

Semi-Annual Environmental Monitoring Report

Project number: 42173-013

Period: January – June 2020
Submission Date: November 2020

BAN: Dhaka Environmentally Sustainable Water Supply Project – PART B

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Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	No	
5. Geology and Contaminated Land		
Soils identified for import onto site are sampled and tested to ensure compliance with screening standards, with records of tests available for inspection?	No	
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground?	Yes N →	Tray is placed under the diesel pump/machine, need stable and good condition ray to prevent leakage to soil / groundwater
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way? Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	No	
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment?	Yes	Not managed in proper way
6. Work in, Adjacent to Areas of trees not Designated for Removal		
Harmful materials and chemicals are not gaining entry to areas of trees not designated for removal?	No	
Work specified limits of grading are not exceeded in and adjacent to areas of trees not designated for removal, and that damage or removal of trees is limited to that specified in the EMP; and environmental documentation?	No	
Trees not proposed to be cut, are suitable protected, such as installation of tree guards?	N/A	
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	No	
7. Control of Air quality/ Noise levels		
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)?	No	
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	No	
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	No	GWT to ensure monitoring and mitigation measures.
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	N/A	

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Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
Is plant in good condition, checks undertaken to control air quality and noise levels?	No	The plant is under construction
Air quality, noise monitoring register is kept up to date with records available on site?	No	
8. Maintenance of Local Traffic Access Patterns		
Local traffic access to residential, commercial, and institutional areas are not modified or redirected subject to approval from the Engineer and relevant government authorities	Yes	Provide document
Any modification or redirection of local traffic access to residential, commercial, and institutional areas comply with time constraints specified in contracts?	No	
9. Other issues		
Are there other issues identified and require control measures?	No	

Date(s) / Stages of next Site Safety Review(s), if required:	
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SSR Approval

Signed:  Engineer's Representative:	Signed: Contractor's Representative:	Date of this Safety Review:
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Distribution: Original to project file, Copy to BMS Representative

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting

3. Instrumental Survey

3.1: Air Quality Results

Site No.	Date of Testing	Site Location	Parameters (Government Standards)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm
Site No.	Date of Testing	Site Location	Parameters (Monitoring Results)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm

3.2: Water Quality Results

Site No.	Date of Sampling	Site Location	Parameters (Government Standards)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l
Site No.	Date of Sampling	Site Location	Parameters (Monitoring Results)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l

3.3: Noise Quality Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Government Standard)	
			Day Time	Nighttime
Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Monitoring Results)	
			Day Time	Nighttime

Note:

During all missions to the construction site photos will be taken which will be used in the Monitoring Reports in order to illustrate and explain relevant environmental issues.

All site visits will be recorded in site visit protocols, with the following information at least:

- date, time, location,
- participants of the site visit,
- environmental surveyor responsible for the specific site,
- actual weather conditions,
- flow/water level near surface waters,
- construction progress / actual construction activities;
- observations regarding human, natural and physical environmental factors and activities,
- risks and deviations identified
- others

ANNEXES

- Photos
 - Summary of consultations, signature of participants
 - Copies of environmental clearances and permits
 - Other
-

General Comments if any:



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ENVIRONMENTAL MONITORING CHECKLIST
P1, P2 and P3 for MONITORING REPORT
(Checklist for Construction Phase, DESWSP)

Project Name [P1]

Contract Number

Name of Contractor

Date: 23 January 2020 Location: P1 (WTP)

WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy/Foggy (Tick Mark)

PREVIOUS SITE CONDITION: Moderate / Fair *Flood plain*

CURRENT SITE CONDITION:

Satisfactory: Unsatisfactory Incident Resolved Unresolved

INCIDENT:

Nature of incident: Happened / Not happened

Intervention Steps: Applicable / Not Applicable

Incident Issues

Resolution	Project Activity Stage	(a) Survey	Done
		(b) Design	Completed:
		(c) Implementation	Ongoing (Commencement Date.....)
		(d) Pre-Commissioning	
		(e) Guarantee Period	

Site Restored to Original Condition Yes No

Signature

Name & Position

ENVIRONMENTAL MONITORING CHECKLIST

Part-1: Scope of Environmental Management Plan and Monitoring Indicator

1.1 Statutory Clearances

Agency, Guidelines & Subject	Yes	No	N/A
ADB SPS 2009			
IFC-PS			
DOE			
RHD			
LGED			
WARPO			
BIWTA			
Other: P1 site clearance document mentioned in CEMP			

1.2 Physical and Ecological Environment

Emissions	Yes	No	N/A
Facilities or projects located within poor quality airsheds		✓	
Vehicles/Machineries/Equipment		✓	
Fuel Used & Type (Leaded, Unleaded, Diesel)			
Others			✓
Noise and Nuisance	Yes	No	N/A
Community is informed	✓		
Noise level of machinery/vehicles/workers No-machineries	✓		
Noise level maintained/ exceeded			✓
Other			
Hazardous Substances	Yes	No	N/A
Compressed gases, including toxic or flammable gases			✓ At this stage
Flammable liquids	✓		✓
Flammable solids;		✓	✓
Oxidizing substances;		✓	✓
Radioactive material; and corrosive substances			✓
Toxic materials			✓
Onsite chemical storage and its condition (Storage needs to be applied following EMP, specification)			
Dust	Yes	No	N/A
Grading			✓
Concrete cutting			✓
Abrasive blast cleaning of concrete and steel			✓
Nuisance to pedestrian and vehicular traffic	✓		
Any dust found to escape the site boundaries (Need more water spraying)	✓		
Discharge of muddy water or muddy tracks seen on adjacent roads		✓	✓
During heavy rain erosion and sediment control measures			✓
Spill of liquid, fuel, oil & grease on site, any site procedure for handling emergencies			
Waste Management, Pollution, Disposal Sites	Yes	No	N/A
Visible onsite solid and liquid waste <i>Solid</i>			✓
Discharge of dewatering activities and location			✓
Reuse and Recycling	Yes	No	N/A
Plastic, sand, paper,			✓
Plastic bottles, cups, cans,			✓
Dust and Litter Control	Yes	No	N/A
Dust	✓		
Litter			✓
Trees and Vegetation	Yes	No	N/A
Tree (Site is barren)			
Construction Access & Traffic	Yes	No	N/A
Roads, River <i>N/A</i>			

Management of stockpiles			
Construction materials			

1.3 Social Environment

Community	Yes	No	N/A
Land acquisition and Resettlement	Yes	No	N/A
Health and Safety (Partially, improvement needs)	Yes	No	N/A
Sanitation Facility (Poor ventilation, lighting, no proper sanitation facility, leaching to groundwater)	Yes	No	N/A
Occupational Health and Safety <i>Waste treatment needs to rectify</i>	Yes	No	N/A
Buildings are structurally safe, provide appropriate protection against the climate, and have acceptable light and noise conditions. (Further improvement needs following IEE/EIA Appendix-1)			
Noise-absorbing materials used, Floors are leveled and non-skid, Equipping facilities with fire detectors, alarm systems, and fire-fighting equipment.	✓		
Adequate supplies of potable drinking water, Adequate lavatory facilities (toilets and washing areas).	✓		
Suitable arrangements are to be made for provision of clean eating areas where workers are not exposed to the hazardous or noxious substances			✓
Available qualified first-aid at all times with appropriately equipped first-aid, and eye-wash stations accessible throughout the place of work. <i>Need to improve</i>	✓		
Equipment Lay-down and Storage Area	Yes	No	N/A
Ecology (Flora, Fauna, Bird sanctuary)	Yes	No	N/A
Employment	Yes	No	N/A
General Code of Ethics (including health care, safety, gender policy, children protection) (No women working)	Yes	No	N/A
Post Construction (Not yet started)	Yes	No	N/A
Training (Not yet started)	Yes	No	N/A
Cultural Heritage (Not yet started)	Yes	No	N/A
GRM and complaint management system review (Not yet started)	Yes	No	N/A
Are there any other activities being undertaken out of working hours	Yes	No	N/A
Others			

1.4 Contractor's Establishment and Operations

Contractor's facilities	Yes	No	N/A
Location (Still developing)	✓		
Signboards (Proper size should be installed, current size A3 (A2))			
Traffic Management	Yes	No	N/A
Signs, traffic control devices maintained, in good working order			
Construction operations conflict with uncontrolled public traffic (Need riverside safety lighting as warning to boats /vessels)	✓		
Emergency Preparedness and Response	Yes	No	N/A
Fire	✓		
OHS Training			

Hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster	✓		
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2. Detailed Environmental Checklist

Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
1. General Environmental Compliance		
Are construction commitments according to EMP and EMS	Y	Moderately
Work does not cause environmental impacts that were not predicted in EA documentation?	Y	
Compliance with environmental requirements and prohibitions of DoE legislation, and ADB Guidelines, particularly with respect to Initial Environmental Examination (IEE) from ADB?	Y	
Monitoring registers and waste management registers are undertaken and updated in accordance with the EMP? Are these available on site?	No	partially Not available any register. MDSC Environmental Team advised to comply with
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process? A record of site inductions to staff available on site?	No	
2. Use of Waste Products or Materials in the Work		
Waste and product dust suppressants meet material and construction requirements of the contract?	Y	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y	
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas?	NO Y	Need to update the register
Any use of reclaimed excess concrete, asphalt pavement, etc., as aggregate, embankment material, slope flattening material or fill in compliance with the material and construction requirements of the EMP?	No	Not at this stage
Stockpiling of topsoil from productive agricultural lands are separate from other soils? Stockpiles are designed with slopes not exceeding 1:2, heights restricted to 2m and not surcharged?	No	Stock piles need to properly slopes.
Are stockpiles covered and shaded?	No	
3. Management and Disposal of Excess Material		
Excess materials from the work are stored, re-used and disposed of as specified in the EMP? Are these storage areas maintained and kept clean?	No	
Standard forms / permits regarding disposal of excess material are submitted prior to disposal of excess materials off site?	No	
Location of disposal or management areas and source of excess material being disposed of is recorded?	No	

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Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
4. Work in, Adjacent to, and over Water bodies		
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Yes	Water is back flowing to river
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? And authorized through environmental permits or approvals?	Yes	Sand filling, geotextile works for protection of offshore intake under construction
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials?	Yes	Need to dig the canal in depth (access for boats)
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation, and authorized through environmental permits or approvals?	No	
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	No	
5. Geology and Contaminated Land		
Soils identified for import onto site are sampled and tested to ensure compliance with screening standards, with records of tests available for inspection?	No	
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground?	Yes	Tray is placed under the diesel pump/machine, need stable and good condition ray to prevent leakage to soil / groundwater
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way? Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	No	
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment?	Yes	Not managed in proper way No spill kit.
6. Work in, Adjacent to Areas of trees not Designated for Removal		
Harmful materials and chemicals are not gaining entry to areas of trees not designated for removal?	No	
Work specified limits of grading are not exceeded in and adjacent to areas of trees not designated for removal, and that damage or removal of trees is limited to that specified in the EMP; and environmental documentation?	No	
Trees not proposed to be cut, are suitable protected, such as installation of tree guards?	N/A	
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	No	
7. Control of Air quality/ Noise levels		

Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)?	Yes	
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	No	
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	No	GWT to ensure monitoring and mitigation measures.
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Yes	
Is plant in good condition, checks undertaken to control air quality and noise levels?	No	The plant is under construction
Air quality, noise monitoring register is kept up to date with records available on site?	No	Only noise monitoring
8. Maintenance of Local Traffic Access Patterns		
Local traffic access to residential, commercial, and institutional areas are not modified or redirected subject to approval from the Engineer and relevant government authorities	Yes	Provide document
Any modification or redirection of local traffic access to residential, commercial, and institutional areas comply with time constraints specified in contracts?	No	
9. Other Issues		
Are there other issues identified and require control measures?	No	
Date(s) / Stages of next Site Safety Review(s), if required:		

SSR Approval

Signed:  Engineer's Representative:	Signed:  Contractor's Representative:	Date of this Safety Review:
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Distribution: Original to project file, Copy to BMS Representative

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting

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3. Instrumental Survey

3.1: Air Quality Results

Site No.	Date of Testing	Site Location	Parameters (Government Standards)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm
Site No.	Date of Testing	Site Location	Parameters (Monitoring Results)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm

3.2: Water Quality Results

Site No.	Date of Sampling	Site Location	Parameters (Government Standards)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l
Site No.	Date of Sampling	Site Location	Parameters (Monitoring Results)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l

3.3: Noise Quality Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Government Standard)	
			Day Time	Nighttime
Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Monitoring Results)	
			Day Time	Nighttime

Note:

During all missions to the construction site photos will be taken which will be used in the Monitoring Reports in order to illustrate and explain relevant environmental issues.

All site visits will be recorded in site visit protocols, with the following information at least:

- date, time, location,
- participants of the site visit,
- environmental surveyor responsible for the specific site,
- actual weather conditions,
- flow/water level near surface waters,
- construction progress / actual construction activities,
- observations regarding human, natural and physical environmental factors and activities,
- risks and deviations identified
- others

ANNEXES

- Photos
- Summary of consultations, signature of participants
- Copies of environmental clearances and permits
- Other

General Comments if any:

ENVIRONMENTAL MONITORING CHECKLIST
P1, P2 and P3 for MONITORING REPORT
(Checklist for Construction Phase, DESWSP)

Project Name [P1]

Contract Number.....

Name of Contractor.....

Date: 15 December 2019 Location: P1 (Intake)

WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy/Foggy (Tick Mark)

PREVIOUS SITE CONDITION: Moderate (Floodplain)/ Fair

CURRENT SITE CONDITION: Preparatory works on going (Earthwork for Intake land raising by dredged material)

Satisfactory: _____ Unsatisfactory _____ Incident _____ Resolved _____ Unresolved _____

INCIDENT:

Nature of incident: Happened / Not happened

Intervention Steps: Applicable / Not Applicable

Incident Issues

Resolution	Project Activity Stage	(a) Survey	Done
		(b) Design	Completed:
		(c) Implementation	Ongoing (Commencement Date.....)
		(d) Pre-Commissioning	
		(e) Guarantee Period	

Site Restored to Original Condition Yes No

Signature

Name & Position

ENVIRONMENTAL MONITORING CHECKLIST

Part-1: Scope of Environmental Management Plan and Monitoring Indicator

1.1 Statutory Clearances

Agency, Guidelines & Subject	Yes	No	N/A
ADB SPS 2009			
IFC-PS			
DOE			
RHD			
LGED			
WARPO			
BIWTA			
Other: P1 site clearance document mentioned in CEMP			

1.2 Physical and Ecological Environment

Emissions	Yes	No	N/A
Facilities or projects located within poor quality airsheds		✓	
Vehicles/Machineries/Equipment	✓		
Fuel Used & Type (Leaded, Unleaded, Diesel)			
Others			
Noise and Nuisance	Yes	No	N/A
Community is informed			
Noise level of machinery/vehicles/workers No machineries	✓		
Noise level maintained/ exceeded	✓		
Other			
Hazardous Substances	Yes	No	N/A
Compressed gases, including toxic or flammable gases			✓ At this stage
Flammable liquids		✓	
Flammable solids;		✓	
Oxidizing substances;		✓	
Radioactive material; and corrosive substances		✓	
Toxic materials		✓	
Onsite chemical storage and its condition (Storage needs to be applied following EMP, specification)	✓		
Dust	Yes	No	N/A
Grading	✓	✓	
Concrete cutting		✓	
Abrasive blast cleaning of concrete and steel			
Nuisance to pedestrian and vehicular traffic			
Any dust found to escape the site boundaries (Need more water spraying)	✓		
Discharge of muddy water or muddy tracks seen on adjacent roads			✓
During heavy rain erosion and sediment control measures			
Spill of liquid, fuel, oil & grease on site, any site procedure for handling emergencies	✓		
Waste Management, Pollution, Disposal Sites	Yes	No	N/A
Visible onsite solid and liquid waste		✓	
Discharge of dewatering activities and location			✓
Reuse and Recycling	Yes	No	N/A
Plastic, sand, paper,		✓	
Plastic bottles, cups, cans,		✓	
Dust and Litter Control	Yes	No	N/A
Dust		✓	
Litter		✓	
Trees and Vegetation	Yes	No	N/A
Tree (Site is barren)			✓
Construction Access & Traffic	Yes	No	N/A
Roads, River			✓

