# REPUBLIC OF IRAQ

# MINISTRY OF PLANNING

Iraq Social Fund for Development SFD (P163108)

# ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

### FOR THE

CONSTRUCTING 1 SCHOOL WITH CAPACITY 9
CLASSROOM IN VILLAGE (YASEEN AL-MUTLAG) AND 2
SCHOOL WITH CAPACITY 6 CLASSROOMS IN VILLAGE
(AL-KHALIFA, AL-OBAID) AND ADDING 6 CLASSROOM
EXTENSION IN VILLAGE (YASEEN AL-MUTLAG, AL-YOUNIS)

IN BAGHDAD GOVERNORATE

17<sup>TH</sup> OCTOBER 2023

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# IRAQ: Social Fund for Development Project PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL &	z ADMINISTRATIVE
Country	IRAQ
Project Title	CONSTRUCTING 1 SCHOOL WITH CAPACITY 9 CLASSROOM IN VILLAGE (YASEEN AL-MUTLAG) AND 2 SCHOOL WITH CAPACITY 6 CLASSROOMS IN VILLAGE (AL-KHALIFA, AL-OBAID) AND ADDING 6 CLASSROOM EXTENSION IN VILLAGE (YASEEN AL-MUTLAG, AL-YOUNIS)\ BAGHDAD GOVERNORATE.
Introduction	Iraq faces a historic opportunity for national reconciliation through the effective delivery of critical social services, economic growth and recovery programs. The reinstatement of trust between the State and its citizens is highly dependent on the Government of Iraq (GOI) demonstrating its capacity to deliver security, jobs and economic growth to all Iraqis, with a focus on the poor, the vulnerable and the millions of Internally Displaced People (IDP).  The GOI, represented by the Ministry of Planning (MOP), requested the World Bank's support in the design and financing of a Social Fund for Development (SFD) project to support locally driven initiatives to improve the living conditions and opportunities of the poor and most vulnerable people in Iraq. The GOI has demonstrated its commitment and support to the design of this operation and established a high-level national team to guide and coordinate the development and institutionalization of the SFD, as well as five technical teams to work on the different aspects of the fund.  The Project Development Objectives (PDOs) are to: (1) Improve access to basic services and; (2) Increase short-term employment opportunities, in targeted communities. This environmental and social management checklist reflects the main issues (project description and activities, baseline conditions, impact analyses, mitigation measures and monitoring arrangements). The main objective of this document is to examine the environmental and socio-economic impacts of the project (both construction and operation phases), and to propose mitigation measures. The project is expected to result in significant socio-economic benefits for the local communities and surrounding areas in addition to

developing social awareness and group responsibility.

#### PROJECT LOCATION & SITE DESCRIPTION

According to the Environmental and Social Management Framework (ESMF) which was prepared for the Iraq Social Fund for Development Project disclosed locally in Iraq and on the World Bank's website<sup>1</sup>. Environmental and Social Management plan (ESMP)/ Environmental and Social Management Checklist should be prepared, cleared, publicly consulted and disclosed prior to the commencement of any rehabilitation activity. The World Bank Operational Policy 4.01 on Environmental Assessment was triggered as the proposed Subprojects have some potential negative environmental and social impacts. Accordingly, this Environmental and Social Management Plan is required to implement the Sub-project in accordance with the requirements of the World Bank's Operational Procedures and applicable Iraqi national legislation.

## Project Location

The subprojects are located in the governorate of BAGHDAD, the capital, that is located in mid of Iraq. Baghdad shares internal boundaries with the governorates of Anbar, Babil, Wasit, Diyala, and Salah Aldin. Desert plains dominate the landscape of the governorate (as shown in figure below). The city is located on a vast plain bisected by the Tigris River. The Tigris splits Baghdad in half, with the eastern half being called "Risafa" and the Western half known as "Karkh". The proposed location of these schools will be in an open area. The school is a separated primary school (i.e., morning for girls and afternoon for boys) and the age range of students who will study there is between 6-12 years old with about 100 students.

The area of each school, coordinates, and the population in each village are shown in the table below:

Table 1: Information about the villages

No.	Village	Area (m²)	Pop ulati on	Coordinat es	Description Activities
1	Yaseen Al- Mutlag	1100	3900	33.732451, 44.396936	Construction of 9- Classroom of School and adding 6
					classroom extension

<sup>&</sup>lt;sup>1</sup>https://documents1.worldbank.org/curated/en/221731554372651925/pdf/Environmental-and-Social-Management-Framework.pdf

					to the current school in the village
2	Al- Khalifa	1225	3890	33.21740, 44.07959	Construction of a 6- Classroom School
3	Al-Obaid	1225	2550	33.22842, 43.907617	Construction of a 6- Classroom School
4	Al- Younis	144	1780	32.487281, 46.655675	Adding 6 classroom extension in village





Yaseen Al-Mutlag



Al-Khalifa



Al-Obaid



**Al-Younis** 

Figure 1: Project area

The area adjacent to the subproject sites is characterized as rural residential areas. The subproject is located within a residential part of the area. There are no protected areas or threatened species (there are no critical or high biodiversity values that might be affected) in the vicinity of the site. There are no close sensitive receptors located to the subprojects site. The subproject is expected to result in significant socioeconomic benefits for the local community and surrounding areas as it

	will enhance self-esteem and the ability to value each person's own worth through a happy, caring, enriching and secure environment. Also, to develop social awareness, group responsibility and empathy through the social context of learning.
	The objective of the subproject is to construct the school. The subprojects aim at facilitating the following:
	<ul> <li>To create a caring, secure environment so that all in school feel a sense of worth.</li> <li>To enhance self-esteem and the ability to value each person's own worth through a happy, caring, enriching and secure environment.</li> <li>To develop social awareness, group responsibility and empathy through the social context of learning.</li> <li>To create a lively and stimulating learning environment that is exciting today, as well as preparation for the future.</li> </ul>
Project Duration	The anticipated project duration is ranging from 180-300 days
Proposed Project Activities	<ul> <li>Each School has a total area of 144, 1100 and 1225m² and includes 6 &amp; 9 classrooms, a suite for administration, WCs, and the outdoor yard. Works for construction and rehabilitation the schools will include the following activities:</li> <li>1. All civil work from foundation up to wall building installation which is represented by:</li> <li>A) Site preparation and Earthwork;</li> <li>B) Masonry work;</li> <li>C) Structural works which include concrete work;</li> <li>D) Finishing works which include painting and tiling in addition to sanitary and electrical works</li> <li>The anticipated duration of construction works is about 240 days for</li> </ul>
	the school with about 20-25 workers per day about 95% of them are local workers and the rest are engineers and technicians that may be from the closest area. The work will also comprise some civil works such as excavation, lifting the soils and other waste produced during the excavation, and also casting in order to prepare the foundations for the fence as follows:  • Providing workers and all the surveying equipment required for the execution of works.  • Conduct excavation work according to the dimensions and

	<ul> <li>methodologies mentioned in the drawings with others considering the possibility of groundwater.</li> <li>Prepare all materials for the implementation of the weak concrete layer and then coating them with asphalt.</li> <li>Processing all construction materials with a number of works and workers to carry out the work of reinforced concrete.</li> <li>Execution casting works.</li> <li>All the raw materials that will be used in the construction of the school are from an authorized quarry.</li> </ul>
Land Use and Acquisition	The adjacent area to the project site is characterized a rural residential area. However, the construction activities will not cause an impact on agricultural areas or make any crop damage.  The school will be constructed on state land and hence there are no issues related to land acquisition. The implementation activities will not cause relocation of people, vendors, or any individuals. The area is free from squatters/encroachers. No involuntary resettlement or economic displacement are expected to take place.
Contactor's Camp	The construction of the school will need about 20-25 workers per day.  Although most of the workers are local workers (more than 95%), however, a camp will be erected within the school and therefore, the water, wastewater, and the solid waste that will be generated from this camp will be treated properly and transferred to the authorized treatment plants or landfills in coordination with the local municipality.  The contractor will establish his storage on vacant state-owned land for equipment and material within the area close to the construction area.  The construction camp should have independent sources of water and electricity, and an adequate septic tank for sanitary effluent disposal. Due to its geographical location, an influx of workers to the subproject area is not expected. Most of the workers will be locals from the surrounding area and will return to their homes.
PROJECT BASELII	
Geographic Conditions	The terrain is characterized as flat. In the project area the elevation is about 34 m asl.
Climate, Air Quality and	Baghdad has a hot desert climate featuring extremely hot, prolonged, dry summers and mild to cool, slightly wet, short winters. In the summer, from June through August, the average maximum

noise	temperature is as high as 44 °C and accompanied by sunshine. Rainfall
	has been recorded on fewer than half a dozen occasions at this time of
	year and has never exceeded 1 mm Even at night, temperatures in
	summer are seldom below 24 °. In winter which starts from December
	through February, Baghdad has maximum temperatures averaging 16
	to 19 °C, though highs above 21 °C are not unheard of. Lows below
	freezing occur a couple of times per year on average.
	Annual rainfall, almost entirely confined to the period from November
	through March, averages approximately 150 mm, but has been as high
	as 338 mm and as low as 37 mm.
	The subproject sites are located in open areas, so the expected
	concentration of air pollutants is low. Air pollutants in the villages are
	caused mainly from movement of vehicles and trucks. Therefore, the
	ambient air quality is expected to be within the WHO ambient air
	quality standards. (Annex3).
	Presently, there is no traffic congestion and consequently the existed
	noise level is within the normal levels.
Hydrogeolog	Flooding in the area near the projects has not been reported.
y Conditions	I looding in the area hear the projects has not been reported.
	There are no Nature Reserves or other legally protected areas in the
Ecology	vicinity of the project or in a close proximity. The project areas do not
Conditions	contain any globally important habitats or ecosystems.
	There are no sites of historical or cultural importance in the area.
Heritage	There are no cemeteries, historical-cultural monuments, churches,
Environment	mosques near the project that need to be removed or will be impacted
	due to the construction activities.
	The population of the project area is approximately 5590. The
	suggested area of the school will be on state land, where no land or property expropriation will be necessary and is free from encroachers or
	squatters. All the areas around the sites remain clear of any settlement
Socio-	
economic	or economic use and are ready for construction works, no interference is
Aspects	registered from the local community which is eager for the works to be
1 2 2 2 2 2	completed. It is important to mention that during the construction of
	the school; it is not expected to cause restriction of access or livelihood
	impacts. Some of the population have a formal education level
	equivalent to middle school and som have higher than that. However,
	some of them operate small businesses or work as farmers and they
	have only a few years of basic education.

