

- Attachment: Environmental Monitoring Sheet
- Pollution Management

Air Quality						
Items	Value (Average)	Value (Maximum)	Standard Value	Applicable Standard	Ref. Standard Value	Method
SO ₂	See Following Attached Record	See Following Attached Record	0.15 ppm	NEMA	150µg/m3 IFC	Nos of Point:4 Frequency: 4times per year Others: Metrological Data Collection
NO ₂			0.10 ppm		150µg/m3 IFC	
CO			9.0 ppm			
O ₃			0.1 ppm		150µg/m3 IFC (8 Hour Mean)	
Particulate Matter			PM10: 50 µg/m ³ PM2.5:25 µg/m ³	WHO		
Dust			-			

Waste	
Items	method
Waste Management during Project ·Kinds of Waste: Construction Surplus Soil, Harmful substance, Garbage Waste Management after Project: ·Dispose/Process Area	· ·Dispose/Process method: 1time per month The spoil material from the sites will be transported to the designated Nsambya dumping site by dumper trucks. The dumping site has been prepared by the contractor and is ready for disposal.

Noise Vibration						
Item	Value (Average)	Value (Maximum)	Standard Value	Applicable Standard	Ref. Standard Value	Method
Equivalent noise level (Leq)[dBA]			Day: 70 dB (A)	National Environment (Noise Standard and	Day:70dB(A)	

	See Following Attached Record	See Following Attached Record	Night 60 dB(A)	Control) Regulations, 2003	IFC Night:70dB(A) IFC	Noise Vibration Measurements during and after Project ·Nos of point:2 ·Item:Noise Vibration 3times per day
Vibration			-	No applicable Standard in UG		Frequency :4times per year

• Social Environment

—Existing Social Infrastructure

Monitoring Item	Method /Report
1) Condition Survey of Social Infrastructures including utility relocation status	Observation: The project has had no negative impact on the social infrastructure thus far

—Road Safety

Monitoring Item	Method/Report
1) Pedestrian Crossing Condition Survey	· Frequency (during Project) : 1time per month Observation: Traffic wardens were deployed by the contractor and have been assisting pedestrians in crossing the road.

—Working Environment

Monitoring Item	Method/Report
1) Working Environment : EHS status survey	· Frequency : EHS Survey : 1time per week Observation: There are adequate social facilities for the workers on site including toilets, resting areas, the contractor has also installed temporary fences to restrict access to the site by 3 rd parties.

—Accident

Monitoring Item	Method/Report			
1) Traffic Condition : Queue Length Survey during Project 2) Accident Data Collection : Data Collection during Project	Frequency : Queue Length Survey during Project; 1time per month			
	Date/Time	Junction	Queue (m)	Remark
	02 May23/ 11:00	No.1	100	Jinja Rd
	06 Jun23/ 10:30	No.1	120	Jinja Rd
	20 Feb 24 13:00	No.3		Jinja/Portbell
	24 Feb 24 05:30	No.2		Jinja/Katalima

**Environment Monitoring
Water Quality**

(Frequency: 2 Times / Year)

Month	JCT No.22 Kubiri																							Remark			
	Color	pH	Conductivity	TSS	BOD	COD	TDS	Turbidity	Lead (Pb)	Nickel (Ni)	Chromium	Sodium	Calcium	Potassium	Iron	Fluoride	Bicarbonates	Phosphorus	Nitrates	Ammonium	Chlorides	Sulphates	Coliforms (Bacteria)		E. Coli	Oils and Greases	
	TCU	-	µS/cm	ppm	ppm	ppm	ppm	NTU	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	C.F.U./100ml	C.F.U./100ml	ppm		
Apr 23	24.0	7.9	844	5.6	80	618	422	22	0.05	0.00	0.00	56.10	28.00	4.50	12.08	1.19	38.60	41.35	56.65	144.0	222.2	84.8	100	0	54.0	Initial	
May 23																											
Jun 23																											
Jul 23																											
Aug 23																											
Sep 23																											
Oct 23	800.0	8.0	1400	5.0	198	1200	712	1200	0.05	0.01	0.11	89.20	59.20	-	5.20	-	-	-	19.20	-	60.0	9.2	93	0	600.0		
Nov 23																											
Dec 23																											
Jan 24																											
Feb 24																											
Mar 24																											
Apr 24	22.00	7.50	340.00	1.40	242.00	650.00	170.00	42.00	0.04	0.00	8.90	179.20	28.90	6.22	3.62	1.02	32.60	6.22	2.56	45.40	136.50	35.60	100.00	10.00	56.00		
May 24																											
Jun 24																											
Jul 24																											
Aug 24																											
Sep 24																											
Oct 24	92.0	7.8	840.0	1.4	490.0	1250.0	170.0	60.0	0.11	0.00	8.20	190.30	28.90	6.20	12.60	1.22	4.90	8.85	8.90	16.5	149.0	64.1	250.0	120.0	250.0		
Nov 24																											
Dec 24																											
Jan 25																											
Feb 25																											
Mar 25																											
Apr 25	32.0	7.6	640	4.4	442	850	320	19	0.04	0.00	0.85	69.00	36.50	9.50	16.20	1.02	62.60	26.22	5.56	136.2	336.5	65.6	100	10	69.0		
May 25																											
Jun 25																											
WHO Std	300.0	8.0	1200	100.0	50	100	1200	25	0.10	1.00	1.00	100.0	100.0	100.0	0.30	1.50	100.0	10.00	20.00	10.0	400.0	500.0	0	0	10.0	reference	