Management of stockpiles			
Construction materials	Not appropriate at some places.	✓	

1.3 Social Environment

	Yes	No	N/A
Community		✓	N/A
Land acquisition and Resettlement	Yes	No	N/A
Health and Safety (Partially, improvement needs)	Yes	No	N/A
Sanitation Facility (Poor ventilation, lighting, no proper sanitation facility, leaching to groundwater)	Yes	No	N/A
Occupational Health and Safety	Yes	No	N/A
Buildings are structurally safe, provide appropriate protection against the climate, and have acceptable light and noise conditions. (Further improvement needs following IEE/EIA Appendix-1)	✓		
Noise absorbing materials used, Floors are leveled and non-skid, Equipping facilities with fire detectors, alarm systems, and fire-fighting equipment.			✓
Adequate supplies of potable drinking water, Adequate lavatory facilities (toilets and washing areas),	✓		
Suitable arrangements are to be made for provision of clean eating areas where workers are not exposed to the hazardous or noxious substances			✓
Available qualified first-aid at all times with appropriately equipped first-aid, and eye-wash stations accessible throughout the place of work.	✓		
Equipment Lay-down and Storage Area	Yes	No	N/A
Ecology (Flora, Fauna, Bird sanctuary)	Yes	No	N/A
Employment	Yes	No	N/A
General Code of Ethics (including health care, safety, gender policy, children protection) (No women working)	Yes	No	N/A
Post Construction (Not yet started)	Yes	No	N/A
Training (Not yet started)	Yes	No	N/A
Cultural Heritage (Not yet started)	Yes	No	N/A
GRM and complaint management system review (Not yet started)			✓
Are there any other activities being undertaken out of working hours	Yes	No	N/A
Others		✓	

1.4 Contractor's Establishment and Operations

	Yes	No	N/A
Contractor's facilities	Yes	No	N/A
Location (Still developing)	✓		
Signboards (Proper size should be installed, current size A3, A2)	✓		
Traffic Management	Yes	No	N/A
Signs, traffic control devices maintained, in good working order	✓		
Construction operations conflict with uncontrolled public traffic (Need riverside safety lighting as warning to boats /vessels)			
Emergency Preparedness and Response	Yes	No	N/A
Fire		✓	
OHS Training			

Hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster			✓
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2. Detailed Environmental Checklist


Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
1. General Environmental Compliance		
Are construction commitments according to EMP and EMS	Y	Moderately
Work does not cause environmental impacts that were not predicted in EA documentation?		
Compliance with environmental requirements and prohibitions of DoE legislation, and ADB Guidelines, particularly with respect to Initial Environmental Examination (IEE) from ADB?		
Monitoring registers and waste management registers are undertaken and updated in accordance with the EMP? Are these available on site?	No	Not available any register. MDSC Environmental Team advised to comply with
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process? A record of site inductions to staff available on site?	No	GWT need to provide
2. Use of Waste Products or Materials in the Work		
Waste and product dust suppressants meet material and construction requirements of the contract?		
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?		
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas?	No	
Any use of reclaimed excess concrete, asphalt pavement, etc., as aggregate, embankment material, slope flattening material or fill in compliance with the material and construction requirements of the EMP?	No	Not at this stage
Stockpiling of topsoil from productive agricultural lands are separate from other soils? Stockpiles are designed with slopes not exceeding 1:2, heights restricted to 2m and not surcharged?	No	
Are stockpiles covered and shaded?	No	
3. Management and Disposal of Excess Material		
Excess materials from the work are stored, re-used and disposed of as specified in the EMP? Are these storage areas maintained and kept clean?	No	
Standard forms / permits regarding disposal of excess material are submitted prior to disposal of excess materials off site?	No	
Location of disposal or management areas and source of excess material being disposed of is recorded?	No	

Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
4. Work in, Adjacent to, and over Water bodies		
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Yes	Water is back flowing to river
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? And authorized through environmental permits or approvals?	Yes	Sand filling, geotextile works for protection of offshore intake under construction
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials?	Yes	Need to dig the canal in depth (access for boats)
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation, and authorized through environmental permits or approvals?	No	
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	No	
5. Geology and Contaminated Land		
Soils identified for import onto site are sampled and tested to ensure compliance with screening standards, with records of tests available for inspection?	No	
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground?	Yes	Tray is placed under the diesel pump/machine, need stable and good condition ray to prevent leakage to soil / groundwater
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way? Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	No	
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment?	Yes	Not managed in proper way
6. Work in, Adjacent to Areas of trees not Designated for Removal		
Harmful materials and chemicals are not gaining entry to areas of trees not designated for removal?	No	
Work specified limits of grading are not exceeded in and adjacent to areas of trees not designated for removal, and that damage or removal of trees is limited to that specified in the EMP; and environmental documentation?	No	
Trees not proposed to be cut, are suitable protected, such as installation of tree guards?	N/A	
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	No	
7. Control of Air quality/ Noise levels		

Item	Comments (Enter N/A if not relevant)	Remarks/Details on Comments
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)?	No	
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	No	
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	No	GWT to ensure monitoring and mitigation measures.
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	N/A	
Is plant in good condition, checks undertaken to control air quality and noise levels?	No	The plant is under construction
Air quality, noise monitoring register is kept up to date with records available on site?	No	
8. Maintenance of Local Traffic Access Patterns		
Local traffic access to residential, commercial, and institutional areas are not modified or redirected subject to approval from the Engineer and relevant government authorities	Yes	Provide document
Any modification or redirection of local traffic access to residential, commercial, and institutional areas comply with time constraints specified in contracts?	No	
9. Other Issues		
Are there other issues identified and require control measures?	No	

Date(s) / Stages of next Site Safety Review(s), if required:	
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SSR Approval

Signed:  Engineer's Representative:	Signed: Contractor's Representative:	Date of this Safety Review:
--	---	-----------------------------

Distribution: Original to project file, Copy to BMS Representative

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting

3. Instrumental Survey

3.1: Air Quality Results

Site No.	Date of Testing	Site Location	Parameters (Government Standards)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm
Site No.	Date of Testing	Site Location	Parameters (Monitoring Results)					
			SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO ppm

3.2: Water Quality Results

Site No.	Date of Sampling	Site Location	Parameters (Government Standards)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l
Site No.	Date of Sampling	Site Location	Parameters (Monitoring Results)					
			pH	Conductivity µS/cm	BOD mg/l	TSS mg/l	TN mg/l	TP mg/l

3.3: Noise Quality Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Government Standard)	
			Day Time	Nighttime
Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Monitoring Results)	
			Day Time	Nighttime

Note:

During all missions to the construction site photos will be taken which will be used in the Monitoring Reports in order to illustrate and explain relevant environmental issues.

All site visits will be recorded in site visit protocols, with the following information at least:

- date, time, location,
- participants of the site visit,
- environmental surveyor responsible for the specific site,
- actual weather conditions,
- flow/water level near surface waters,
- construction progress / actual construction activities,
- observations regarding human, natural and physical environmental factors and activities,
- risks and deviations identified
- others

ANNEXES

- Photos
- Summary of consultations, signature of participants
- Copies of environmental clearances and permits
- Other

General Comments if any:

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)

Contract Number..... ICB-01/DEB/DESWSP/2014.....

Name of Contractor..... SUEZ.....

Date..... 09/02/2020..... Location..... WTP.....