#### **LEGISLATION & POLICIES**

National & Local Legislation and World Bank Policies that Apply to the Project

- ➤ Public Health Law No. 89 of 1981, amended by Resolution No.54 of 2001;
- ➤ The applicable national legislation is as follows:
- ➤ Instructions No. 2 of 2014 on Environmental Protection from Municipal Waste;
- ➤ Law No.3,1997 regarding to Environment protection
- ➤ The Law for the Protection and Improvement of Environment No. 27, 2009;
- ➤ Instructions no. 3 of 2015 on Hazardous Waste Management;
- ➤ Law No. 6 of 1988 concerning the National Commission for Occupational Hygiene and Safety;
- ➤ Instructions No. 12 of the year 2016: Occupational Health and Safety;
- ➤ Labor Law No. 37 of 2015;
- ➤ Law no. 89 of the year 1981, amended by Decree No.54 of 2001: Public Health;
- ➤ Law No. 41 for the year of 2015: Noise Protection and Control;
- ➤ Public Roads Law No. 35 of 2002;
- ➤ Instructions No.3 of 2012: National Emissions' Determinants for Activities and Businesses by the Ministry of Health and Environment;
- ➤ Regulation No. 4 for the year of 2012: Ambient Air Quality;
- > The main WB safeguard policies applicable for SFD are:
- ➤ OP 4.01 Environmental Assessment
- ➤ OP 4.12 Involuntary Resettlement (There might be a probability of storage of construction materials within the project area. Until the date of report development, no land acquisition is anticipated.).
- ➤ OP 4.11 Physical and Cultural Resources (The proposed construction activities are not expected to pose risks of damaging cultural property).
- labor influx guidance note (2016).
- ➤ WB General Environmental, Health, and Safety guideline²

The EHS guidelines entails the effective methods for managing environmental, health and safety issues in accordance with WBG requirements. This includes understanding the likelihood, magnitude and priority of the EHS risks. The EHS guidelines includes 4 primary sections and respective sub sections (applicable segments from the EHS

<sup>&</sup>lt;sup>2</sup> https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=nPtguVM

guidelines for the sub-project are highlighted in **Red**):

- 1. Environmental Guidelines
  - 1) Ambient Air Quality Limits and Guidelines
  - **2)** Energy Conservation Energy Conservation and Efficiency Methods
  - 3) Wastewater and Ambient Water Quality Effluent water quality and indicators for water discharge and treatment
  - **4)** Water Conservation Methods for ensuring reduction in water consumption
  - **5) Hazardous Material Management** The appropriate Methods for managing hazardous waste and instructions on community and worker protection
  - **6) Waste Management** Instructions on waste management and planning, waste prevention and safe waste disposal
  - 7) Noise Methods for prevention and control of Noise, and the applicable noise limits for different activities and exposure period
  - 8) Contaminated Land Management approaches for contaminated land due to different hazardous substances or waste or oil. Includes Risk Reduction measures
- 2. Occupational Health and Safety Guidelines<sup>3</sup>
  - 1) General Facility Design and Operation ensuring appropriate facility integration of H&S, that integrates safety measures in design for different physical hazards
  - 2) Communication and Training Ensuring there is an appropriate level of communication between workers and management, and that there is sufficient training for all workers prior to operations
  - **3)** Physical Hazards Methods for prevention of accidents or injuries that can occur due to exposure to mechanical or other physical works, including Noise and Vibrations
  - 4) Chemical Hazards Injuries and accidents that could occur due to usage of chemicals and methods of protection and prevention. Includes management of fires and

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https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxyx

- explosions
- **5)** Biological Hazards Protection and Management of different biological agents
- 6) Radiological Hazards Management and Limits for Radiation Exposure
- 7) PPE Guidance on usage of PPE and clearly highlighting that it should be considered the last resort
- 8) Special Hazards Environments Guidance on Managing different environments that can present a risk to workers such as confined spaces.
- 9) Monitoring Efficient monitoring of occupational health and safety programs and mitigation measures. This includes the Occupational Accident Reporting frequency
- 3. Community Health and Safety Guidelines<sup>4</sup>
  - 1) Water Quality and Availability Ensuring the protection of nearby water resources such as groundwater and surface water sources.
  - 2) Structural Safety of the Project Potential Hazards that could occur due to poor design and methodology for dealing with those hazards. Includes the general approach that architects/structural engineers must follow to ensure community safety is considered during design
  - 3) Life and Fire Safety (L&FS) Ensuring that building design is in accordance with local regulations and requirements, and that it integrates Fire safety standards (more focused on buildings rather than infrastructure)
  - 4) Traffic Safety Includes the potential risks and impacts on traffic and from traffic that occurs due to the project. Includes recommend measures to deal with traffic risk
  - **5) Transport of Hazardous Material** Approach and Guidelines for transporting hazardous material, including a hazard assessment and emergency response plan.
  - **6)** Disease Prevention Includes the recommended interventions and methods to protect the community from communicable diseases and vector borne diseases
  - 7) Emergency Response and Preparedness This sub

https://www.ifc.org/wps/wcm/connect/eeb82b4a-e9a8-4ad1-9472-f1c766eb67c8/3%2BCommunity%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxTd

section requires a plan and response system in place to respond to any potential emergency that could occur due to the works or operation

- 4. <u>Construction and Decommissioning Guidelines</u><sup>5</sup>
  - 1) Environment covers the different environmental factors that could be affected by the construction activities including soil erosion, disturbance to water bodies, disturbance to air quality, wastewater discharges etc.
  - **2)** Occupational Health and Safety Different OHS risks due to construction or decommissioning works
  - **3)** Community Health and Safety Different Hazards that can occur due to the project and affect the surrounding community.
  - 4) Grievance Redress Service

#### PUBLIC CONSULTATION & GRIEVANCE REDRESS MECHANISMS

The consultations were carried out in the village for construction of school on March 2022 and Sep. 2023. One on one interviews were conducted. Thus, a questionnaire was formatted to cover the key environmental and social aspects related to the subproject.

The purpose of conducting the consultation activities is to achieve the following:

- 1. Introduce the construction subproject of the school.
- 2. Reveal information regarding the Grievance Mechanism resources in place.
- 3. Discuss anticipated environmental and social impacts associated with the project.
- 4. Suggest extensive mitigation measures to address potential environmental and social risks associated with the project activities.
- 5. Disclose information regarding the Grievance Redress Mechanism (GRM)

The formatted questionnaire was then addressed to 17 women and 52 men in the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

## Public Consultation Process

<sup>&</sup>lt;sup>5</sup> https://www.ifc.org/wps/wcm/connect/7d708218-2a9e-4fcc-879d-9d5051746e7d/4%2BConstruction%2Band%2BDecommissioning.pdf?MOD=AJPERES&CVID=nPtgy6x

### **Consultation Results:**

All interviewees expressed their hope that the completion of the project will enhance their life condition. All those interviewed expressed their support for the project. Therefore, they link the project with improving their living conditions and the development of the area economically. They also stressed the importance of providing a timetable for the completion of the project because they heard of many planned projects in their district but have not seen them being completed. The participants emphasized that they know that the project's benefits are far greater than its negative impacts and confirmed their willingness to cooperate with the project. All participants in the village expressed that the construction of the school will have a positive impact on their social daily life. Please refer to Annex 1 and Annex 2 for sample of the consultations for both men and women in these villages. As per the questionnaire prepared for individual interviews, the below are the main findings:

- 1) There is no infrastructure within the project area will be affected negatively due the construction activities.
- 2) The interests of the locals will not be affected in any way by the construction activities.
- 3) They agreed that the construction of school will have a positive impact from the social perspectives on the locals.
- 4) All agreed that it is governmental land property, there is no claims from any locals were recorded or alleged regarding the ownership of the land;
- 5) There is no vegetation covers, crops, plants, trees...etc. will be removed in order to execute the construction activities of these schools.
- 6) No deportation, dislocation of any of the local community will be needed due to these activities.
- 7) The construction of the project will enhance the social relationship among the locals; improve their achievements and performance.
- 8) Most locals agreed that the project needs more instructional signs near the schools' area.

## GRM Process

The Grievance Redress Mechanism is a procedure that aims to facilitate the most satisfactory solution and/or guidance to stakeholders seeking to submit their comments or complaints.

Before the start of the project, local community members will be

informed about the GRM via communication channels. For example, they will be informed verbally by their community leader or through social media online. Visible sign boards, hard copies of the GRM brochures, and online platforms will also be made available posting GRM-relevant contact information and an explanation of the grievance process.

The SFD established a central free hotline, and it is functioning properly in addition to the email and WhatsApp application. The digital system with multi-channels for receiving complaints, inquiries, feedback or comments like WhatsApp, Facebook, email and complain boxes for each subproject. Additionally, GRM focal points will be assigned at local level and central level to be in charge of handling complaints. The focal point will maintain a log and report on grievance management, which includes minutes of meetings, resolutions and recommendations as part of an annual project progress report.

The information for the central office is:

#	Name	Job Title	Phone Number	E-mail
1	Husam A. Shaael	GRM Team leader	07833344263 07733344263	Sfd.grm.iraq@gmail.com

Meanwhile, in order to comply with the WB requirements, SFD has assigned staffs as focal points with their cell phone numbers to be disseminated at each subproject level for receiving calls and handling complaints. The contact details will be posted on subproject signboard and the complaint boxes will be installed in each location as shown in the below table.

#### **Contact Information for GRM**

#	Name	Job Title	Phone Number	E-mail
1	Alaa Z. Hamad	SFD Team leader	07903995595	albayti7920@gmail.com
2	Hussein H. Abdulah	Env. officer		albayti7920@gmail.com
3	Kariem O. Kariem	GRM officer	07901968154	albayti7920@gmail.com

The process of managing complaints will be as follows:

The grievance note should be signed and dated by the aggrieved person. Where the affected person is unable to write, s/he should obtain assistance from the community to write the note and mark the letter with his/her thumbprint. Individuals who submit their comments or grievances have the right to request that their name be kept confidential, though this may mean that the social officer in charge of the GRM is unable to provide feedback on how the grievance is to be addressed. However, an anonymous complaint can receive a code and should be investigated appropriately and treated courteously.

After receiving the comments and complaints, they will be summarized and listed in a Complaints/Comments LogBook, containing the name/group of commenter/complainant, date the comment was received, brief description of issue, information on proposed corrective actions to be implemented (if appropriate), and the date of response sent to the commenter/complainant. Complaints should be sorted out according to complexity; Significantly, the GRM classifies feedback in two categories, high-level and standard, each has its own procedure as explained further below.

#### **High-Level Feedback**

Feedback received to be categorized as 'high' level instances will include issues that meet the following criteria:

- Incidents that caused or may potentially cause significant or great harm to the environment, workers, communities, or natural resources;
- Incidents which entail failure to implement environmental and social measures with significant impacts or repeated non-compliance with E&S policies;
- Incidents for which failure to address may potentially cause significant impacts that are complex and/or costly to reverse; and
- Incidents that may result in a fatality or some level of lasting damage or injury.

This type of feedback will be acknowledged, and an investigation will be launched by the PCU/PMO and any other relevant stakeholders with 24 hours during work days and within 48 hours if the feedback was received over the weekend. It should be noted that some types of incidents, including accidents and fatalities need to be reported to the World Bank. This guidance is provided in the Environment & Social Incident Response Procedures.

