C	DZB-718L	
Visual Petroleum Product		Yes <input type="checkbox"/>	

Remarks:
Sample are not collected because sedimentation pond is full with sludge.

Contractor Representative:  <i>19/3/23</i> Engr. M. Shokeer	Witness by:  Mahmood Khan Asst Field Inspector DHC
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Contractor	DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
 			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input type="checkbox"/>
Location	Sedimentation Pond of Mut. (CR9)		
Date Of Inspection	2023-03-19	Time Of Inspection	11:30
Sample points	/	Report No.	/

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	/
Conductivity	µs/cm	DZB-718L	
PH	/	DZB-718L	
DO	mg/L	DZB-718L	
Temperature	°C	DZB-718L	
Visual Petroleum Product		Yes <input type="checkbox"/>	

Remarks: Sample are not collected because ~~pond~~ Pond is full with sludge.



<p>Contractor Representative:</p> <p style="font-size: 2em; font-family: cursive;">[Signature]</p> <p style="font-size: 1.2em;">19/3/23 Engr. M. Shabeer</p>	<p>Witness by:</p> <p style="font-size: 2em; font-family: cursive;">[Signature]</p> <p style="font-size: 1.2em;">Mahmood Khan Asst Field Inspector</p>
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Contractor	 DASU HYDROPOWER PROJECT DASU-MW-02	Engineer	Employer
			
Surface water quality spot measurements Report			

Surface water quality		River Water <input type="checkbox"/>	Waste Water <input checked="" type="checkbox"/>
Location	Sedimentation Pond of C ₂ Batching Plant		
Date Of Inspection	2023-03-19	Time Of Inspection	11:50
Sample points	01	Report No.	MW-02/SW-89

Item	Unit	Portable Meter	Result
Turbidity	NTU	WZB-175	52.5
Conductivity	µs/cm	DZB-718L	706
PH	/	DZB-718L	11.4 ↑
DO	mg/L	DZB-718L	5.6
Temperature	°C	DZB-718L	16.9
Visual Petroleum Product		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Remarks: The contractor will ensure fresh water and chemical addition to bring PH value within limit.

Contractor Representative:  19/3/23 Engr. M. Shukha	Witness by:  Mahmood Khan Asst Field Inspector DHC.
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Annexure C: PHOTO LOG



Monthly Spot Monitoring in Jan 2023



Joint inspection for Resumption of Work on KKH-02 after closure for a month due to safety issues.



Monthly Progress Review Meeting on 31st of Jan 2023



Monthly Spot Monitoring on 16th Feb, 2023



Presentation to WB Regarding Progress 27-02-23



WB's MW-02 component Visit on 26-02-2023



WB's Underground Power House Visit on 26-02-2023



WB's Underground Power House Visit on 26-02-2023



Monthly Spot Monitoring in Dated: 19th of March 2023



Sedimentation Tank Visit to Uchar Thoki Crushing Plant on 27th of March 2023



Joint Inspection of WAPDA and DHC on 07th of March 2023



Joint Inspection of WAPDA and DHC on 28th of March 2023