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	Slope is not rightly stored.
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	N/A
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	N/A
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	N/A
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	N/A

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	N/A
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Y
- Traffic management plan	Y
- Sewage management plan	N
- Firefighting and rescue plan	Y
- Disaster management plan	N/A
12. Other Issues	
Are there other issues identified and require control measures?	N/A
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	N
Date(s) / Stages of next Site Safety Review(s), if required:	

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)
 Contract Number: ICB-01 / D & B / DESWSP / 2014
 Name of Contractor: SUEB
 Date: 04/02/2020 Location: Intake area

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened

3.2 Intervention Steps: Applicable / Not Applicable N/A

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils? Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	No. Flood plain
Are stockpiles covered / greened to prevent erosion?	N/A
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	Y
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	Y
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	N/A
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Y
- Traffic management plan	Y
- Sewage management plan	Y
- Firefighting and rescue plan	Y
- Disaster management plan	N/A
12. Other issues	
Are there other issues identified and require control measures?	
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y
Date(s) / Stages of next Site Safety Review(s), if required:	

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)
 Contract Number.....
 Name of Contractor.....
 Date: 10.02.2020 Location: NTP

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded? Y

3.1 Nature of incident: Happened / Not happened *Near mines (2 Nos).*

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	<i>found storage need to improve at CMC area.</i>
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	N
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	N/A
Are these storage areas maintained and kept clean?	
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	<i>Nothing required</i>
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies?	Y
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	<i>Y</i>

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	N
Earth works shall be limited to the construction sites, no informal storage of soil / excavations!	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under roof?	Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	N N/A
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	N/A
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y Please provide spill kits all fuel storage area.
Fueling of construction machines in designated and sealed areas only!	Y
Car wash and wheel cleaning in designated areas only!	N/A
5. Work in, Adjacent to Areas of trees not Designated for Removal	
Trees not proposed to be cut, are suitable protected within the construction site, such as installation of tree guards?	N/A
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood, non – construction purposes	Y
Where will trees have to be felled for construction purposes?	Y
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	with to N/A
Have trees been replaced?	N
6. Control of Air quality/ Noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	During monitoring dust day found increased winds and Eastern side of DSM area, must be taken care for reducing dust.
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	walkways found invisible while traffic moves.
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	Y Monitoring & mitigation should be improved
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Air quality levels must be improved.
Air quality, noise monitoring register is kept up to date with records available on site?	Air monitoring register need to be updated.
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	N/A
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Need to improve pot & jar
Has the sewage sludge properly been disposed and recorded?	Need to provide the method st.
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)?	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Y
- Traffic management plan	Y
- Sewage management plan	shall be provide.
- Firefighting and rescue plan	Y
- Disaster management plan	Not to prepare.
12. Other issues	
Are there other issues identified and require control measures?	N
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Have plans for near future.
A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y

Date(s) / Stages of next Site Safety Review(s), if required:	
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ESR Approval

<p>Signed: </p> <p>Engineer's Representative:</p>	<p>Signed: </p> <p>Contractor's Representative:</p>	<p>Date of this Safety Review: February 10, 2020.</p>
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Distribution: Original to project file, Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature


 M.D. Mahmoodul Hossain Rahat
 Environmental Inspector.

 Name & Position

Consolidated Remarks if any:

- i At the entry of the dormitory at GWT area, noise and emission found from generator. Proper fuel stand is missing and no safety barrier is present. Please improve.
- ii Need to take immediate action to take effective control of dust.

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)

Contract Number... **ICB-01/D&B/DESWSP/2014**

Name of Contractor... **SUEZ**

Date **04/03/2020** Location... **Intake**

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened **3 near miss at inspection day.**

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	N
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	N
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	N, GWT ensure
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	N
Location of disposal or management areas and source of excess material being disposed of is recorded?	N
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	N, GWT to ensure
3. Work in, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	N
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	Y Geotextile bag to be used for dyke.
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	Y N/A
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	Y


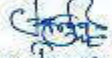
Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	Y SWDP Worker area need to rectify
Earth works shall be limited to the construction sites, no informal storage of soil / excavations!	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	Y
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under roof?	N N, SWDP area/offshore intake has issues.
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	N Y
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	N
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	N/A managed at SWDP area Y
Fueling of construction machines in designated and sealed areas only!	N/A
Car wash and wheel cleaning in designated areas only!	N/A
5. Work in, Adjacent to Areas of trees not Designated for Removal	
Trees not proposed to be cut, are suitable protected within the construction site, such as installation of tree guards?	N/A
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	N/A
No cutting down of trees for fire wood, non – construction purposes	N/A
Where will trees have to be felled for construction purposes?	N/A
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	N/A
Have trees been replaced?	N
6. Control of Air quality/ Noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Y N/A Y
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	N
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	Y Y, But needs more action for mitigation
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	Recorded
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	Y
Access of pedestrians to private, commercial and institutional property is maintained?	N/R
Management of local / construction traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Not recorded
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Not all are equipped.
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Y. Not at site
- Traffic management plan	Y. Not at site
- Sewage management plan	Y. Not at site
- Firefighting and rescue plan	Y.
- Disaster management plan	Yet to finalized
12. Other issues	
Are there other issues identified and require control measures?	Have keeping need to improve at SHAP area
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	N
A record of site inductions to staff available on site?	Y
No hunting of wild animals.	Y
Date(s) / Stages of next Site Safety Review(s), if required:	

ESR Approval

Signed: 	Signed:  Omar Farouq HSE Supervisor.	Date of this Safety Review: March 09, 2020
Engineer's Representative:	Contractor's Representative:	

Distribution: Original to project file, Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature



Environmental Inspector

Name & Position

Consolidated Remarks if any:

- No top soil used for dyke at northern part of intake area.
- Kitchen waste records should be present on site. at GWT area
- SWDP area is missing proper storage of chemicals, at few points/locations.
- SWDP area must update/maintain proper house cleaning.

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)

Contract Number.....

Name of Contractor.....

Date 01/03/2020 Location WTP

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened

Near Misses (3 Nos)

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	N
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	N/A
Are these storage areas maintained and kept clean?	<u>Cance area need to clean</u>
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	N/A
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	N/A
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	N/A



Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	N
Earth works shall be limited to the construction sites, no informal storage of soil / excavations!	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under roof?	Y Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	Y Y
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	N
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located?	Y
Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y
Fueling of construction machines in designated and sealed areas only!	N/A
Car wash and wheel cleaning in designated areas only!	N/A
5. Work in, Adjacent to Areas of trees not Designated for Removal	
Trees not proposed to be cut, are suitable protected within the construction site, such as installation of tree guards?	Y
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood, non – construction purposes	Y
Where will trees have to be felled for construction purposes?	N/A
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	N/A
Have trees been replaced?	N
6. Control of Air quality/ Noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	N/A Y. But, construction of menard areas need to spray more
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	N
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	Y Y. Need to improve more
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	N, Working on it
- Traffic management plan	Y, updating
- Sewage management plan	Y, updating
- Firefighting and rescue plan	Y,
- Disaster management plan	Y, updating.
12. Other issues	
Are there other issues identified and require control measures?	
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals.	Y
Date(s) / Stages of next Site Safety Review(s), if required:	

ESR Approval

Signed: 	Signed: 	Date of this Safety Review: 01/03/2020
Engineer's Representative:	Contractor's Representative:	

Distribution: Original to project file, Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature



Md. Mahiuddin Hasan Rekt
Environmental Eng
Name & Position

Consolidated Remarks if any:

- 1 Rebar area is not well layed and cleaned at concrete area.
- 2 Water Stagnant at shades at concrete area.

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)

Contract Number... ICB-01/D&B/DESWSP/2014

Name of Contractor... SUEZ

Date: 10/03/2020 Location: INTAKE

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	Y
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work In, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	N/A
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	N/A
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	Y
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	Y


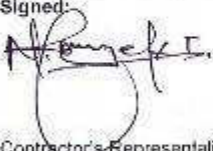
Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	N
Earth works shall be limited to the construction sites, no informal storage of soil / excavations!	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under roof?	N Mostly under roof.
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	N Mostly
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	N
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y But SWDD near to clear things.
Fueling of construction machines in designated and sealed areas only!	Y
Car wash and wheel cleaning in designated areas only!	N
5. Work in, Adjacent to Areas of trees not Designated for Removal	
Trees not proposed to be cut, are suitable protected within the construction site, such as installation of tree guards?	N/A
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	N/A
No cutting down of trees for fire wood, non – construction purposes	Y
Where will trees have to be felled for construction purposes?	N/A
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	N/A
Have trees been replaced?	N/A
6. Control of Air quality/ Noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	N/A Mostly, need some spray to other areas, No complaints.
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	N
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards?	Y
Are the appropriate mitigation measures being undertaken?	Y
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y

Environmental Monitoring Checklist


Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/R
Management of local / construction traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	SWDP need to provide new ones.
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Working on it
- Traffic management plan	Do
- Sewage management plan	Do
- Firefighting and rescue plan	Do
- Disaster management plan	Do
12. Other issues	
Are there other issues identified and require control measures?	
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y
Date(s) / Stages of next Site Safety Review(s), if required:	

ESR Approval

<p>Signed: </p> <p>Engineer's Representative:</p>	<p>Signed: </p> <p>Contractor's Representative: 10.03.2020</p>	<p>Date of this Safety Review: 10.03.2020</p>
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Distribution: Original to project file, Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature 

MD. MAMMUDUL HASAN RAHAT

Env. Inspector

Name & Position

Consolidated Remarks if any:

- SWDP need to provide new toilets for worker. and should replaced the old ones with proper sewage management systems.
- SWDP need to provide proper cover/Barrier and sign at intake off shore area.