#### Standard-Level Feedback

If the identity of the aggrieved person is known and the grievance is classified

as 'standard', the acknowledgement of grievance will be within 3 working-days and the response will be within 20 working-days (depending on the type of grievance i.e. high or standard). The GRM Social Officer will keep a grievance log and report on grievance management (i.e. minutes of meeting, recommendations, and resolutions made) as part of annual project progress reports. At the 20 business-day mark, if a complaint/question is still pending, the GRM focal point will provide an update to the aggrieved person and inform them of the reason of delay in resolving their case, and provide the date for which a response will be provided.

Aggrieved people who are dissatisfied with the outcome of their complaint can appeal the decision by resubmitting their complaint to the GRM Social Officer within 30 working days of receiving a response to the original submitted grievance. Subsequently, the GRM Social Officer and other relevant personnel have 30 working days to investigate and address the issue. Additionally, the GRM Social Officer has 10 working days to prepare a comprehensive response, including the findings of the investigation and the rationale of the determination. Accordingly, within a maximum of 40 working days, the appeal case should be closed.

Lastly, if the aggrieved person is still not satisfied with the solution provided, s/he has the option to go to court.

Individuals who submit their comments or grievances have the right to request that their name be kept confidential. An anonymous complaint will receive a code and should be investigated appropriately and treated courteously. Ensuring confidentiality when dealing with cases of sexual harassment, sexual exploitation and sexual abuse. In order to mitigate those issues/ complaints, assigning female GRM officer in case of facing any SEA/SH incidents, in addition, all GRM officers/ focal points must be trained on how to handle SEA/SH related grievances.

In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress System (GRS) can also be approached for reporting and resolving issues.

#### Disclosure activities

As soon as the site-specific ESMP gets clearance from the World Bank and approval from the Ministry of planning, the following disclosure procedures will be adapted. A final report, in English and in local language, will be published on the WB, SFD and Ministry of Planning

	websites and also will be available locally (such as at local SFD office.		
INSTITUTIONAL C	APACITY BUILDING		
Will there be any capacity building?			

## PART B: SAFEGUARDS SCREENING AND TRIGGERS

ENVIRON	ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS							
		Activity / Typology	Status	Triggered Actions				
	1.	Re/construction of private homes, housing estates, public buildings, or facilities and installations for public services (e.g. substations, water treatment plants, pumping stations or similar)	[X] Yes [ ] No	This subproject is construction of 6-class school.				
Will the	2.	Reconstruction of / impacts on surface drainage system	[ ] Yes [X] No	The subproject doesn't have an impact on Surface drainage system				
site activity include/in	3.	Activities in Historic building(s) and districts	[ ] Yes [X] No	The construction activities do not take place anywhere near historic buildings or districts and				
volve any of the following?	4.	Required acquisition of land or temporary / permanent impacts on livelihoods	[ ] Yes [X] No	No land acquisition is required for this subproject as the activities will be taking the school will be constructed on state owned land.				
	5.	Handling or presence of hazardous or toxic materials	[ ] Yes [ X] No	There are no toxic or hazardous materials generated by the project.				
	6.	Impacts on forests and/or protected areas	[ ] Yes [X] No	There are no forests or protected areas surrounding the subproject area.				
	7.	Risk of unexploded ordinance (UXO)	[ ] Yes [ <mark>X</mark> ] No					
	8.	Traffic and Pedestrian Safety	[X] Yes [ ] No	If "Yes", see Part C				

# PART C: MITIGATION MEASURES/ CONSTRUCTION PHASE

No.	Potential Impacts	Mitigation Measures
1	General	<ol> <li>The local construction and environment inspectorates and communities have been notified of upcoming activities.</li> </ol>
	Conditions	2) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works).

No.	Potential	Mitigation Measures
110.	Impacts	Minigation Measures
		3) The contractor must take reasonable steps to prevent unauthorized people
		accessing the site.
		4) All guidelines from the WB and national instruction should be followed to
		prevent or mitigate the transmission of COVID-19 related to this context.  5) All legally required permits have been acquired for construction and/or
		rehabilitation.
		6) Workers' PPE will comply with international good practice (always hardhats,
		as needed masks and safety glasses, harnesses and safety boots)
		7) The Contractor formally agrees that all work will be carried out in a safe and
		disciplined manner designed to minimize impacts on neighbouring residents
		and environment.
		8) There is posted material indicating the nearest police station and hospital (with accident and emergency facilities).
		9) Prohibit the burning of waste on site.
		10) Provide a first aid kits in different places of the work site with the
		appropriate number of materials given the number of workers on site. The
		workers will be noted about the locations of the first aid kits and trained how
		to use it.
		11) There are fire extinguishers which should be distributed within the working area.
		12) If work involving the use of flammable materials is being carried out or any
		other material that might make any danger, stop people smoking and do not
		allow other work activities involving potential ignition sources to take place
		nearby.
		13) Providing site boundaries (if any) by installing suitable physical boundaries
		(barriers, tape or fence).
		14) Marking excavation holes (if any) with physical boundaries (barriers, tape or fence).
		15) The contractor should put up barriers or covers in the area of openings and
		excavations if any.
		16) Clearance letter of explosive remnants of War (ERW) Unexploded Ordnance
		(UXO) should be obtained before commencing the work in the site area.
		17) Everyone who works on any site must have access to adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an
		area for storing and drying clothing and personal protective equipment
		(PPE).
		18) Contractor to ensure PPE (personal protective equipment) is used by all
		workers on site.
		19) Materials and equipment are tidily stacked, protected and covered where
		necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these
		items from weather conditions.
		20) Ensure that distance is maintained between drivers and workers when
		unloading construction materials and recommend that drivers remain in
		their vehicles whenever possible to avoid COVID-19.
		21) Appropriate signposting of the sites will inform workers of key rules and
		regulations to follow.
		22) The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and
		fatalities) as well as insurance for third party.
		23) Rigid obligations and penalties will be added to the
		contractor/subcontractors' contractual agreements in order to guarantee
		child labor is prohibited in the project. Penalties to be applied in cases where
		workers under the age of 18 are hired.
		24) The contractor must clean up and rehabilitate all sites prior to handing over.

No.	Potential Impacts	Mitigation Measures
		<ul> <li>25) Actions to make the school more energy efficient, such as use of natural light and ventilation which may also reduce the reliance on generators and other sources for energy should be considered.</li> <li>26) The new building shall be designed, constructed, and operated in full compliance with local building codes, local fire department regulations, local legal/insurance requirements, and in accordance with an internationally accepted L&amp;FS standard. A suitably qualified L&amp;FS professional acceptable to the Bank and hired by the Borrower shall prepare and submit a L&amp;FS Master Plan, including preliminary drawings and specifications, and certify that the design meets the requirements of WBG General EHS guidelines. This professional should conduct a review of L&amp;FS systems as part of the commissioning tests for new and renovated buildings and certifies that construction of the L&amp;FS systems has been carried out in accordance with the accepted design.</li> </ul>
	Generation,	<ol> <li>Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities.</li> <li>Construction and demolition waste, if any, will be separated from general</li> </ol>
	storage, disposal	refuse, organic, liquid and chemical wastes by on-site sorting and stored in
	of	<ul><li>appropriate containers.</li><li>3) Construction waste will be collected and disposed properly by licensed collectors to authorized area.</li></ul>
2	constructio	4) The records of waste disposal will be maintained as proof for proper
	n, hazard,	management as designed. 5) Whenever feasible Contractor will reuse and recycle appropriate and viable
	and	materials 6) Simple waste management plan for specific waste streams must be developed.
	domestic	7) General waste must be collected and transported to the approved disposal sites.
	waste <sup>6</sup>	8) Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors.
		<ul> <li>9) Waste containers must be located at each worksite with sufficient numbers.</li> <li>1) Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/truck shall be collected for safe transport outside the site for recycling, transport or disposal at approved sites to be nominated by the Municipality and the Ministry of Health and Environment</li> </ul>
9	Hazardous	2) The site will be cleaned from all wastes frequently and wastes will be stored in
3	wastes and materials <sup>7</sup>	safe containers until transported  3) The waste shall be transported by specially licensed Transporters and disposed of in the special group to be determined by the authority.
		of in the special areas to be determined by the authority.  4) Paints containing solvents, solvents or lead-based paints might be used shall not be used as per requirements, instructions and coordination with the Ministry of Science and Technology
		5) Empty containers of treatment chemicals shall be returned to suppliers.
4	Air quality <sup>8</sup>	<ol> <li>Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust when necessary</li> <li>There will be no open burning of construction / waste material at the site.</li> </ol>
		3) All machinery will comply with Iraqi emission regulations, shall be well maintained and serviced and there will be no excessive idling of construction

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 $<sup>^6 \, \</sup>underline{\text{https://www.ifc.org/wps/wcm/connect/456bbb17-b961-45b3-b0a7-c1bd1c7163e0/1-6\%2BWaste\%2BManagement.pdf?MOD=AJPERES\&CVID=nPtgwEW}$ 

<sup>&</sup>lt;sup>7</sup> https://www.ifc.org/wps/wcm/connect/90231ba8-5bb3-40f4-9255-eaf723d89c32/1-

 $<sup>\</sup>frac{5\%2BHazardous\%2BMaterials\%2BManagement.pdf?MOD=AJPERES\&CVID=nPtgwml}{8} \ \frac{1}{1} \frac{1}{1}$ 

<sup>1%2</sup>BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

No.	Potential	Mitigation Measures
	Impacts	
		vehicles at sites.
		4) Providing some indigenous species of vegetation, which will also reduce dust
		level.
5	$Noise^9$	1) Construction noise will be limited to restricted times agreed to in the permit
		<ul><li>2) All the workers will be supplied with full safety measures including earmuffs.</li><li>1) Procedures will be put in place for rapid response to accidental spills of fuels,</li></ul>
	Runoff	lubricants and other toxic or noxious substances, and for their recovery and
6	water and	appropriate disposal
	1	2) Construction vehicles and machinery will be washed only in designated areas
	drainage systems	where runoff will not pollute natural surface water bodies 3) There will be no unregulated extraction of groundwater, nor uncontrolled
	systems	discharge of process waters, cement slurries, or any other contaminated waters
	G 1	into the ground or the water resource.
7	Ground water	Sewage from construction offices and rest areas will be collected in septic tanks and
	water quality	transferred by trucks to the nearest sewage treatment plant by authorized contractors.
	quanty	1) The site will be clearly visible, and the public warned of all potential hazards by
		signposting and barriers / fencing
		2) In compliance with national regulations, the Contractor will ensure that the
8		construction site is properly secured, and construction related traffic regulated.  3) Adjustment of working hours to local traffic patterns, e.g., avoiding major
	Traffic	transport activities during rush hours or times of livestock movement
		4) If required, active traffic management by trained and visible staff at the site for
		safe passage for the public 5) Ensuring safe and continuous access to all adjacent office facilities, shops and
		residences during construction
		1) Provide adequate signage to prevent accidental falling into open areas
		2) All guidelines from the WB and national instruction should be followed to prevent or mitigate the transmission of COVID-19 related to this context.
		3) The contractor should develop and implement "EHS Procedures".
		Include Construction OHS Plan (submitted and approved by the Resident Engineer)
		prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk
		of sinking, Electrocution, and Safety of equipment.
	Occupation	
	al and	<ul> <li>4) Deployment of HSE procedures for the construction personnel.</li> <li>5) Ensure that workers receive advice and instructions on how to conduct daily</li> </ul>
9	community	self-monitoring and report the most common symptoms for COVID-19.
9	health &	6) Create and train a COVID-19 response team, comprising contractors, managers
	safety	and workers, with clear responsibility.  7) During the loading and unloading of debris specific measures should be applied:
	conditions	a. Covering the trucks using polyethylene sheets to avoid the falling of debris
		b. Trucks should use unpopulated routes as much as possible
		8) For proper implementation of Community Health and Safety mitigation measures during construction, it is essential to establish and sustain an open
		and transparent dialogue between MoP/contractor and the affected communities
		in full compliance with the WB standards related to stakeholder engagement
		activities.
		10) Apply the concept of universal access to the design and construction of buildings or any structures where technically and financially feasible (i.e. access to all
		users, including persons with disabilities such as wheelchair users)

