

Environmental and Social Compliance Summary Sheet

Environmental and Social Management Matrix for Al-Fukhary (Sofa) Landfill Site During Operation Phase

Potential Impact	Proposed Mitigation Measures	Summary of Progress
General Impacts	Standard Operation Procedures (SOPs) and operation manual should be followed	SOPs were followed except SOPs related to Leachate treatment and pumping
Odor Impacts	Upgrade the rates of compaction and application of soil cover	Compaction and soil cover were applied on a daily basis
Deterioration of air quality by Dust/smoke	<ul style="list-style-type: none"> Apply the daily cover to prevent any of waste self-burning at the site 	Daily cover were applied at the end of each day. The source of soil is the near stockpile which was resulted from the landfill excavations.
	<ul style="list-style-type: none"> Reject any burnt waste to be received at the disposal cell to prevent the distribution of fires 	Burnt Waste received were rejected to access to the disposal cell
	<ul style="list-style-type: none"> Ensure the waste filling schedule is followed as per the operation plan, as well the daily and final cover to be applied. The gas collection system will be installed at the landfill closure phase. 	Waste filling schedule were followed as detailed in the operational manual
	<ul style="list-style-type: none"> All vehicles and heavy equipment working in the site should be maintained according to the maintenance schedule recommended by the manufacturer/supplier. Any vehicle that has high smoke emissions visibility detected should be promptly repaired. 	All vehicles were maintained according to the maintenance schedule
	<ul style="list-style-type: none"> Water spraying especially in the dry days when dust is noticed. 	Water spraying were used when dust noticed in some of dry days. The source of water is the stormwater lagoon, and the tool of water spraying is getter "one of landfill equipment"
	<ul style="list-style-type: none"> Keep stable slopes of the 	Slopes of the stockpile is stable, and it was taken

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	stockpile	into consideration once taking the daily cover not to affect the slope stability.
	<ul style="list-style-type: none"> • Distribute safety signs around the stockpile site • 	Safety signs were distributed.
Impacts on groundwater and soil	<ul style="list-style-type: none"> • The leachate pond should be regularly de-sludged and the removed sludge should be transferred back to the landfill. 	No sludge was noticed yet
	<ul style="list-style-type: none"> • The leachate collection pumping station and correspondent piping network should be adequately maintained to ensure smooth operation. 	Adequately maintenance done for collection pumping station and piping network
	<ul style="list-style-type: none"> • Regular testing of the groundwater quality at the downstream and upstream areas 	Every six month there is an inspection for ground water quality. The results were compared with the Palestinian regulatory standards and baseline results and no changes were noticed of the groundwater quality.
	<ul style="list-style-type: none"> • Regular maintenance shall always be planned during the non-rainy period. Spare pumps shall be available at the site to be used in the event of accidental breakdown of the operating pumps. 	Spare pumps are available at the site
	<ul style="list-style-type: none"> • Secure the site by fence and monitor the site by CCTV to prevent leachate stealing 	The site are secure by a fence and monitor by CCTV
Risks of receiving hazardous wastes	<ul style="list-style-type: none"> • Workers of the landfill should receive adequate training on the permitted and prohibited list of waste to be received/rejected at the landfill site based on the JSC-KRM bylaws. 	ALL workers in the landfill had adequate training and signed the Code of Conduct

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	<ul style="list-style-type: none"> Awareness of hazardous waste generators regarding the sorting at source in order to avoid a mixing of hazardous and non-hazardous waste. 	JSC-KRM workers are aware about the hazardous waste, no hazardous waste is collected, and if any of hazardous waste is discovered in front of the control room or even in the cell during the dumping, then it can be rejected and transferred outside the landfill.
	<ul style="list-style-type: none"> The list of prohibited waste should be clearly shared with municipalities 	List of prohibited waste shared with municipalities, and it is printed and installed at the gate of the landfill
Risks to occupational Safety, health and hygiene	<ul style="list-style-type: none"> The Safety Plan of the operation of the landfill should be followed, as well the emergency response plan. 	Safety plan of the operation are followed as well as emergency response plan
	<ul style="list-style-type: none"> More specific training program shall be conducted to the workers about safe working methods and good hygiene practices. Updating the program in accordance to the workers performance is necessary. 	Training about COVID 19 precaution measures and the Health protocol was conducted for workers. Also workers had a training about Code of Conduct content.
	<ul style="list-style-type: none"> Prevention of unauthorized admission to the landfill specially the waste pickers. 	Waste pickers are prevented to enter the landfill, no waste pickers were noticed at the site since the operation of the landfill.
	<ul style="list-style-type: none"> Vaccination of all workers against Tetanus 	All workers take vaccination against tetanus
	<ul style="list-style-type: none"> Smoking is not allowed at the landfill site 	Smoking is not allowed at the landfill
	<ul style="list-style-type: none"> Follow the health and safety plans instruction during the operation. 	Health and safety plan are followed
	<ul style="list-style-type: none"> All workers in the landfill should be provided with anti-puncture gloves, Safety shoes, overalls and masks. 	All workers were provided with anti-puncture gloves ,safety shoes ,overall and masks
	<ul style="list-style-type: none"> Securing the deep areas by a fence to prevent the drowning in the storm water lagoon/ leachate lagoon. 	Storm water lagoon and leachate lagoon are secured with fence
	<ul style="list-style-type: none"> All of injuries should be documented, as well a report should be written after any of accident 	no injuries were reported at the landfill site