Environmental Monitoring Checklist

For P1, P2 and P3.1 and P3.2 Construction Phase

Project Name [P1] [P2] [P3] (Tick Mark any one)

Contract Number ... ICB-01/D&B/DESWSP/2014

Name of Contractor... SUEZ

Date *March 09, 2020* Location *WTP*

1. WEATHER CONDITION: Sunny/Cloudy/ Rainy/Stormy /Foggy/Smog (Tick Mark)

2. INCIDENT:

Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?

3.1 Nature of incident: Happened / Not happened

3.2 Intervention Steps: Applicable / Not Applicable

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	Y
Are stockpiles covered / greened to prevent erosion?	N
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y, <i>sample area need to update</i>
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work In, Adjacent to, and over Water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags, barriers if required?	Y
Ensure temporary water passages systems, temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies!	N/R
Disturbance, damage to water course or water body beds, banks and bank vegetation is limited to that specified in the contract and environmental documentation	Y

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Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water, ground water sources?	Y, at DSM area Fuel refuelling drops
Earth works shall be limited to the construction sites, no informal storage of soil / excavations!	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under roof?	Y Missing at Menard waste (Fuel)
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	Y Y
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	Y, Informd, recorded and documented.
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed, spill kits checked periodically and correctly stored and located?	Y
Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y
Fueling of construction machines in designated and sealed areas only!	N Portable tank to refuel at site.
Car wash and wheel cleaning in designated areas only!	N/A
5. Work in, Adjacent to Areas of trees not Designated for Removal	
Trees not proposed to be cut, are suitable protected within the construction site, such as installation of tree guards?	Y
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood, non – construction purposes	Y
Where will trees have to be felled for construction purposes?	N/A
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	N/A
Have trees been replaced?	N
6. Control of Air quality/ Noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Y Y N/A
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties	N/A
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards?	Y
Are the appropriate mitigation measures being undertaken?	Y
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is plant in good condition, checks undertaken to control air quality and noise levels?	Y
Air quality, noise monitoring register is kept up to date with records available on site?	N SWT to ensure
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/R
Access of pedestrians to private, commercial and institutional property is maintained?	N/R
Management of local / construction traffic according to the traffic management plan	N/A
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	N, DSM area only one with no water.
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y, But need more for others
Has the sewage sludge properly been disposed and recorded?	Need proper documentation.
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Working on it.
- Traffic management plan	Working on finalization.
- Sewage management plan	Do.
- Firefighting and rescue plan	Do.
- Disaster management plan	Do.
12. Other issues	
Are there other issues identified and require control measures?	N
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y
Date(s) / Stages of next Site Safety Review(s), if required:	

ESR Approval

Signed: 	Signed: 	Date of this Safety Review: 09.03.2020
Engineer's Representative:	Contractor's Representative:	

Distribution: Original to project file, Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature



MD, Mahmoodul Hasan Rishi
EHS Inspector.

Name & Position

Consolidated Remarks if any:

Environmental Monitoring Checklist

Item	Comments (Strike N/A if not relevant)
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or barriers if required?	N/A
Excess temporary water, passage systems, and temporary water body crossing/impoundment have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies.	Y
Drain, erosion, damage to water course or water body walls, banks, and bank vegetation is tracked to that specified in the contract and environmental documentation.	N/A
Any incidents of chemical spills, oil leaks or other ingress of potentially toxic liquid substances to surface water or ground water sources?	N
Earth retention is fitted in the construction area, an external scourge of soil is monitored.	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do drivers vehicles show any sign of contamination (leaks, oil spill)?	N
Where wheelbarrow storage for diesel tanks, skips for waste, etc. are located on impermeable and standing areas to mitigate any contamination of ground? Are these storage areas under a roof?	Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	Y
Have there been any contamination risks of the areas subjected to substances, or in the worst case violation to prevent contaminated soil from site?	N
Are chemicals, fuels, and other potentially toxic substances being stored in approved storage areas at least 50m away from surface water sources?	Y
Are fuel tanks adequately managed and suitably checked periodically and correctly stored and labelled?	Y
Are spill kits available in various locations around site, close to plant or equipment (but accessible)?	Y
Flaring of construction machines in designated and visible areas only.	Y
Car wash and wheel cleaning in designated areas only.	N
5. Work in, adjacent to areas of trees not designated for removal	
Trees not proposed to be cut, are suitably protected within the construction site with protection of tree guards?	N/A
Entry of equipment, construction materials and access materials to areas of trees not designated for removal is limited with protective measures in place?	N/A
No cutting down of trees for the road and near – construction purposes.	N/A
Where will trees have to be felled for construction purposes?	N/A
How many trees will have to be felled? Is there need to call these trees? Which kind of trees will be felled?	N/A
Have trees been marked?	N/A
6. Control of air quality/ noise levels	
Are the operators dust control measures being undertaken or site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)?	Y
Has dust been suppressed (water spray)? Are there any complaints from the local neighbourhood?	N

Environmental Monitoring Checklist

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name: ICB-01/D2-B/DESWSP/2014 (P3.1) (P3.2) (Tick one)

Contract Number: GWT SNC

Name of Contractor: INTAKE

Date: 07.05.2020 Location: INTAKE

- 1. WEATHER CONDITION:** Sunny / Cloudy / Rainy / Stormy / Foggy / Smog (Tick Mark)
- 2. INCIDENT:**
- Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? **YES/NO**
- 3. Nature of incident - Impact on:**
- Terrestrial environment: flora, fauna, and cultural resources
 - Aquatic environment: aquatic flora, fish, invertebrates, ground water, surface water ponds, rivers
 - Air: air quality (e.g. dust)
 - Human use activities: agriculture, farming, livelihood
 - Others: e.g. noise, vibration, impact, complaints of residents

3.2 Intervention Steps: Not Applicable (Provide details)



Item	Comments (Strike N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from hazardous and ecologically critical areas, roads and water bodies?	Y
2. Soil Management, Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not overtopped?	Y
Are stockpiles covered / ground to prevent erosion?	N/A
Excess materials from the work site stored, re-used and disposed of in accordance with the EMP?	Y
Are these storage areas maintained and kept clear?	Y
Location of disposal or management sites and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent erosion / turbidity of the water body?	N/A
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	N/A

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Environmental Monitoring Checklist

Date(s) / Stages of next Site Safety Review(s), if required:

EBR Approval

 07/05/2020 Engineer's Representative	 Contractor's Representative	Date of this Safety Review: 07.05.2020
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Distribution: Original to project file. Copy to BMS Representative Project Team Distribution. Copy to all present at Review Meeting. Copy to site team members not present at review meeting.