<sup>&</sup>lt;sup>9</sup> https://www.ifc.org/wps/wcm/connect/4a4db1c5-ee97-43ba-99dd-8b120b22ea32/1-7%2BNoise.pdf?MOD=AJPERES&CVID=nPtgwZY

No.	Potential Impacts	Mitigation Measures					
		<ul> <li>11) A grievance mechanism should be made available to community people</li> <li>12) Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to have the contractors adhere to all World Bank policies and regulations and is in compliance with measures listed in the ESMP.</li> </ul>					
10	Social Impacts	<ol> <li>Reducing impacts on the community through community and neighbour engagement.</li> <li>Provide the proper GRM for handling complaints</li> </ol>					
11	Child labor	<ol> <li>Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exists in the subproject</li> <li>The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</li> <li>The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance</li> <li>The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities.</li> <li>Implement all facets of the established grievance mechanism, ensuring anonymous channels are available.</li> </ol>					
12	Accessibilit y	<ol> <li>Schools should be accessible to all students with disabilities, including wheelchair users.</li> <li>The project should have measures to make schools accessible to boys and girls, such as including separate toilets for boys and girls,</li> <li>Where culturally appropriate, conduction a sensitization campaign for parents, and training/hiring female teachers are necessary.</li> </ol>					

Mitigation Measures during Operation Phase.

		mingation measures during Operation			
	Receptor	Mitigation Measures	Responsibility	Supervision	Cost in
1	• Air quality	• The net impact of the Project on air quality is not significant and temporary and will be limited to the Construction Period.	Not Applicable	Not Applicable	Not Applicable
2	• Soil	Not applicable	Not applicable	Not applicable	Not applicable
3	Sanitary Waste	• Wastewater (sanitary waste) will be collected in the collection tank (septic tank) and then transported periodically to the nearest authorized wastewater treatment plant as there is no sewage network available in the area of these schools.	Local authorities	Local authorities	municipal budget
4	Noise	Negligible noise levels associated with the operation of the school during operating time.	Not Applicable	Not Applicable	Not Applicable
5	Solid and hazardous wastes	<ul> <li>During the operational period, some littering and waste generation resulting from the repair activities will occur. Littering may occur due to wind action.</li> <li>In addition, the used oil produced from engines (generator if present) can be stored in an air-tight container that can be sealed with a screw on cap and then transferred to the nearest recycling facility i.e the hazardous waste, the storage, collection, transportation and disposal of hazardous waste should be handle properly.</li> <li>All waste should be deposed through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated</li> </ul>	Local Authority (Municipality)	Local Authority (Municipality)	Within municipal budget
6	Flora & Fauna	Not applicable	Not Applicable	Not Applicable	Not Applicable
7	Topography and landforms	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	Handling Complains	The continued operation of a GRM for one year following operating of the schools for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.	Local authorities	Local authorities And E&S specialist	No cost
9	Health and Safety	• Provision signage to improve visibility and overall safety of roads, particularly along stretches located near schools or other locations	- Contractor - Local	Resident engineer	Included in

	Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated Cost in
		<ul> <li>where children may be present.</li> <li>Having a clear set of emergency Plan and Procedures which include fire safety, fire drills, etc.</li> <li>provision of health and safety information;</li> <li>regular inspection, review and recording of EHS performance.</li> <li>Safety measures for storage of fuel should be followed.</li> <li>Ensure that, (i) there is minimum disturbance to the students from generator operations. (ii) safety systems in place in case of an accident.</li> <li>An appropriate training and management actions for maintaining water quality, water supply volumes and maintenance of sanitation systems should be included.</li> </ul>	Authority		contractor
10	Accessibility:	<ul> <li>Schools should be accessible to all students with disabilities, including wheelchair users.</li> <li>Where culturally appropriate, conduction sensitization campaign for parents, training/hiring female teachers are necessary.</li> </ul>	- Contractor - Local Authority	Resident engineer	Included in contractor cost
		Total cost US\$ (Operation phase)			No Cost

# PART D: MONITORING PLAN/ CONSTRUCTION PHASE

	Impacts	otential		Responsibility		Additional Cost in USD	
No.		Mitigation Measures	Mitigation Measures Monitoring	Implement ation	Monitoring	Mitigation measures	Monitoring
1	General Conditions	<ol> <li>The local construction and environment inspectorates and communities have been notified of upcoming activities</li> <li>The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)</li> <li>All legally required permits have been acquired for construction and/or rehabilitation</li> <li>The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment.</li> <li>Workers' PPE will comply with international good practice (Always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>There is posted material indicating the nearest police station and hospital (with accident and emergency facilities).</li> <li>The contractor must take reasonable steps to prevent unauthorized people accessing the site.</li> <li>Prohibit the burning of materials on site.</li> <li>Provide a first aid kits in different places of the work site with the appropriate number of materials given the number of workers on site. The workers will be noted about the locations of the first aid kits and trained how to use it.</li> <li>There are fire extinguishers which should be distributed within the working area.</li> <li>If work involving the use of flammable materials is being carried out or any other material that might make any danger, stop people smoking and do not allow other work activities involving potential ignition sources to take place nearby.</li> <li>Providing site boundaries (if any) by installing suitable physical boundaries (barriers, tape or fence).</li> </ol>	Bi-monthly: record of all the licenses and permits obtained;  Compliance with the HSE requirements	Contractor	Resident Engineer and E&S specialist	No additional cost	No additional cost

	Potential	Mitigation Measures		Respor	sibility	Additional Cost in USD	
No.	Impacts		Monitoring	Implement ation	Monitoring	Mitigation measures	Monitoring
		<ol> <li>Marking excavation holes with physical boundaries (barriers, tape or fence)</li> <li>The contractor should put up barriers or covers in the area of openings and excavations.</li> <li>Store building materials (such as pipes, manhole rings, and cement bags) so that they cannot topple or roll over.</li> <li>Everyone who works on any site must have access to adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an area for storing and drying clothing and personal protective equipment (PPE).</li> <li>Contractor to ensure PPE (personal protective equipment) is used by all workers on site.</li> <li>Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions.</li> <li>Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> <li>All Practical measures to help employers, workers and the self-employed prevent and mitigate the transmission of COVID-19 in construction work should be followed.</li> <li>All guidelines from the WB and national instruction should be followed to prevent or mitigate the transmission of COVID-19 related to this context.</li> <li>The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and fatalities) as well as insurance for third party.</li> <li>Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to guarantee child labor is prohibited in the project. Penalties to be applied in cases where workers under the age of 18 are hire.</li> <li>The contractor must clean up and rehabilitate all sites</li> </ol>					

	Potential	d		Respor	sibility	Additional Cost in USD	
No.	Impacts	Mitigation Measures	Monitoring	<b>Implement</b> ation	Monitoring	Mitigation measures	Monitoring
		prior to handing over.  26) Monitoring actions related to working in trenches and foundations as needed for constructing new buildings  27) The new building shall be designed, constructed, and operated in full compliance with local building codes, local fire department regulations, local legal/insurance requirements, and in accordance with an internationally accepted L&FS standard. A review of L&FS systems should be conducted as part of the commissioning tests for new and renovated buildings and certifies that construction of the L&FS systems has been carried out in accordance with the accepted design.  28) Contractor clauses in case of any non-compliances including (initial warning, penalties, contract termination etc) will be followed and reviewed as in annex 4.					
2	Generation , storage, disposal of constructio n, hazard, and domestic waste	<ol> <li>Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities.</li> <li>Construction and demolition waste, if any, will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>Construction waste will be collected and disposed properly by licensed collectors to authorized area.</li> <li>The records of waste disposal will be maintained as proof for proper management as designed.</li> <li>Whenever feasible Contractor will reuse and recycle appropriate and viable materials</li> <li>Simple waste management plan for specific waste streams must be developed.</li> <li>General waste must be collected and transported to local council approved disposal sites.</li> <li>Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site</li> </ol>	Weekly site inspections and verifying the records on waste disposal	Contractor	Resident Engineer And E&S Specialist	No additional cost	No additional cost

	No. Potential Impacts	Mitigation Measures		Responsibility		Additional Cost in USD		
No.			Monitoring	Implement ation	Monitoring	Mitigation measures	Monitoring	
		through licensed contractors.  9) Waste containers must be located at each worksite with sufficient numbers.  10) Guidelines from the WB and national instruction should be followed to prevent or mitigate the transmission of COVID-19 related to this context.  11) Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority.						
3	Handling of hazardous wastes and materials	1) Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/truck shall be collected for safe transport outside the site for recycling, transport or disposal at approved sites to be nominated by	Weekly site inspections and verifying the records on waste disposal	Contractor	Resident Engineer And E&S specialist	No additional cost	No additional cost	
4	Deteriorati on of	1) Demolition debris, excavated soil, and aggregates shall be kept in a controlled area and sprayed with water mist to reduce debris dust	Ambient air quality test, 1 time prior to	Contractor	Resident	Additional cost of	Testing is done by	
	air ${ m quality}^{10}$	<ul><li>During pneumatic drilling or breaking of pavement and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at the site</li><li>The surrounding environment (sidewalks, roads) shall be</li></ul>	construction to obtain the baseline Air quality		Engineer E&S	water	accredited  Laboratorie	

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https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