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Pests Impacts	<ul style="list-style-type: none"> Follow the pest management plan instruction during the operation. 	<p>Pest management plan instruction operated during the operation. PPE is committed by the workers, and the used pesticide is PTI which is allowed by MoH. The frequency of spraying is weekly.</p>
Noise impacts	<ul style="list-style-type: none"> Key noisy equipment (such as generators, trommels, conveyor belts ... etc.) should be selected with minimum noise; 	We keen to operate machines with minimum noise
	<ul style="list-style-type: none"> Optimize the use of machines and noisy equipment (i.e. switching off when idle); 	We keen to operate machines with minimum noise
	<ul style="list-style-type: none"> In case the landfill manager received complaints from neighboring areas regarding noisy operations acoustic barriers should be placed between the noise source and the location of the complaining neighbor. 	No complaints from neighboring areas regarding noisy operations
Visual impacts and aesthetics	<ul style="list-style-type: none"> Provide adequate buffer area, such as trees, or fences, between the facility and potential receptors 	There are fences between the facility and the surrounding lands
	<ul style="list-style-type: none"> apply the daily cover to conserve the aesthetics conditions" 	Daily cover were applied (3621) m3 of soil used for daily and intermediate cover
	<ul style="list-style-type: none"> Compaction of waste at the disposal cell to maximize the landfill lifespan and capacity 	Compaction of waste were done by using D8 (one of landfill equipment"
Impacts of the incoming and outgoing waste vehicles (Traffic)	<ul style="list-style-type: none"> Drivers should not exceed the driving limit 20 km/hr inside the landfill site 	Drivers don't exceed the limit speed 20 km/hr inside the landfill, briers were also installed on the landfill ring road
	<ul style="list-style-type: none"> Traffic barriers and signs should be installed to 	Traffic barriers and signs were installed

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	decrease the speed of driving	
	<ul style="list-style-type: none"> The unauthorized vehicles should be rejected to access to the landfill site 	Unauthorized vehicles are rejected to access to the landfill site
	<ul style="list-style-type: none"> Washing the waste vehicles and the place of washing should be approved by the landfill manager 	The wheel cleaning is not constructed yet.
Fauna and Flora ex: distribution of dogs / birds at the landfill site	Communication with animal welfare societies to deal with them.	We communicate NGO “sulala” to deal with animal inside the landfill, all of stray dogs were transferred to Sulala land. No more stray dogs were noticed at the landfill site
Inconvenience to local community	<ul style="list-style-type: none"> Grievance uptake Channels to be created in the site for any coming complaints during operation 	E-Complaint system of the JSC-KRM was established in 2018. Other channels can be used also such as call phones.
	<ul style="list-style-type: none"> Conduct periodic consultation sessions with the local community in Al-Fukhary to share information about the operational activities and the implementation of the mitigation measures, in addition to record their new concerns. 	<ul style="list-style-type: none"> No meetings were carried out in the last months due to COVID-19 measures
	<ul style="list-style-type: none"> Develop and Implement a strong communication plan to share information with the community in the service area. 	<ul style="list-style-type: none"> Communication plan was developed and it is under implementation
	<ul style="list-style-type: none"> Use the multimedia and the social media to share photos and videos about the daily work to share it with the community. 	<ul style="list-style-type: none"> Information and images about the progress of work is shared on the social media (JSC-KRM Facebook page)
	<ul style="list-style-type: none"> Following up and managing the complaint system in JSC-KRM day by day. 	<ul style="list-style-type: none"> All of the received complaints were related to primary and secondary collection, and all of them were solved.
	<ul style="list-style-type: none"> Invite the stakeholders to visit the facility to strengthen the relationship with JSC-KRM and exchange the knowledge with 	<ul style="list-style-type: none"> Some of stakeholders visited the landfill site in the last months such as some of NGOs, mayors, youth groups, and women committee

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	the related parties.	
	<ul style="list-style-type: none"> Restrict the communication between workers and the surrounding local community. 	Communication between workers and the surrounding local community are prevented
Labor Rights	<ul style="list-style-type: none"> Ensure that all the workers in JSC-KRM are covered by the insurance 	All workers in JSC-KRM are covered by the insurance
	<ul style="list-style-type: none"> Ensure that all the workers can get the allowance according to the Palestinian Labor Law. 	All workers get the allowance according to the Palestinian labor law
	<ul style="list-style-type: none"> Sexual exploitation and abuse and sexual harassment should be controlled 	No cases for Sexual exploitation and abuse and sexual harassment
	<ul style="list-style-type: none"> Review the code of conduct of the workers in the facility and update it when it needed according to the registered accidents, behaviors and concerns and ensure that all the workers are aware about it. 	code of conduct of the workers was updated and signed by each worker
	<ul style="list-style-type: none"> Provide all the required hygiene and cleaning materials for the workers and enforce them to use it specially before taking their meals inside the facility. 	all the required hygiene and cleaning materials for the workers were provided
	<ul style="list-style-type: none"> Provide all the required first aid tools and store it in suitable and easily accessible place. 	first aid tools available for the workers in suitable places
	<ul style="list-style-type: none"> Conduct periodic meetings with the workers to listen to their concerns and encourage them to use the complaint system. 	meetings with the workers are done periodically
	<ul style="list-style-type: none"> Provide suitable rest place for all workers at the site, and assign a rest hour for all workers 	suitable rest place for all workers at the site is available
	<ul style="list-style-type: none"> Prevent any child under the legal age to work at the site. 	No children are working at the site

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	Age verification should be conducted when engaging project workers and it should be monitored to be not less than 18 years old.	