Signature


 (MAVINUR RASHID) DRE MDSC

Consolidated Remarks if any:

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WDTT
MACDONALD


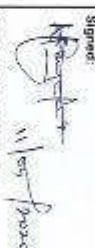
Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is there a clear tripod to pedestrian, vehicle traffic, adjacent residential, commercial and institutional processes?	N
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DOE standards?	Y
Are the appropriate mitigation measures being undertaken?	Y
Prohibit and eliminate from disposal area, and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DOE guidelines?	Y
Is there a good condition and are checks undertaken to control air quality and noise levels?	Y
Air quality and noise monitoring register is kept up to date with scores available on site?	Y
T. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local (commercial) traffic according to the local management plan	Y
B. Waste Management	
Waste must be separated and stored in closed containers in designated areas?	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
B. Sewage Management	
Is domestic sewage from the camp collected and treated hygienic way?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, ventilation)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	
- Waste management plan	Working on it
- Traffic management plan	Do
- Sewage management plan	Do
- Firefighting and rescue plan	Do
- Disaster management plan	Do
12. Other Issues	
Are there other issues identified and suitable control measures?	Y
Training, awareness and competence of the environmental inspectors have been provided to new staff as part of their induction process?	Y
A record of site inductions is available on site?	Y
No hunting of wild animals	Y

Item	Comments (Enter N/A for not relevant)
Is plant in good condition, checks undertaken to confirm air quality and noise levels?	Yes
Air quality, noise monitoring register is kept up to date with records available on site?	Maintained
7. Maintenance of Local Traffic Access Patterns	N/A
Local traffic access to residential, commercial, and institutional premises properly managed?	N/A
Access of pedestrians to private, commercial and institutional premises maintained?	N/A
Management of local / construction traffic according to the traffic management plan?	Yes
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas?	Yes
Waste must be disposed by licensed company?	Wastehub registered vendors
Disposal of waste must be recorded?	Yes
9. Storage Management	
Is domestic sewage from the camp collected and treated (people tanks)?	Yes
Are tanks provided a separate number?	Yes
Do tanks fit appropriate standards of hygiene, floorboard, sanitation?	Yes
Has the sewage sludge properly been disposed and recorded?	Yes
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)?	Yes
11. Management Plans	
The following plans must be available on site:	
- Waste management plan	Yes (MHA completed)
- Traffic management plan	Yes (Project files)
- Sewage management plan	Yes
- Firefighting and rescue plan	Yes
- Disaster management plan	Yes
12. Other Issues	
Are there other issues identified and require control measures?	NO
Training, awareness and competence of the environmental management have been recorded in new staff as part of their induction process?	Yes
A record of site induction is still available on site?	Yes
No handling of wild animals	N/A

Drawn by: Sangeeta of new Site Safety Review(s), if required.
As required during Lockdown Period.


ESR Approval

Signed: 	Signed: 	Date of this Safety Review: 11.05.2020
Engineer's Representative:	Contractor's Representative:	

Distribution: Original to project file, Copy to EHS Representative, Project Team Distribution. Copy to all present at Review Meeting. Copy to site team members not present at review meeting.

Signature: 
Name & Position: SYED FARHAN KARIM (DPE)

Consolidated Remarks if any: All the new Signboards prepared & will be printed immediately after the Lockdown is in-between. Now the site is Environmentally secured & healthy due to the zero/po pollution in the air.



Environmental Monitoring Checklist

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name P1 P2 P3.1 P3.2 (Tick one)

Contract Number... ICB-01/D&B/DESIGN/2014

Name of Contractor: GWT SNC

Date 17.05.2020 Location: INTAKE

1. WEATHER CONDITION. Sunny / Cloudy / Rainy / Stormy / Foggy / Smog (Tick Mark)

2. INCIDENT:

Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? Yes/No

2.1 Nature of incident - impact on:

- Terrestrial environment: flora, fauna, soil, cultural resources
- Aquatic environment: aquatic flora, fish, invertebrates, ground water, surface water, ponds, rivers
- Air air quality (e.g. dust)
- Human use, activities, fisheries, farming, livelihood
- Other: e.g. noise, vibration incident, complaints of residents

2.2 Intervention Steps: Not Applicable/Applicable (Provide details)

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	N/A
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	N/A
Are stockpiles covered / greened to prevent erosion?	N/A
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	N/A
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not giving entry to water courses, other water bodies?	N/A

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or barriers if required?	Y
Erms temporary water passage systems and temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies.	Y
Disturbance, damage to water course or water body beds, banks, and bank vegetation is limited to that specified in the contract and environmental documentation	Y
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water or ground water sources?	N
Earth works shall be limited to the construction sites, no informal storage of soil / excavations	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (weeds, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes, etc. are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas wind a taut?	Y
Have there been instances of chemical spill at tanks on site? Have these been managed in the right way? Have there been any remediation works of the areas subjected to substances, or in the worst case validation to remove contaminated soil from site?	N Y N/A
Are chemicals, fuels, and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel tanks adequately managed and spill kits checked periodically and correctly stored and located? Are spill kits available in various locations around site: close to plant or equipment (fuel absorbent)?	Y Y
Fueling of construction machines in designated and sealed areas only. Car wash and wheel cleaning in designated areas only	Y N/A
5. Work in, adjacent to areas of trees not designated for removal	
Trees not proposed to be cut, are suitably protected within the construction site, such as installation of tree guards?	N/A
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	
No cutting down of trees for fire wood and fire – construction purposes	
Where will trees have to be felled for construction purposes?	
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	
Have trees been replaced?	
6. Control of air quality/ noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Y Y

Environmental Monitoring Checklist

Date(s) / Stages of next Site Safety Reviews, if required:

ESR Approval:

Signed: 	Signed: 	Date of this Safety Review: 17.05.2020
Engineer's Representative:	Contractor's Representative:	

Distribution: Original to project file, Copy to BIM Representative
Project Team Distribution. Copy to all present at Review Meeting, only to site team members not present at review meeting

Signature



MUINUR RAGHID, DRE, MDSC.

Name & Position

Consolidated Remarks if any:



Environmental Monitoring Checklist

Item	Comments (E/N/A/N/A (not followed))
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	Y
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DOE standards?	Y
Are the appropriate mitigation measures being implemented?	Y
Noise and vibration from proposed works and from operations are being monitored and the appropriate controls measured being undertaken on site to limit levels in accordance to DOE guidelines?	Y
Is plant in good condition and are checks undertaken to control air quality and noise levels?	Y
Air quality and noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial and institutional areas is properly managed?	Y
Adequacy of roadways and to provide, comments and instances property is maintained?	N/A
Management of local / commercial traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the site collected and treated in a septic tank?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene throughout, standards?	Implementation needed
Has the sewage's edge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site:	
- Waste management plan	
- Traffic management plan	
- Sewage management plan	
- Firefighting and rescue plan	
- Disaster management plan	
12. Other Issues	
Are there other issues identified and require further resources?	Trackable, under control
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to date available on site?	Y
No hunting of wild animals.	N

Environmental Monitoring Checklist

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name DESWSP [P1] [P2] [P3.1] [P3.2] (Tick one)
 Contract Number
 Name of Contractor SUEZ
 Date 14/06/2020 Location WTP

1. WEATHER CONDITION: Sunny / Cloudy / Rainy / Stormy / Foggy / Smog (Tick Mark)

2. INCIDENT:

Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? Yes No

2.1 Nature of incident - impact on: N/A

- Terrestrial environment: flora, fauna, soil, cultural resources
- Aquatic environment: aquatic flora, fish, invertebrates, ground water, surface water, ponds, rivers
- Air: air quality (e.g. dust)
- Human use, activities: fisheries, farming, livelihood
- Others: e.g. noise, vibration incident, complaints of residents

2.2 Intervention Steps: Not Applicable / Applicable (Provide details):

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	Y
Are stockpiles covered / greened to prevent erosion?	Y
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	N/A
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or barriers if required?	N/A
Ensure temporary water passage systems and temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies.	N/A
Disturbance, damage to water course or water body beds, banks, and bank vegetation is limited to that specified in the contract and environmental documentation	Y
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water or ground water sources?	N/A
Earth works shall be limited to the construction sites, no informal storage of soil / excavations.	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes, etc. are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under a roof?	Y Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way? Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	N Y N
Are chemicals, fuels, and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	N
Are fuel bunds adequately managed and spill kits checked periodically and correctly stored and located?	Y
Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y
Fueling of construction machines in designated and sealed areas only.	Y
Car wash and wheel cleaning in designated areas only.	N/A
5. Work in, adjacent to areas of trees not designated for removal	
Trees not proposed to be cut, are suitably protected within the construction site, such as installation of tree guards?	
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood and non – construction purposes	Y
Where will trees have to be felled for construction purposes?	
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	
Have trees been replaced?	N
6. Control of air quality/ noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)?	Y
Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	N/A
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	Y N/A
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y
Is plant in good condition and are checks undertaken to control air quality and noise levels?	Y
Air quality and noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	Y
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	N/A
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	Y
- Waste management plan	
- Traffic management plan	
- Sewage management plan	
- Firefighting and rescue plan	
- Disaster management plan	
12. Other issues	
Are there other issues identified and require control measures?	N/A
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process? A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y

Environmental Monitoring Checklist

Date(s) / Stages of next Site Safety Review(s), if required:	
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ESR Approval

Signed:  Engineer's Representative:	Signed:  Contractor's Representative:	Date of this Safety Review: 14.06.2020 Sunday
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Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature



Name & Position

Consolidated Remarks if any:

Water stagnant issue (water stagnant for long) in drain around dormitory & site facilities area.