	Potential	Mitigation Measures		Respon	sibility	Additional Cost in USD	
No	Impacts		Monitoring	Implement ation	Monitoring	Mitigation measures	Monitoring
		kept free of soil and debris to minimize dust  4) There will be no open burning of construction/waste material at the site.  5) All guidelines from the WB and national instruction should be followed to prevent or mitigate the transmission of COVID-19 related to this context.  6) All machinery will comply with Iraqi emission regulations, shall be well maintained and serviced and there will be no excessive idling of construction vehicles at sites.  7) Providing some indigenous species of vegetation, which will also reduce dust level.	parameters:  PM10, PM2.5, SO2, NOx, CO, Ozone and HC  Compliance with dust abatement measures (Annex 3)		specialist	500	s.  Additional cost  750 US
5	Increased level of noise <sup>11</sup>	<ol> <li>Construction noise will be limited to restricted times agreed to in the permit</li> <li>All the workers will be supplied with fully safety measures including earmuffs.</li> <li>Compliance with the time limitations;</li> <li>Switching off the equipment not in use;</li> <li>Use of protective gear</li> </ol>	Weekly site inspection (Annex 3)	Contractor	Resident Engineer E&S specialist	No additional cost	No additional cost
6	Disruption of the runoff water and drainage systems	<ol> <li>Procedures will be put in place for rapid response to accidental spills of fuels, lubricants and other toxic or noxious substances, and for their recovery and appropriate disposal</li> <li>Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies</li> <li>There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers;</li> </ol>	Weekly site inspection during rainy season;  Bi-weekly site inspection during dry seasons:  Signs of spillage of hazardous materials  Testing in case of accidental spills of	Contractor	Resident Engineer E&S Specialist	additional cost:  contingenc y for removal of accidental hazardous spills  1000 US \$	No additional cost

<sup>11</sup> https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS

	Potential	Mitigation Measures		Respor	nsibility	Additional Cost in USD	
No.	Impacts		Monitoring	Implement ation	Monitoring	Mitigation measures	Monitoring
7	Deteriorati on of ground water quality	Sewage from construction offices and rest areas will be collected in septic tanks and transferred by trucks to the nearest sewage treatment plant (Annex 3)	hazardous materials  Weekly site inspection during rainy season; Bi-weekly site inspection during dry seasons  Water testing: in case of accidental spills of hazardous materials: pH, Turbidity, (EC), Color, Total Suspended Solids (TSS), (TDS), (COD), (BOD),	Contractor	Resident Engineer E&S specialist	No additional cost	Testing done by  Accredited Laboratorie s.  Additional cost  500 US \$
8	Disruption of traffic	<ul> <li>1)In compliance with national regulations the Contractor will ensure that the construction site is properly secured and construction-related traffic regulated.</li> <li>2)The site will be clearly visible and the public warned of all potential hazards by signposting and barriers/fencing</li> <li>3)Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes.</li> <li>4)Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement</li> <li>5)Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction</li> </ul>	Monthly site surveillance for the presence of fencing/barriers and warning signs, and traffic speed limitations	Contractor	Resident engineer PMO	No additional cost	No additional cost
9	Deteriorati on of health &	<ol> <li>Provide adequate signage to prevent accidental falling into open areas</li> <li>Fencing of the work areas.</li> <li>The contractor should develop and implement "EHS</li> </ol>	Inspection and photo evidence Maintaining records of	Contractor	Resident Engineer	No additional cost	No additional cost

	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
No.				Implement ation	Monitoring	Mitigation measures	Monitoring
	safety conditions 12	Procedures".  4) Include the Construction OHS Plan (submitted and approved by the Resident Engineer) prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk of sinking, Electrocution, and Safety of equipment.  5) To ensure worker safety, health insurance must be provided to all type of workers  6) All guidelines from the WB and national instruction should be followed to prevent or mitigate the transmission of COVID-19 related to this context.  7) Deployment of HSE procedures for the construction personnel  8) Compliance with local fire department regulations, local legal/insurance requirements, and in accordance with an internationally accepted L&FS standard.	injuries and accidents with cause and location		E&S Specialist		
10	Social Impacts	<ol> <li>Reducing impacts on the community through community and neighbour engagement.</li> <li>Ensuring confidentiality when dealing with cases of sexual harassment, sexual exploitation, and sexual abuse. In order to mitigate those issues/ complaints, assigning female GRM officer in case of facing any SEA/SH incidents, in addition, all GRM officers/ focal points must be trained on how to handle SEA/SH related grievances.</li> <li>Ensure that the Worker's Code of Conduct and corresponding training concerning the commitment of Labour towards the community and the different behaviour that should be avoided i.e., sexual harassment, sexual exploitation and sexual abuse.</li> </ol>	Weekly monitoring of response to complaints  Training on GRM + attendance sheet	Contractor	-Resident Engineer -E&S Specialist	No additional cost	No additional cost
11	Child labor	<ol> <li>Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject</li> <li>The PMO will oblige the contractor to keep a copy of IDs of</li> </ol>	Inspection and Bi-	Contractor	Resident Engineer	No additional cost	No additional cost

<sup>12</sup> https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxyx

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD		
				Implement ation	Monitoring	Mitigation measures	Monitoring	
		laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).  3) The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance  4) The code of conduct for workers/contractors should be introduced to prevent misconduct, including prevention of sexual harassment, and also training and awareness raising for workers should be continued, through daily toolbox talks and other training opportunities.  5) The monitoring of workers' compliance with the Code of Conduct when interacting with the surrounding communities.  6) Implement all facets of the established grievance mechanism, ensuring anonymous channels are available.	weekly monitoring Signed Worker's Code of Conduct Trainings on Code of Conduct + attendance sheet GRM		E&S Specialist			
12	Accessibil ity	<ol> <li>Schools should be accessible to all students with disabilities, including wheelchair users.</li> <li>The project should have measures to make schools accessible to boys and girls, such as including separate toilets for boys and girls,</li> <li>Where culturally appropriate, conduct a sensitization campaign for parents, and training/hiring female teachers are necessary.</li> </ol>	Resident engineer	Contracto r	Resident engineer E&S Specialist	No additional cost	No additional cost	
Expected additional mitigation costs:  USD 1500								
Expected monitoring costs:								

# **ANNEXES**

# **Annex 1: Consultations Photos**





Public Consultations at **Al-Obaid** Village



Public Consultations at **Al-Younis** Village

## Annex (2): Sample individual interviews for both men and women



#### استبيان الفريق البيني والاجتماعي استبيان الفريق البيئي والاجتماعي اسم المشروع الناء مدرسة حيث اسم المشروع: ١٠٠١ د مدر م ٦٦ من القضاء ..ا.سوعردس القضاء البورة التا القرية اليبيع الناحية ...المغروالسلاع الناحية الناع السياع الجنس: 🗖 ذكر الجنس: 🛘 ذكر العمر: ٥٧ سنة العمر: ٢٠ سنة المهنة: ن موظف متقاعد كاسب طالب وربة بيت المهنة: 🕝 موظف 🛭 مثقاعد 🔻 كاسب 🕝 طالب 🛭 ربة بيت هل هناك ادعاءات او مطالبات من قبل السكان المحلين يعاندية الارض المقام عليها المشروع هل هناك ادعاءات او مطالبات من قبل السكان المحليين بعاندية الارض المقام عليها المشروع هل ستضرر مصالح السكان القاطنين بالقرب من المشروع بسبب الاعمال الانشانية عند انشاء او اعادة تأهيل المشروع هل ستضرر مصالح السكان القاطنين بالقرب من المشروع بسبب الاعمال الانشانية عند انشاء او اعادة تأهيل المشروع 75 E نعم 🔻 کلا ٣. هل هناك اي بني تحتية مؤقتة او دانمية تلعب دورا اساسيا في النشاطات الحياتية اليومية للسكان ستتأثر عند اعمال انشاء او ٣. هل هناك اي بني تحتية مؤقتة او دانمية تلعب دورا اساسيا في النشاطات الحياتية اليومية للسكان ستتأثر عند اعمال انشاء او اعادة تأهيل المشروع اعادة تأهيل المشروع نعم ص کلا نعم ۵کلا 🛮 ملاحظات هل ان اعمال انشباء او اعادة اعمار المشروع ستتسبب باجراءات اعادة توطين شخص او اشخاص الى مناطق جديدة هل ان اعمال انشاء او اعادة اعمار المشروع ستسبب باجراءات اعادة توطين شخص او اشخاص الى مناطق جديدة 3 SK □ ملاحظات ۵ کلا □ ملاحظات هل يوجد لموقع المشروع تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال الانشاء او اعادة التاهيل ؟ هل يوجد لموقع المشروع تأثيرات اجتماعية سلبية بالمنطقة نتيجة اعمال الانشاء او اعادة التاهيل ؟ نعم ۵ کلا ם צול هل هناك تغييرات ديمغرافية او ضرر في النميج الاجتماعي من جراء اعمال الانشاء او اعادة التاهيل ؟ ٩. هل هناك تغييرات ديمغرافية او ضرر في النسيج الاجتماعي من جراء اعمال الانشاء او اعادة التأهيل ؟ الع كلا ا کلا ٧. هل اعمال انشاء او اعادة تاهيل المشروع ستؤثر بشكل سلبي على المجاميع الاكثر ضعفا وهشاشة ؟ لا. هل اعمال أنشاء او اعادة تاهيل المشروع ستؤثر بشكل سلبي على المجاميع الاكثر ضعفا وهشاشة ؟ نعم 🕝 کلا 🗆 ملاحظات ا کلا ٨. هل يحتاج المواطنون المقيمون بالقرب من المشروع الى وضع علامات تحذيرية او استدلالية لزيادة معدلات الامن والامان ٨. هل يحتاج المواطنون المقيمون بالقرب من المشروع الى وضع علامات تحذيرية او استدلالية لزيادة معدلات الامن والامان لمستخدمي الطريق؟ 🖒 نعم 🏻 🖒 کلا ہ کلا ں نعم 🗖 ملاحظات 🗖 ملاحظات ٩. بسبب اعمال الانشاء او اعادة اعمار المشروع هل تتوقع ازالة محاصيل زراعية او اشجار او اية غطاء نباتي تعود عانديته ٩. بسبب اعمال الانشاء أو اعادة اعمار المشروع هل تتوقع ازالة محاصيل زراعية أو اشجار أو أية غطاء نبائي تعود عائديته لمواطنين او سكان محليين؟ لمواطنين او سكان محليين؟ JS B ں نعم 📗 کلا □ ملاحظات □ ملاحظات ١٠. هل سيؤثر المشروع في الكثافة السكانية ( التوزيع السكاني )؟ ١٠ . هل سيوثر المشروع في الكثافة السكانية ( التوزيع السكاني )؟ □ ملاحظات و نعم 🕝 کلا □ ملاحظات 🗖 نعم ١١. هل تعتقد ان عملية أنشاء او اعادة تأهيل المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق ١١. هل تعتقد ان عملية أنشاء او اعادة تأهيل المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع القريبة من المشروع ا کلا □ ملاحظات 🛛 ملاحظات ا نعم □ کلا شكراً على وقتكم .... شكراً على وقتكم ....