Environment Monitoring
Air-Pollution and Noise / Vibration

Month	Air Pollution (Frequency: 4 Times / Year)										Noise / Vibration (Frequency: 4 Times / Year)						Remark						
	JCT No.22 Kubiri										JCT No.12 Rwenzori Court							JCT No.22 Kubiri					
	SO2	NO2	CO	O3	PM2.5 (24hr average)	PM2.5 (max)	PM2.5 (min)	PM10 (24hr average)	PM10 (max)	PM10 (min)	Noise Level (average)	Noise Level (max)	Noise Level (min)	Ground Vibration (average)	Ground Vibration (max)	Ground Vibration (min)		Noise Level (average)	Noise Level (max)	Noise Level (min)	Ground Vibration (average)	Ground Vibration (max)	Ground Vibration (min)
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	dB	dB	dB	mm/s	mm/s	mm/s	dB	dB	dB	mm/s	mm/s	mm/s	
Apr 23	0.20	0.60	105.0	0.04	26.10	99.0	0.00	25.35	97.00	0.00	65.0	97.9	56.1	0.277	8.500	0.000	66.3	96.6	52.6	0.752	2.900	0.000	Initial
May 23																							
Jun 23																							
Jul 23	1.00	22.00	93.00	0.02	35.52	124.0	0.00	36.70	99.00	0.00	66.0	92.1	54.2	1.220	5.000	0.000	65.9	98.0	57.8	0.238	9.100	0.000	
Aug 23																							
Sep 23																							
Oct 23	2.50	32.00	86.00	0.04	33.87	94.00	0.00	31.27	195.0	2.00	59.1	96.2	67.6	1.476	3.300	0.000	66.3	96.6	52.6	1.023	4.100	0.000	
Nov 23																							
Dec 23																							
Jan 24																							
Feb 24	-	-	85.00	0.00	27.44	101.0	2.00	29.10	102.0	0.00	66.8	98.5	50.3	3.300	7.600	0.000	67.6	96.2	54.4	1.900	2.800	0.500	
Mar 24																							
Apr 24	0.60	0.30	21.03	0.30	28.94	97.00	3.00	27.21	94.00	2.00	66.8	91.7	57.3	1.180	13.200	0.000	65.0	95.2	54.4	0.540	8.500	0.000	
May 24																							
Jun 24																							
Jul 24	0.80	0.90	23.80	0.70	71.27	214.0	32.00	55.63	313.00	30.00	66.4	94.5	58.7	1.300	8.000	0.200	66.0	91.7	53.6	1.500	5.200	0.300	
Aug 24																							
Sep 24																							
Oct 24	0.60	0.30	22.00	0.30	26.03	99.00	0.00	30.35	98.00	1.00	67.1	93.9	59.1	1.700	5.200	0.500	66.4	90.4	51.0	1.590	6.400	0.200	
Nov 24																							
Dec 24																							
Jan 25	0.60	0.30	21.03	0.30	48.00	96.00	0.00	25.40	98.00	0.00	66.8	91.7	57.3	1.180	13.20	0.000	65.0	95.2	54.4	0.540	8.500	0.000	
Feb 25																							
Mar 25																							
Apr 25	1.00	1.20	100.0	0.50	22.00	88.00	0.00	12.00	50.00	1.00	62.5	89.6	51.7	2.200	18.00	1.200	66.0	90.6	52.1	2.100	8.300	1.100	
May 25																							
Jun 25																							
WHO Std	15.27	13.29	5.56	7.78	25.00			50.00			75.0		20.00				75.0			20.00			reference

Environment Monitoring
Others Pollution / Social Environment

v: OK, x: Corrective Action Required

Month	Waste Management				Soil Pollution				Hydrogy (Rainwater Drainage)	Traffic Congestion				Working Condition (EHS Situation)				Number of Accident	Location	Remark / Corrective Action			
	1W	2W	3W	4W	1W	2W	3W	4W	-	1W	2W	3W	4W	1W	2W	3W	4W				-		
Apr 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1				
May 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1				
Jun 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1&3				
Jul 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	1	JCT No1&3				
Aug 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1&3				
Sep 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1,3&4				
Oct 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	2	JCT No1,3&4				
Nov 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	1	JCT No1,2,18,19&27				
Dec 23	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1,2,17,18,19&27				
Jan 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1,2,17,18,19&27				
Feb 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1,2,17,&22				
Mar 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No1,2,17,22&24				
Apr 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No17,22,24&121				
May 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No17,22,24&114				
Jun 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No22,24,114&115				
Jul 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No22,24,37,114&115				
Aug 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No21,22,24,37,&115				
Sep 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No21,24,37,&115				
Oct 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No21,24,37,&115				
Nov 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 5,6,12,15,21~24,37				
Dec 24	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No.1 5,6,8,12,15,23,37				
Jan 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 5,6,8,12,15,23,188				
Feb 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 5,6,8,12,15,26,188				
Mar 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	1	JCT No 5,6,8,12,15,26,188			Vandalism of a power box at 188	
Apr 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 5,6,7,8,12,15,25,26				
May 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 7,8,12,15,25,26				
Jun 25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	0	JCT No 7,8,12,15,25,26				