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Work specified in workcourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or barriers if required?	Y
Ensure temporary water passage systems and temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicles travel through surface water bodies.	Y
Discretion, damage to water course or water body banks, banks and bank vegetation is limited to that specified in the contract and environmental documentation.	Y
Any incidents of chemical spills, oil leaks or other agents of potentially hazardous substances to surface water or ground water sources?	N
Earth works shall be limited to the construction site, no debris storage of soil / excavation.	Y
4. Contaminated land - storage of fuel and hazardous substances	N
Do stored sets show any sign of contamination (leak, oil spill)?	Y
When required, storage for diesel tanks, oils, fuel, wastes, etc. are located on impermeable and draining areas to mitigate any contamination of ground? Are these storage areas fenced a ramp?	N
Have there been instances of accidental spills or leaks on site?	Y
Have these been managed in the right way?	N/A
Have there been any contamination within of the areas subjected to substances, or in the soil and water table? Is there contamination of soil from site?	Y
Are chemicals, fuels, and other potentially hazardous substances being stored in purpose designed safe areas at least 50m away from surface water sources?	Y
Are fuel tanks adequately managed and well lids checked individually and regularly when and fueled?	Y
Are spill kits available in various locations around site, close to plant or equipment (well maintained)?	Y
Fuelling of construction materials in designated and silted areas only.	N/A
Oil wash and wheel cleaning in designated areas only.	N/A
5. Work in, adjacent to areas of trees not designated for removal	N/A
Trees not proposed to be cut, are suitably protected with the construction site such as installation of tree guards?	Y
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood and non - construction purposes.	Y
Where will trees have to be felled for construction purposes?	Y
How many trees will have to be felled? Is there need to cultivate trees? Which kind of trees will be felled?	Y
Have trees been replaced?	Y
6. Control of air quality noise levels	Y
Are the appropriate dust control measures being undertaken on site for dust from excavated works and from operations (grading, concrete cutting, grinding, alternative best cleaning of materials and sites, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighbourhood?	Y

Environmental Monitoring Checklist

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name: ICB-01/DAB/DESWSP/2014

Contract Number: GWT SNC

Name of Contractor: ICB-01/DAB/DESWSP/2014

Use: 31.05.2020 Location: INTAKE

1. WEATHER CONDITION: Sunny / Cloudy / Rainy / Stormy / Foggy / Snow / Spring (Tick Mark)

2. INCIDENT:

Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? Yes/No

2.1 Nature of incident - impact on:

- Terrestrial environment, flora, fauna, soil, cultural resources
- Aquatic environment, aquatic flora, fish, invertebrates, ground water, surface water, ponds, rivers
- Air (air quality (e.g. dust)
- Human use, activities, fisheries, farming, livelihood
- Others, e.g. noise, vibration, odour, complaints of residents



2.2 Intervention steps. Not Applicable /Applicable (Provide details):

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from vibrations and ecologically or from noise, birds and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of liquid from protective agricultural tanks are separate from other soils?	N/A
Excavation are designed with slopes not exceeding 1:2, and not over-bermed?	N/A
Are stockpiles covered / grouted to prevent erosion?	Y
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is suitable?	Y
Are stockpiles located away from surface water to prevent sediment / turbidity of the water body?	N/A
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not going into water courses, other water bodies?	N/A

Environmental Monitoring Checklist

Date(s) / Stages of next Site Safety Review(s), if required:

ESR Approval

Signature:  Engineer's Representative	Signature:  Inspector's Representative	Date of the Safety Review: 31.05.2020
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Distribution: Original to project file. Copy to BME Representative Project Team Distribution. Copy to all present at Review Meeting. Copy to site team members not present at review meeting.

Signature



MUNIR RASHID, DRE, MDBC.

Name & Position

Consolidated Remarks if any

Environmental Monitoring Checklist

Item	Comments (Enter 'Y' for follow-up)
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	Y
Is the air quality on site and in the surrounding area being monitored, ensuring compliance with DOE standards?	Y
Are the appropriate mitigation measures being undertaken?	Y
Noise and vibration from exposed piles and train operations are being monitored and the appropriate control measures being undertaken on site to limit levels to acceptable to local residents?	Y
Is plant in good condition and are checks undertaken to control air quality and noise levels?	Y
Are quality and noise monitoring registers kept up to date with records available on file?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	Y
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / constituent traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers a designated area?	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Storage Management	
Is domestic sewage from the camp collected and treated (septic tank)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (flushable, ventless)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire Fighting	
Is firefighting equipment available on site (for existing sites, see blankets)?	Y
11. Management Plans	Submitted
The following plans must be available on site:	
- Waste management plan	
- Traffic management plan	
- Storage management plan	
- Fueling and rescue plan	
- Disaster management plan	
12. Other Issues	
Are there other issues identified and require control measures? (Inlet's at consultant's local sheet).	Y
Training, awareness and competence of the environmental management have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	N

Environmental Monitoring Checklist

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name DESWSP [P1] [P2] [P3.1] [P3.2] (Tick one)

Contract Number

Name of Contractor SUEZ

Date 18/06/2020 Location WTP

1. WEATHER CONDITION: Sunny / Cloudy / Rainy / Stormy / Foggy / Smog (Tick Mark)

2. INCIDENT:

Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? Yes/No

2.1 Nature of incident - impact on: N/A

- Terrestrial environment: flora, fauna, soil, cultural resources
- Aquatic environment: aquatic flora, fish, invertebrates, ground water, surface water, ponds, rivers
- Air: air quality (e.g. dust)
- Human use, activities: fisheries, farming, livelihood
- Others: e.g. noise, vibration incident, complaints of residents

2.2 Intervention Steps: Not Applicable / Applicable (Provide details):

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, suitably located away from habitations and ecologically critical areas, khals and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are separate from other soils?	Y
Stockpiles are designed with slopes not exceeding 1:2, and not surcharged?	
Are stockpiles covered / greened to prevent erosion?	Y
Excess materials from the work are stored, re-used and disposed of as specified in the EMP?	Y
Are these storage areas maintained and kept clean?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	Y
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	Y

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or barriers if required?	N/A
Ensure temporary water passage systems and temporary water body crossings implemented have been sufficiently maintained to prevent deposition of silt or other materials? No vehicle movement through surface water bodies.	Y Y
Disturbance; damage to water course or water body beds, banks, and bank vegetation is limited to that specified in the contract and environmental documentation	Y
Any incidents of chemical spills, oil leaks or other ingress of potentially hazardous substances to surface water or ground water sources?	N
Earth works shall be limited to the construction sites, no informal storage of soil / excavations.	Y
4. Contaminated land – storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (waste, oil spill)?	N
Where required, storage for diesel tanks, skips for solid wastes, etc. are located on impermeable hard standing areas to mitigate any contamination of ground? Are these storage areas under a roof?	Y Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	N Y
Have there been any remediation works of the areas subjected to substances, or in the worst-case validation to remove contaminated soil from site?	Y
Are chemicals, fuels, and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel bunds adequately managed and spill kits checked periodically and correctly stored and located?	Y
Are spill kits available in various locations around site, close to plant or equipment (fuel absorbent)?	Y
Fueling of construction machines in designated and sealed areas only.	Y
Car wash and wheel cleaning in designated areas only.	N/A
5. Work in, adjacent to areas of trees not designated for removal	
Trees not proposed to be cut, are suitably protected within the construction site, such as installation of tree guards?	Y
Entry of equipment, construction materials and excess materials to areas of trees not designated for removal is limited with protection measures in place?	Y
No cutting down of trees for fire wood and non – construction purposes	Y
Where will trees have to be felled for construction purposes?	N
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	N/A
Have trees been replaced?	N
6. Control of air quality/ noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, abrasive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Rainy day (continuous rain for few days) N/A

Environmental Monitoring Checklist

Item	Comments (Enter N/A if not relevant)
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	N
Is the air quality on site and in the surrounding areas being monitored, ensuring compliance with DoE standards? Are the appropriate mitigation measures being undertaken?	N/A N/A
Noise and vibration from exposed work and from operations are being monitored and the appropriate control measures being undertaken on site to limit levels in accordance to DoE guidelines?	Y
Is plant in good condition and are checks undertaken to control air quality and noise levels?	Y
Air quality and noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	N/A
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	N/A
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is domestic sewage from the camp collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, sanitizers)?	Y
Has the sewage sludge properly been disposed and recorded?	Y
10. Fire fighting	
Is firefighting equipment available on site (fire extinguishers, fire blankets)	Y
11. Management Plans	
The following plans must be available on site	Y
- Waste management plan	
- Traffic management plan	
- Sewage management plan	
- Firefighting and rescue plan	
- Disaster management plan	
12. Other issues	
Are there other issues identified and require control measures?	N
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
A record of site inductions to staff available on site?	Y
No hunting of wild animals	Y

Environmental Monitoring Checklist

Date(s) / Stages of next Site Safety Review(s), if required:	
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ESR Approval

Signed:  Engineer's Representative:	Signed:  Contractor's Representative:	Date of this Safety Review: 18.06.2020 Thursday
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Distribution: Original to project file. Copy to BMS Representative.