استبيان الفريق البيني والاجتماعي	استبيان الصندوق الاوتماعي للنتمية لمعاطقة البضار
اسم المشروع: ١ ـــــــــــــــــــــــــــــــــــ	جزيزتي المواطلة جزيزي المواطلة فتريخ وزارة الشطيطة المصنوق الاجتماعي تلتمية ؟ مسح ميداني تطرحي التشاور الموضعي مع ايناه اطرية حول الازمرات المسيدية إلاجتماعية التي سيتر انتقادها بقسموني تقييد المستريح في القرية ومدن الراءا على الموضع المطلي والبيئة المحيطة، ادون الإيمام وصفح وديكية عن المتناول الثاني ونزا الحاجة لذكر الرائد الوسال.
المهنة:  - و مطلف المعادة المهنة:  - المهنة:  - و مطالب المكان المحليين بعائدية الإرض المقام عليها المشروع - المعادة	- النسا معروب به جه وسف مي الرباق بالمن المقاللي المعاللي المقاللي المقالل
ق. هل أن أعمال أنشاء أو أعادة أعمار المشروع ستتسبب باجراءات أعادة توطين شخص أو أشخاص الى مناطق جديدة     من مم كلا ملاحظت     مل بوجد لموقع المشروع تأثيرات اجتماعية سلبية بالمنطقة نتيجة أعمال الانشاء أو اعادة التأهيل ؟     من مم كلا ملاحظت     مل هناك تغييرات ديمغرافية أو ضرر في النسيج الاجتماعي من جراء اعمال الانشاء أو اعادة التأهيل ؟     من مم كلا ملاحظت     ما معاد الشاء أو اعادة تأهيل المشروع ستؤثر بشكل سلبي على المجاميع الاكثر ضعفا و هشاشة ؟     لا اعمال انشاء أو اعادة تأهيل المشروع ستؤثر بشكل سلبي على المجاميع الاكثر ضعفا و هشاشة ؟	<ul> <li>بن مشك عادات او مشابهات من قبل السكان المطبين بعادية الارض المقام طبيها النشروع؟.</li> <li>بن سياون هذاك مترر طبي الشنطات و المسالح الوصة اللاطلي بسبب الاحمل الإشاعية للمشروع؟.</li> <li>بن سياون هذاك مترر طبي الشنطات و المسالح الوصة اللاطلي بسبب الاحمل الإشاعية للمشروع؟.</li> <li>بن هفات اي بني تشابة ستائل بسبب الاحمل الإشاعية للمشروع؟.</li> <li>بن مشك اي بني تشابة ستائل بسبب الاحمل الإشاعية للمشروع؟.</li> </ul>
□ ندم □ ككل □ ملاحظات   ٨. هل يحتاج المواطنون المقيمون بالقرب من المشروع الى وضع علامات تحذيرية او استدلالية لزيادة معدلات الامن والامان   كما تمام المعارفية؟   كما ندم □ ككل □ ملاحظات   ٩. يسبب اعمال الاتضاء او اعادة اعمار المشروع هل تتوقع ازالة محاصيل زراعية او اشجار او اية غطاء نباتي تعود عاديته  لدواظن او نكان محلين؟	<ul> <li>ه. هذاه احتفاظ توطيق الشخص او الحفاظ شخاص پدیده الآمة المشروع في القريمة?</li> <li>ن. نحم في الله المحلي بصورة حاليمة النجمة المشاريع المقاسة?</li> <li>خ. سوف ينافر المجارية المحلي بصورة حاليمة النجمة المشاريع المقاسة؟</li> <li>ن. نحم في الله المحلي المحلمات</li> <li>ا. في اعتمال الشاء او اعتمال العبل المحلم المحلم المحلم الاكثر المحلمة والنسام والمحلمين؟ ؟</li> <li>ن. نحم في كال إن المحلمات</li> <li>ن. نحم في كال إن المحلمات</li> </ul>
الم المستود المسل المستود الم	<ol> <li>في تقوق وزالة معتصيل زراعية أو الشيار أو اينة طباء نياتي تنود علتيته تعواطين أو سئان مطين بسبب الاحدال الاشاعية الشخروجاد.</li> <li>أن من أو كالا إن ملاحظات إن ملاحظات أن ملاحظات أن ملاحظات أن المراحظات أن المراحظات أن المراحظات أن المراحظات أن الملحظات أن الملحظات أن الملحظات أن الملحظات أن الملحظ الملحظات أن الملحظ الملحظات أن الملحظة الملحظات الملحظ</li></ol>
شكراً على وقتكم	مریب می میرون در استان از استان استان از استان از استان از استان

الدائيات المطاويل الإجاباتي بالثانية المحافظة أنبأ أن المحافظة ال	استبيان الصندول الإجتماعي للتنمية تحداثلة - ترابر ر عورتي الموافقة عزيزي الموافق تعريف وزارة التنطيفة المستمول الاجتماعي التنمية ) سبح سياض توض التناور المجتمع مع ابناء الخرية حول الإمرادات اليومة والاجاماعية التني سيام التقافما بالمسروس الفيذ المشتريع في القريبة ومدن على المجلسم المستمي واليينة المحملة، رامين الإجابة بعدل وجبالية عن الاستميال القائم بون المعلية أنام الاسر أو رسيلة الانصالي .
مواهدوع: المباداة عبنام 1 بهت أميخريق المواشى عبد الوقريب السبالولية ليالاح عبد البودين عبر الدارات عبر الدارات	سوسدرو: اطائدة علاع ٦ عت قرق البوش سد الوغريب سد والقراسة عيد البوشي مدر عدد سد الدرسة
نيك رئيلاً رفق عدر الله كريان	السهاف موسرتات وخلب وطف الرياسات
). على ملك الاحاث الو مشايدة من طول السكان العمليون يعنيها الازمون المقالم شبية المطروع. الراحد السياح الله الاحمادة المساودات المساودا	<ul> <li>بر على هناك تدعيت او بطالبات من قبل قسانان قبحتين بحديث الارض قبطم طبها المشروع?.</li> <li>را نصر حريكات و مكالستان.</li> </ul>
<ul> <li>في خواري شاه سرر على إشتخاف و إمديني دي مرا تشاهي بينيه (دسل الاشارية المشروع).</li> <li>د ادم الله الله الله الله الله الله الله الل</li></ul>	<ol> <li>على سيفون هناك شور على الشاطات و المستاح طوسة كلاملي بسبب الإعمال الاشتهية للمشروع؟</li> <li>با احد آيان كلا ويمانك ويمانكات ويمانكات ويمانكات المشاطرة المشروع؟</li> <li>على هناك ابن بقية مطال بسبب الاحمال الاشتقية المشروع؟</li> </ol>
را حرا الله الله الله الله الله الله الله ال	ر عام الله وي المسلم الله الله الله الله الله الله الله ال
ا التاس المستقبل الم	د نمر گهٔ کالا و محکمتات ۱۰. عل سوف پنالر انجمای انجمای بصور 5 مطیع نتیجه انجمای
ان سر کهوند را در مختلفت د. اطر اصطر المشرخ با سعد دهی استان را شال سری طن الدینان ۱۳۵۶ شامه را داشت استان (۱۳۵۰ و المعالی) از	ر المر الحريقة والمقدّمة والمحتمدة المراجعة المراجعة المراجعة والمحتمدة المراجعة والمساورة المحتمدة والمحتمدة والمساورة المحتمدة والمحتمدة
<ul> <li>ام کی گاه کال نیاز میشد.</li> <li>در افزائیلی ژبان شداد روایت در شیار از اینه اطلال تیان شود علیب فیو مشیر و مشیر بدید. دوسی ویژبایی:</li> </ul>	ی امبر کی کا و در محمدالت ۳. مان توقع از الهٔ محاصل (راجهٔ این شاجر اور ایهٔ طاعات لیتی تعود جنسیته امواطنین و سنان محلین پسید، ۱۹ عمل ۱۹۵۰، شید
للقروا. مام محمد وللنطب	CLEANED NEW PUT
<ul> <li>من مورثر فحضروع في وعظمة السخاشة واستطيا هوم موطنتي من مدعج فقري في مقوية سبب فعشريخ والي مرفقة و كالياس وراحة وراحة في الهائدة الإستان المراحة اللهائد المراحة المراحة</li></ul>	<ul> <li>على مدورة المشاروع في الشاقة المكافية والمكافية فدوم مواطنين من مناطق نظري التي فقرية مسبب فاشتروع التي منطقاع؟</li> <li>عند 200 صداقة</li> </ul>
<ul> <li>ق. على عظة إن سارة فاسر و "ماه دائير المدروع لها فل بينظية من تشدية الانتشاعة بقاسية السدن فلطمين في مشاعق فشرية أمن معتمروع".</li> <li>كان عمر إن كذا و و دائستان.</li> </ul>	<ul> <li>هر خار معقد دن مداية فشاء أو احداد تاهل فاستروع تها كثر ايجابية من النحية الاجتماعية بالنحية السفان القاطلين في فسنطق فقريبة من تأمشروج!</li> <li>عال يد ي كلا إن سلامية لث</li> </ul>
شائر: على وتتكم	شاورا على وقتام

# **Ambient Air Quality Guidelines**

Dollutout	Iraqi Standards		WHO Standards	
Pollutant	Concentration	Average Time	Concentration	
CO.	10 ppm	8 hours	N/A	
СО	35 ppm	1 hour	N/A	
	0.1 ppm	1 hour	500 μg/m³	
SO <sub>2</sub>	0.04 ppm	24 hours	20 μg/m <sup>3</sup>	
	0.018 ppm	1 year	N/A	
NO <sub>2</sub>	0.05 ppm	24 hours	200 μg/m³	
NO <sub>2</sub>	0.04 ppm	1 year	40 μg/m <sup>3</sup>	
Ozone (O <sub>3</sub> )	0.06 ppm	1 hour	100 μg/m³	
PM <sub>10</sub>	150 μg/m³	24 hours	50 μg/m <sup>3</sup>	
PM <sub>2.5</sub>	65 μg/m³	24 hours	50 μg/m <sup>3</sup>	
FIVI <sub>2.5</sub>	15 μg/m <sup>3</sup>	1 year	15 μg/m <sup>3</sup>	
Total Suspended	350 μg/m³	24 hours	N/A	
Particles	150 μg/m³	1 year	N/A	
	10 t/Km <sup>2</sup> /month	30 days	N/A	
Falling Dust	(Residential Zone)			
railing Dust	20 t/Km <sup>2</sup> /month	30 days	N/A	
	(Industrial Zone)			
Hydrocarbons	0.24 ppm	3 hours	N/A	
	2 μg/m <sup>3</sup>	24 hours	N/A	
Pb	1.5 μg/m <sup>3</sup>	3 months	N/A	
	1 μg/m³	1 year	N/A	
Benzene	0.003 μg/m <sup>3</sup>	1 year	N/A	
Dioxin	0.6 pico g/m <sup>3</sup>	1 year	N/A	

## Noise:

Law no. 41 of the year 2015: Noise Protection and Control / Noise Limits for Different Working Zones

Туре	Allowable (dB)
Industrial	70
Commercial	70
Residential	55

### Water:

The table below shows the limits defined for discharges to both natural waters (water resources) and sewers (which generally have higher permissible discharge limits).

