

Environmental Monitoring Form (EMoF) during Operation Phase

Monitoring Date: From 3 Jun. to 7 Jun. 2018

1. Form of Environmental Monitoring

(1) Air Quality

1) Emission Gas Quality

Parameter	Monitoring points (ECO OUTLET)	Note
	EG-1	
O ₂ (%)	1.16	Continuous monitoring for effective operation aspects. And values left were at 09:36 of 05 Jun. 2018.
CO ₂ (%)	5.6	

2) Ambient Air Quality

Parameter	Monitoring points*					Target Value
	A-4	A-5	A-6	A-7	A-8	
PM ₁₀ ($\mu\text{g}/\text{m}^3/24\text{hr}$)	75.3	81.8	71.9	76.9	84.8	150 $\mu\text{g}/\text{m}^3/24\text{hr}$
SO ₂ (ppm/hr)	0.089	0.061	0.092	0.048	0.065	0.1 ppm/hr
NO ₂ (ppm/hr)	0.008	0.011	0.018	0.007	0.007	0.05 ppm/hr
CO (ppm/hr)	5.03	5.10	6.92	4.82	5.07	35 ppm/hr
Temperature (°C)	42.0	42.4	41.3	43.3	43.8	-
Relative Humidity (%)	10	11	26	12	13	-
Wind Direction	NW 310	NW 321	SE 131	NW 308	NW 314	-
Wind Speed (m/sec)	1.4	1.3	7.2	1.8	1.5	-

*: The way of allocation of numbers is same with during rehabilitation, so there is no A1-A3.

(2) Water Quality

1) Effluent water quality

Item	Monitoring point	Standards*	
	E-1	Iraq	IFC
Water temperature	41.1	< 35	-
pH	6.9	6.5 – 9.5	6 – 9
DO	2.99	-	-
BOD ₅	19.7	< 40	-
COD	48.4	< 100	-
Suspended Solid (SS)	690	50	50
Total Dissolved Solid (TDS)	1,350	-	-
Oil and grease	12.87	-	10
Nitrate NO ₃ ⁻ -N	1.02	50	-
Phosphate PO ₄ ³⁻ -P	0.93	3	-
Ammonium NH ₄ ⁺ -N	ND	-	-
Copper (Cu)	0.05	0.2	0.5
Iron (Fe)	0.43	-	1.0

* unit: mg/l except for temperature and pH

ND: Not detect

(3) Solid Waste Management

No.	Items	Implementation status		
1	Appropriate disposal of removed workpiece.	<input checked="" type="checkbox"/> Implemented	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Others
2	Appropriate pumping up night soil from the septic tank if any.	<input checked="" type="checkbox"/> Implemented	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Others
3	Appropriate collections for most of the waste to be	<input type="checkbox"/> Implemented	<input checked="" type="checkbox"/> Not	<input type="checkbox"/> Others

No.	Items	Implementation status		
	disposed by the recycle company. Some Waste are keeping at disposal site to be recycled by local companies, in future.		Applicable	
4	Appropriately dispose rest waste at a Disposal Site (designated governorate dumping site)	<input checked="" type="checkbox"/> Implemented	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Others
5	Preparing records of usage of hazardous and chemical substance, and regularly updating it.	<input checked="" type="checkbox"/> Implemented	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Others
6	Hazardous and chemical substance to be disposed is kept separately and adequately.	<input checked="" type="checkbox"/> Implemented	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Others

(4) Grievance Redress

No.	Date of Receipt of Complaints	Contents of the Complaints	Correspondences	Resolved / Not yet resolved
-	None			

End