Project Team Distribution: Copy to all present at Review Meeting, copy to site team members not present at review meeting.

Signature

Md. Mahmudul Hasan Rehit
 Environmental Inspector

Name & Position

Consolidated Remarks if any:

Environmental Monitoring Checklist:

Item	Comments (Enter N/A if not relevant)
Work specified in watercourse, water bodies and their banks are following the EMP and environmental documentation? Use of geotextile bags or burlap if required?	Y
Ensure temporary water passage systems and temporary water body construct improved have been sufficiently maintained to prevent deposition of fill or other materials? No vehicle movement through temporary water bodies.	Y
Disturbance damage to water course or water body beds, banks, and bank vegetation is limited to that specified in the contract and environmental documentation.	Y
Any incidents of chemical spills, oil leaks or other releases of potentially hazardous substances to surface water or ground water sources?	N
Earth works shall be limited to the construction sites, no in-stream storage of soil (excavators).	Y
4. Contaminated land - storage of fuel and hazardous substances	
Do stored soils show any sign of contamination (leak of spill)?	N
Where required, storage for diesel tanks, skips for solid wastes etc. are located on uncontaminated land according to plans to mitigate any contamination of ground? Are these storage areas under a roof?	Y
Have there been instances of chemical spills or leaks on site? Have these been managed in the right way?	Y
Have there been any remediation works of the areas subjected to pollution, or if the worst case validation is never contaminated soil has not?	N/A
Are chemicals, fuels and other potentially hazardous substances being stored in purpose-designed safe areas at least 50m away from surface water sources?	Y
Are fuel tanks adequately managed and spills checked periodically and promptly stored and located?	Y
Are spill kits available in various locations around site, close to plant or equipment (fuel associated)?	Y
Fuelling of construction machines is designated and marked areas only	Y
Car wash and wheel cleaning in designated areas only.	N/A
5. Work in, adjacent to areas of trees not designated for removal	N/A
Trees not proposed to be cut, are suitably protected within the construction site, such as installation of tree guards?	
Entry of equipment, construction materials and access materials to areas of trees not designated for removal is limited with protection measures in place?	
No cutting down of trees for fire wood and fuel - construction purposes	
Where will trees have to be felled for construction purposes?	
How many trees will have to be felled? Is there need to cut these trees? Which kind of trees will be felled?	
Have trees been replanted?	
6. Control of air quality/ noise levels	
Are the appropriate dust control measures being undertaken on site for dust from exposed work and from operations (grading, concrete cutting, grinding, progressive blast cleaning of concrete and steel, and road sweeping)? Has dust been suppressed (water spray)? Are there any complaints from the local neighborhood?	Y

Environmental Monitoring Checklist:

For P1, P2, P3.1 and P3.2 Construction Phase

Project Name: ICB-01/DEB/DESWSP/2014 (Tick one)
 Contract Number: ICB-01/DEB/DESWSP/2014 (P3.1) (P3.2)
 Name of Contractor: GWTSNC
 Date: 2020-06-08 Location: INTAKE



- 1. WEATHER CONDITION** Sunny / Cloudy / Rainy / Stormy / Foggy / Smog (Tick Mark)
- 2. INCIDENT:**
- Are environmental incidents reported and reviewed, and corrective and preventive actions identified and recorded? Yes/No
- 2.1 Nature of incident - impact on:
- Terrestrial environment flora, fauna and cultural resources
 - Aquatic environment aquatic life, invertebrates, ground water, surface water, ponds, rivers
 - Air quality (e.g. dust)
 - Human use, activities fisheries, farming, livelihood
 - Others e.g. noise, vibration, odour, complaints of residents
- 2.2 Intervention Steps: Not Applicable (Applicable (Provide details):

Item	Comments (Enter N/A if not relevant)
1. Storage of Construction Material	
Are storage areas for construction plant, equipment and raw materials suitably demarcated, securely fenced away from habitats and ecologically critical areas, shafts and water bodies?	Y
2. Soil Management - Stockpiling and Excess Material	
Stockpiling of topsoil from productive agricultural lands are suitable topsoils other soils?	N/A
Stockpiles are designed with slopes not exceeding 1:2 and not to obstruct?	
Are stockpiles covered / g sealed to prevent erosion?	N/A
Excess materials from the work are stored, re-used and disposed in accordance in the EMP?	Y
Are these storage areas maintained and kept clear?	Y
Location of disposal or management areas and source of excess material being disposed of is recorded?	Y
Are stockpiles located away from surface water to prevent siltation / turbidity of the water body?	N/A
3. Work in, adjacent to, and over water bodies	
Sediment and other harmful materials and substances are not gaining entry to water courses, other water bodies?	N/A

Environmental Monitoring Checklist

Date(s) / Stage(s) of next Site Safety Review(s), if required:

ESR Approval

Signed:  Engineer's Representative	Signed:  Contractor's Representative	Date of this Safety Review: 2020-06-08
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Distribution: Original to project file. Copy to ESR Representative
 Project Team Distribution. Copy to all present at Safety Meeting, copy to site team members not present at review

Signature



MUNEER RASHID, DRE, MDEC

Name & Position

Consolidated Remarks if any

Environmental Monitoring Checklist

Item	Comments (Enter 'N/A' if not relevant)
Is there a clear impact to pedestrian, vehicle traffic, adjacent residential, commercial and institutional properties?	Y
Is the air quality on site and in the surrounding areas being monitored, including compliance with LDE standards?	Y
Are the appropriate mitigation measures being undertaken?	Y
Will the site be visited from adjacent work and from operations are being undertaken and are appropriate measures being undertaken on site to limit levels in accordance to DSE guidelines?	Y
Is there in good condition and are there any activities to control air quality and noise levels?	Y
Are quality and noise monitoring register is kept up to date with records available on site?	Y
7. Maintenance of Local Traffic Access Patterns	
Local traffic access to residential, commercial, and institutional areas is properly managed?	Y
Access of pedestrians to private, commercial and institutional property is maintained?	N/A
Management of local / construction traffic according to the traffic management plan	Y
8. Waste Management	
Waste must be separated and stored in closed containers in designated areas.	Y
Waste must be disposed by licensed company	Y
Disposal of waste must be recorded	Y
9. Sewage Management	
Is correct sewage from the camps collected and treated (septic tanks)?	Y
Are toilets provided in appropriate numbers?	Y
Do toilets fit appropriate standards of hygiene (handwash, water up)?	Y
Has the sewage sludge properly been disposed and recorded?	Completed head end Site 285000 or 285000 Waste, drive, test, okay
10. Fire fighting	
Is firefighting equipment available on site, the extinguishers are functional	Y
11. Management Plans	
The following plans must be available on site:	submitted
- Waste management plan	
- Traffic management plan	
- Storage management plan	
- Firefighting and rescue plan	
- Disaster management plan	
12. Other issues	
Toilets of workers at rental areas (SDWP)	
Are there other issues identified and require control measures?	Y
Training, awareness and competence of the environmental requirements have been provided to new staff as part of their induction process?	Y
Are records of site inductions to staff available on site?	Y
Are training of wild animals	N