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
Color	-	-
Temperature	Less than 35°C	45°C
Suspended solids	60	750
рН	6-9.5	6 – 9.5
Dissolved Oxygen (DO)	-	-
Biochemical Oxygen Demand (BOD)	Less than 40	1,000
Chemical Oxygen Demand (COD)	Less than 100	-
Cyanide (CN <sup>-</sup> )	0.05	0.5
Fluoride (F <sup>-</sup> )	5.0	10
Free Chlorine (Cl <sub>2</sub> )	Traces	100
Chloride (Cl <sup>-</sup> )	<ul> <li>A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or less, the chloride concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</li> <li>B. If the ratio of the amount of water discharged to the amount of source water is more than</li> </ul>	600

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
	<ul> <li>1000:1 the wastewater discharge must not exceed a chloride concentration of greater than 600 mg/L.</li> <li>C. If the concentration of chloride in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</li> </ul>	
Phenol	0.01 – 0.05	5 – 10
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	<ul> <li>A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or less, the sulfate concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</li> <li>B. If the ratio of the amount of water discharged to the amount of source water is more than 1000:1 the wastewater discharge must not exceed a sulfate concentration of greater than 400 mg/L.</li> <li>C. If the concentration of sulfate in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</li> </ul>	300
Nitrate (NO <sub>3</sub> )	50	-
Phosphate (PO <sub>4</sub> <sup>3-</sup> )	3	-
Ammonium (NH <sub>4</sub> <sup>+</sup> )	-	-
DDT	Nil	-
Lead (Pb)	0.1	0.1
Arsenic (As)	0.05	0.05
Cupper (Cu)	0.2	-
Nickel (Ni)	0.2	0.1
Selenium (Se)	0.05	-
Mercury (Hg)	0.005	0.001
Cadmium	0.01	0.1
Zinc (Zn)	2.0	0.1

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
Chromium (Cr)	0.1	0.1
Aluminum (Al)	5.0	20
Barium (Ba)	4.0	0.1
Boron (B)	1.0	1.0
Cobalt (Co)	0.5	0.5
Iron (Fe)	2.0	15
Manganese (Mn)	0.5	-
Silver (Ag)	0.05	0.1
Total Hydrocarbons & Derivatives	Allows discharge of total hydrocarbons to water sources and A1 and A2 according to the concentrations and limitations set forth in the tables below; the concentration of hydrocarbons must be measured discharging to the water source. Hydrocarbons shall not be discharged to water sources A3 and A4. For rivers in continuous flow 10 mg/l according to the ratio of the amount of wastewater discharged to the amount of the water source should not be less than 1000:1.  For a river in a continuous flow 3 mg/L and in accordance with the ratio of the amount of the wastewater discharged to the amount of water source should not be 300:1 or less.	-
Sulfide (S <sup>2-</sup> )	Nil	3.0
Ammonia (NH <sub>3</sub> )	Nil	10
Ammonia gas (free NH <sub>3</sub> )	Nil	6.0
Sulfur dioxide SO <sub>2</sub>	Nil	7.0
Calcium Carbide CaC	Nil	Not allowed
Organic solvents	Nil	Not allowed
Benzene	Nil	0.5
Chlorobenzene	Nil	0.1
TNT	Nil	0.5
Bromine (Br <sub>2</sub> )	Nil	1-3

يجب على مقاول الإنشاء الالتزام بالإجراءات التالية:

#### جودة الهواء

- الترطيب المنتظم للطرق بالماء لمنع الغبار
- التحكم في نواتج الحفر والتسوية للحد من إنتشار الغبار.
- أي مواد بناء قابلة للتطاير (أسمنت جاف وخلافه) يتم تخزينها في أكياس محكمة الغلق وتغطيتها لمنع تولد الغبار.
- الاحتفاظ بالمازوت والزبوت والطلاء والمواد الكيميائية الأخرى المستخدمة في الموقع بأقل كميات ممكنة وتخزينها في حاويات محكمة الغلق للحد من الأبخرة ؟
  - لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة لتجنب الانبعاثات غير الضرورية ؟
- يتم الحفاظ على جميع المعدات والآلات والمركبات المستخدمة في الموقع في حالة عمل جيدة في جميع الأوقات لضمان الحد الأدنى من استهلاك الوقود وعوادم الدخان. ينطبق هذا على الحافلات المستخدمة لنقل العمال من وإلى الموقع.
  - منع الحرق المكششوف للمخلفات.
- يتم تغطية الشاحنة الناقلة لمواد/مخلفات البناء أو المواد المتربة الأخرى وذلك بعد التأكد من الاحتفاظ بمسافة ٠.٣ متر تحت الحافة العلوية لجدران الشاحنة ، بالقماش المشمع للتحكم في الغبار ؛
  - تغطية درم الحفر المخزن بصفة مؤقتة في الموقع بالمواد المناسبة ، مثل البولي إيثيلين أو ألواح النسيج لتجنب تشتت التربة.
  - تحديد سرعة قصوي للمركبات والمعدات التابعة للمشروع بحيث ألا تتجاوز السرعة القصوي داخل حدود الموقع عن ١٠–١٥ كم/ساعة.
    - توفير خط ساخن لتلقى الشكاوي ٤ / ٧

#### <u>الضوضاء</u>

- تطبيق جدول زمني مناسب لتجنب أي أعمال قد تسبب ضوضاء واهتزازات خلال الفترة من ١٠ مساءا إلى ٦ صباحا.
- إقتصار تشغيل المعدات المستخدمة في أعمال البناء على أوقات محدودة خلال النهار حيث أنها ليست آمنة للعمل أثناء الليل. سيؤدي ذلك إلى تقليل اضطراب الضوضاء إلى حد كبير للمجتمعات القربية من مواقع العمل ؟
  - تقييد استخدام الآلات التي تصدر ضوضاء بالقرب من المستقبلات الحساسة ، واستخدام وسائل الحد من الضوضاء لآلات البناء ، إذا لزم الأمر ؟

- استخدام المركبات والمعدات المطابقة للمعايير الوطنية للضوضاء والاهتزاز ؟
- أثثاء العمل ، يجب إغلاق أغطية المحرك للمولدات وضواغط الهواء وغيرها من المعدات الميكانيكية التي تعمل بالطاقة ، ووضع المعدات بعيدًا عن المناطق السكنية قدر الإمكان ؛
  - يجب توفير أغطية للأذنين / معدات حماية السمع لجميع العمال
  - لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة للتحكم في الضوضاء الناتجة ؟
    - · تطبيق نظام الشكاوي لتلقى الشكاوي المتعلقة بالضوضاء.

#### إدارة المخلفات الصلبة والخطرة

#### التقليل من المخلفات:

- شراء المواد بالكمية الدقيقة المطلوبة ، لتقليل الاستخدامات المتبقية غير المستخدمة.
  - تقليل تولد النفايات في الموقع.
  - · وضع خطة إدارة بسيطة للنفايات.
  - يجب جمع النفايات العامة ونقلها إلى المكان المخصص لذلك من قبل البلدية.
- يجب جمع نفايات الطعام ، حيثما أمكن ، مع مراعاة النظافة الشخصية ، للتخلص منها خارج الموقع من خلال مقاولين مرخصين.
  - يجب وضع حاويات لتجميع النفايات في كل موقع عمل.
- يجب جمع النفايات الكيميائية في براميل (أو حاويات محكومة مماثلة) ، معنونة بشكل مناسب ، وم ثم يتم إرجاعها إلى المورد أو نقلها بأمان إلى المكان المخصص من قبل البلدية. يحتوي مكب النفايات هذا على مكان مخصص لاستقبال النفايات الخطرة والطبية على حد سواء ، ويجب إجراء عمليات التخزين والنقل والتعامل مع جميع المواد الكيميائية وفقًا لجميع المتطلبات التشريعية ، من خلال المقاولين المرخصين وبالتنسيق مع البلدية.
  - يجب تخزين جميع النفايات الخطرة بشكل ملائم في مناطق محدودة وبجب تحديدها بوضوح على أنها "خطرة".
  - يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال مقاولين مرخصين وبالتنسيق الوثيق مع البلدية ذات الصلة ووفقًا للمتطلبات والتعليمات القانونية.
    - يجب إدارة السوائل الخطرة ، مثل المذيبات وعوامل مقاومة الصدأ طبقاً لمتطلبات التشريعات ذات الصلة.
      - يجب إعداد جرد للمواد الخطرة لفترة البناء.

- يجب توفير أصحيفة بيانات سلامة المواد (MSDS) للمواد الخطرة في الموقع أثناء البناء وإتاحتها وشرحها للعمال.
- يجب جمع نفايات المواد الهيدروكربونية ، بما في ذلك زيوت التشحيم ، للنقل الآمن خارج الموقع لإعادة استخدامها أو إعادة تدويرها أو نقلها أو التخلص منها في مكب معين من قبل البلدية.

### إعادة استخدام النفايات وإعادة التدوير

- · كلما أمكن ، سيعيد المقاول استخدام المواد القابلة للتدوير وإعادة تدويرها.
- يتم إعادة تدوير المخلفات التالية: الورق المقوى ، والمعادن ، وخردة المعادن مثل علب المشروبات الغازية ، وزيت مستهلك ، والورق ، والبلاستيك ، والخرسانة النظيفة ، وكذلك الغطاء النباتي المنزوع .

#### حفظ السجلات

- سيتم الاحتفاظ بكافة سجلات إزالة النفايات والإبلاغ عنها كما هو مطلوب في تقرير الأداء البيئي الشهري ؟
- السجلات التي سيتم الاحتفاظ بها تشمل: إيصالات وفواتير من مقاول نقل النفايات ومنشأة استلام النفايات
- يتم الاحتفاظ بالسجلات السالفة الذكر في سجل النفايات ، الذي يسجل تواريخ الجمع ونوع النفايات والكميات وشركة نقل النفايات والوجهة وتوقيع الشخص المفوض تخزبن النفايات ومعالجتها
  - · سيتم تخزين النفايات في حاويات أو صناديق. لن يتم تخزينها مباشرة على أرض غير مبطنة ؟
  - سيتم تخزين نفايات إعادة التدوير في مناطق أو حاويات منفصلة ، ولن يتم خلطها مع أنواع النفايات الأخرى ؟
    - يجب تخزبن جميع النفايات الخطرة بشكل ملائم في المناطق المحصورة وتحديدها بوضوح على أنها "خطرة"
  - معالجة النفايات وإدارتها بشكل صحيح من خلال فصل النفايات الصلبة عن النفايات الخطرة وعدم مزجها في مكب النفايات ؟
  - سيتم جدولة إزالة النفايات من الموقع ، بحيث يكون لديك دائمًا سلة للنفايات متاحة للإستخدام في الموقع ، وللتأكد من عدم الملئ الكامل للنفايات/الحاويات ؟
  - أي مناطق تخزبن نفايات مؤقتة (غير متضمنة في صناديق أو حاوبات) سيتم تغطيتها و / أو إحاطتها بسياج شبكي لمنع هبوب الرباح منها إلى الموقع ؛ و
    - يتم تخزين النفايات السائلة ، بما في ذلك نفايات الزيوت والمواد الكيميائية السائلة ، في براميل / حاويات محكمة الإغلاق على سطح خرساني.

