

Lam Environmental Services Limited

Ref no.	Date	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_21RIW3_083	13-Aug-21	I	Turbidity (NTU) pH	131.0 8.3	206.9 6.6-8.4	214.2 6.5-8.5	Possible reason:	Natural variation in water quality due to rainy weather on 13 August 2021 in the vicinity of the water quality monitoring station.
			SS (mg/L)	181.5	172.8	201.4	Action taken/ to be taken:	Checking with contractor for the construction activities conducted on 13 August 2021. No exceedance was recorded at Station I on 16 August 2021.
			DO(mg/l)	6.4	5.5	5.4		
							Remarks/ Other Observations:	Silty water was observed at monitoring station I during water quality monitoring. Ground investigation, shotcreting and formwork shuttering were conducted at RIW3 construction site area under Contract No. NE/2017/03 on 13 August 2021, however, no surface runoff and no effluent discharge from construction works area into the concerned waterbody was observed during monitoring and afterward daily monitoring. The weather was rainy from 12 to 13 August 2021, runoff from uncertain sources may affect the water quality at station I. In view of the above, it is considered that there was no evidence to suggest the exceedance was related to Project works at RIW3.
X_21RIW2_084	16-Aug-21	F	Turbidity (NTU)	74.5	24.4		Possible reason:	Natural variation in water quality due to rainy weather on 16 August 2021 in the vicinity of the water quality monitoring station.
			рН	7.9	6.6-8.4	6.5-8.5		
			SS (mg/L)	74.7	17.0	23.8	Action taken/ to be taken:	A repeated in-situ measurement had been conducted immediately to confirm the exceedances. Checking with contractor for the construction activities conducted on 16 August 2021. Increased the monitoring frequency to daily on 17 August 2021, no exceedance was recorded, for suspended solid, no exceedance was recorded on 18 August 2021.
			DO(mg/l)	7.3	5.8	5.5		
							Remarks/ Other Observations:	Silty water was observed at monitoring station F during water quality monitoring. Drilling and excavation were conducted at RIW2 construction site area under Contract No. NE/2017/03 on 16 August 2021. However, no surface runoff was observed discharging into nearby gullies during monitoring. The weather was rainy from 15 to 16 August 2021, runoff from unknown sources may also affect the water quality of station F. Turbidity and suspended solid results were relatively high at station E (65.8 NTU, 70.9 mg/L), AC2 (80.2 NTU, 65.3 mg/L) and AC3 (95.3 NTU, 84.2 mg/L).Thus, it is considered that the exceedances were not related to Project works at RIW2
X_21RIW2_085	30-Aug-21	F	Turbidity (NTU)	163.7	24.4		Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
			рН	8.4	6.6-8.4	6.5-8.5		
			SS (mg/L)	164.0	17.0	23.8	Action taken/ to be taken:	A repeated in-situ measurement had been conducted immediately to confirm the exceedances. Checking with contractor for the construction activities conducted on 30 August 2021. Increased the monitoring frequency to daily on 31 August 2021, no exceedance was recorded, for suspended solid, no exceedance was recorded on 01 September 2021.
			DO(mg/l)	6.2	5.8	5.5		
							Remarks/ Other Observations:	Silty water was observed at monitoring station F during water quality monitoring. Welding works was conducted at RIW2 construction site area under Contract No. NE/2017/03 on 30 August 2021. However, no surface runoff was observed discharging into nearby gullies during monitoring. Although low turbidity and suspended soild results were recorded at station AC2 (11.1NTU, 4.5 mg/L) and station AC3 (6.7NTU, 2.3 mg/L), it is considered that there was no evidence to suggest the exceedances were related to Project works at RIW2.