### التخلص من النفايات

- يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال المقاولين المرخص لهم وبالتنسيق الوثيق مع البلدية المختصة بذلك.

يجب جمع النفايات العامة ونقلها إلى المكب المعين من قبل البلدية.

### <u>جودة التربة</u>

- وضع علامات لتحديد مكان الحفر عن طريق سور ولاصقات وعلامات ارشادية.
  - إتباع الأساليب السليمة للحد من الانسكابات/التسريات؛
  - التداول والإدارة السليمة للمخلفات ومواد البناء والمواد الخطرة.
  - · يتم تخزين النفايات داخل صناديق أو حاوبات، وليس على الأرض مباشرة؛
    - عدم دفن و / أو حرق النفايات المنزلية في موقع المشروع.
- التخزين المؤقت للنفايات الصلبة عن طريق الاحتواء المناسب لتجنب انتشار النفايات والرائحة وتجنب الغبار ؛ احتواء ثانوي لمنع التسرب.
- ضمان أن تكون حاويات المواد السائلة الخطرة / حاويات النفايات محكمة الإغلاق بشكل صحيح دائمًا ومؤمنة من الانقلاب / السقوط / التلف / أشعة الشمس المباشرة أثناء النقل والتخزين؛
  - تخزين المواد الكيميائية، مثل الزبوت ومضادات التآكل بكميات قليلة بالموقع.
  - تحفظ جميع أنواع الوقود والمواد الكيميائية السائلة في أوعية أو براميل أو خزانات محكمة الإغلاق وفوق سطح الارض.
    - يجب إجراء الصيانة والإصلاح الروتيني للمعدات / المركبات المتنقلة في ورشة عمل.
- يتم الاحتفاظ بمجموعات التنظيف الخاصة بالانسكابات بالقرب من المناطق المستخدمة لتخزين الوقود أو المواد الكيميائية السائلة وسيتلقى الموظفون تدريباً على استخدام أدوات تنظيف الانسكابات؛
  - تخزين الزيت ومواد الطلاء في مكان مناسب له قاعدة واقية، مثل بلاطة خرسانية، لمنع أي تغلغل في الأرض؛
- التأكد من وجود البراميل والحاويات المستخدمة في تخزين الوقود أو المواد الكيميائية السائلة (بما في ذلك الزيوت المستعملة والدهانات) في حالة جيدة وخالية من الصدأ أو التلف؛
  - · تنظيف موقع البناء من المخلفات الصلبة قبل إغلاقه.
  - تخصيص مناطق معينة لتخزين مخلفات التربة ومخلفات البناء.
  - · يجب أن يتم ترميم التربة السطحية والمناطق المتضررة بعد انتهاء مرحلة البناء.

#### <u>جودة المياه</u>

- يجب تنفيذ أعمال الأرض (إزالة الغطاء النباتي، والحفر، والتسوية) خلال فترات الطقس الجاف.
  - يجب أن يتم تخزبن التربة على مسافة آمنة بعيداً عن المجاري المائية.
- يتم تخزين النفايات داخل صناديق أو حاويات ، وليس على الأرض مباشرة لمنع التسرب ؟
- · عدم إلقاء / التخلص من النفايات الصلبة (غير الخطرة أو الخطرة) ومياه الصرف في المسطحات المائية أو بالقرب منها.
  - التنظيف الجيد لتقليل الانسكابات / التسريبات.
- الاستجابة السريعة للانسكابات العرضية للوقود ومواد التشحيم والمواد السامة أو الضارة الأخرى ، واستعادتها والتخلص منها بشكل مناسب (يجب على المقاول إعداد خطة استجابة للطوارئ).
  - عدم غسل أو صيانة المركبات والآلات بالقرب من المسطحات المائية.

#### المياه الجوفية:

- سيتم تخزين النفايات داخل حاويات أو حاويات نفايات ، وليس مباشرة على الأرض لمنع التسرب ؟
  - يجب إجراء الصيانة والإصلاح الروتينية للمعدات / المركبات المتنقلة في ورشة ؛
- إجراء الصيانة والتفتيش الدوربين على خزانات الصرف الصحى والسباكة ومرافق الصرف الصحى المرتبطة بها لضمان ظروف صحية جيدة

### السلامة والصحة المهنية

يجب على المقاول إعداد خطة الصحة والسلامة المهنية وتحليل مخاطر العمل خلال مرحلة البناء. سيقوم المقاول أيضًا بتعيين شخص متخصص للإشراف على الخطة. فيما يلى بعض تدابير التخفيف الرئيسية التي يجب تضمينها في الخطة:

- يجب تدريب العمال على تحديد وتقييم مخاطر السقوط وأن يكونوا على دراية كاملة بكيفية التحكم في التعرض لمثل هذه المخاطر.
  - يجب على العمال وموظفي الموقع دائمًا استخدام معدات الحماية الشخصية خاصة عند التعامل مع المواد السامة.
    - يجب على العمال الامتثال لقاعدة إدارة الصحة والسلامة المهنية التي تخص الاستخدام الآمن للسلالم.
- لمنع مخاطر معدات البناء الثقيلة ، يجب على العمال اتباع إرشادات سلامة البناء المصممة للقضاء على التعرض لمثل هذه الإصابات والحوادث
  - يجب أن تكون معدات الطوارئ (مواد تنظيف الانسكاب ، طفايات الحريق ، إلخ ..) متوفرة دائمًا في الموقع.
    - يجب توفير الفحوصات الصحية الأولية والدورية للعمال.
    - يجب أن تتضمن الخطة تدابير الاستجابة لفيروس كورونا المستجد كما هو موضح في الملحق ٤.
- يجب تزويد العمال بتأمين صحى (يغطى تقديم الدعم الطبي في حالة الإصابة بالأمراض) وتأمين السلامة (الذي يغطي العمال في حالة الحوادث

#### السلامة المجتمعية

- يجب وضع خطط أمن وأمان كافية لمنع وصول الجمهور إلى مواقع العمل والمواد الخطرة والمخلفات
  - يجب على المقاول الالتزام بخطة إدارة المخلفات لتجنب أي عوائق أو مخاطر على السلامة.
    - يجب توفير آلية للتظلمات لضمان التواصل الفعال فيما يتعلق بمخاوف المجتمع.

## السلامة المرورية

- يجب تثبيت لافتات أمان لإخطار المجتمع بأن مركبات البناء ستستخدم الطرق المؤدية إلى محطة المياه
  - يجب على المقاول التأكد من أن النقل المرتبط بالبناء يتوافق مع حدود السرعة

### عمالة الأطفال

- يجب كتابة شروط صارمة في عقد المقاول لحظر تعيين الأطفال دون سن ١٨ عامًا
  - يجب أن يحتفظ المقاول بنسخة من هويات جميع العاملين

### التراث الثقافي

- اتباع إجراء العثور على الأثار (مرفق رقم (٣))

### تدفق العمالة و العنف القائم على النوع الإجتماعي

- إعداد مدونة سلوك مناسبة تنص على التزام العمال تجاه فئات المجتمع والسلوكيات التي يجب تجنبها
  - يجب تدريب جميع العاملين على قواعد السلوك.
  - يجب توقيع قواعد السلوك من قبل المقاول من الباطن
- تعريف بمدونة قواعد السلوك يتم إجراؤه كل أسبوعين للعاملين الدائمين والوافدين الجدد قبل بدء العمل.
  - تطبيق المتطابات الكاملة المتعلقة بتشغيل آلية التظلم بما في ذلك القنوات المجهولة
- زيادة وعى السكان المحليين حول التزام المشروع تجاه المجتمعات والتدابير المتخذة لذلك من خلال المشاورات العامة ومناقشات على شكل مجاميع.
  - تطبيق العقوبات على العاملين المخالفين لقواعد السلوك

### البنية التحتية والمرافق

- في حالة تلف أحد المرافق الموجودة تحت الأرض وأنابيب البنية التحتية ، يجب اتباع الإجراءات القياسية ، بالإضافة إلى إعداد تقرير توثيقي للحادث.
  - في حالة قطع المياه، يجب إعلام المجتمع المحلي قبل القطع
    - تنفیذ آلیة للشکاو ی

### إدارة الخدمات الموقعية

- اقامة المخيم داخل أراضى محطة المياه
- ضمان إقامة كرفانات البناء الملائمة ومرافق الصرف الصحى للبناء، أي إنشاء خزان لتخزين المياه العادمة المنزلية الناتجة عن المخيم.
  - اتباع أفضل ممارسات إدارة المخلفات وتدابير التخفيف الواردة في خطة الإدارة البيئية والاجتماعية.
    - مراقبة ظروف العمل عن كثب ، وفرض تدابير للتحكم في انتقال الأمراض المعدية.
- الحفاظ على آلية فعالة للتظلم (تمت مناقشتها في فصل مشاركة أصحاب المصلحة). يجب أن تكون آلية معالجة المظالم هذه حساسة للنوع الاجتماعي وتضمن السرية
  - انخراط محدد مع النساء والفتيات يتضمن التوعية بالعنف القائم على النوع الاجتماعي والوصول إلى قنوات مجهولة للإبلاغ عن الحالات.

# العقوبات وإلغاء التعاقد

إذا فشل المقاول في الوفاء بأي من الالتزامات المذكورة أعلاه بموجب العقد ، فسيتم تطبيق العقوبات التالية:

التفاصيل	الإجراء	المراحل
يجب أن يتلقى المقاول بيان تحذير يتضمن الإجراء التصحيحي المقترح.	التحذير	المرحلة الأولي
يجب أن تبدأ جميع الإجراءات التصحيحية في مدة لا تزيد عن أسبوعين.		
يجب على المقاول اتخاذ الإجراء التصحيحي بشكل سريع.		
في حالة عدم النزام المقاول بخطة الإدارة البيئية والاجتماعية ، لا يحق للمقاول الحصول على الدفعات النقدية بموجب شروط هذا العقد.	الدفعات النقدية	المرحلة الثانية
لن يتم صرف المدفوعات حتى يتم وضع خطة عمل واضحة ويبدأ المقاول في تنفيذ الإجراءات المتفق عليها.		
لن يتم إنهاء العقد بسبب عدم الوفاء بالتزامات خطة الإدارة البيئية والاجتماعية. ومع ذلك ، سيخصم مالك المشروع تكلفة تنفيذ خطة الإدارة البيئية والاجتماعية من العقد. وفي هذه الحالة يجب إرفاق دليل واضح على فشل المقاول في تنفيذ خطة الإدارة البيئية والاجتماعية	إلغاء التعاقد	المرحلة الثالثة