

Notification of Water Quality Monitoring Exceedance

Incident Report on Action/ Limit Level Exceedance

Reference No.:	IR20210413_M3_SS						
Project:	Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1						
Date:	2021/04/13						
Time: (hh:mm)	M1: M2: M3: <u>9:00</u> (Flood Tide)						
Action level / Limit level:		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
		AL	LL	AL	LL	AL	LL
	M1	2.25	1.91	48.4	50.4	59.0	68.0
	M2	1.88	1.79	43.0	52.4	81.0	112.0
	M3	3.28	3.14	74.3	78.0	104.0	167.0
Measured level of exceeded parameter: (fill in / circle as appropriate)	M1	DO (AL / LL) : _____		M3	DO (AL / LL) : _____		
		NTU (AL / LL) : _____			NTU (AL / LL) : _____		
		SS (AL / LL) : _____			SS (AL / LL) : <u>125</u>		
	M2	DO (AL / LL) : _____					
		NTU (AL / LL) : _____					
		SS (AL / LL) : _____					
Action taken / to be taken: (tick / circle / fill in as appropriate)	Inspection :						
	<input checked="" type="checkbox"/> ER / IEC / Contractor is/are informed. <input checked="" type="checkbox"/> Monitoring equipment & monitoring data are checked and confirmed without problem. <input type="checkbox"/> In-situ measurement is repeated. <input type="checkbox"/> Other _____						
Possible reason for action or Limit level Non-compliance: (tick / fill in as appropriate)				DO	Turbidity	SS	
	Finding / Evidences						
	<input type="checkbox"/> Upstream Control Station exceeded AL/LL						
	<input type="checkbox"/> Station was polluted by the inflow of other construction site						
	<input type="checkbox"/> Station was polluted by the inflow of residential discharge						
	<input type="checkbox"/> Station was polluted by the inflow of surface runoff from rainstorm and storm water drainage						
	<input checked="" type="checkbox"/> No construction activities were carried out in the vicinity of station					M3	
<input type="checkbox"/> Other _____							

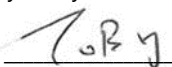
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Project:	Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1			
Date:	2021/04/13			
Conclusion:	<input checked="" type="checkbox"/>	DO	Turbidity	SS
	Due to change or/and influences of ambient condition in the vicinity, not Project related			M3
Mitigation Measures:	<input type="checkbox"/> Due to influences of construction activities under this project in the vicinity, considered to be Project related			
	<p>The following mitigation measures have been taken:</p> <ol style="list-style-type: none"> 1. Channels, earth bunds or sand bag barriers were provided on site to properly direct stormwater to such silt removal facilities; 2. The surfaces of construction site areas near the drainages were paved; 3. Construction materials on sites were covered with tarpaulin or similar fabric during rainstorms; and 4. Manholes were adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system. 			
Remarks: (tick / fill in as appropriate)	<input type="checkbox"/> Repeat in-situ measurement was done.			
	M1	DO : _____ NTU : _____	M3	DO : _____ NTU : _____
	M2	DO : _____ NTU : _____		
Attachment	<input checked="" type="checkbox"/> No major observation of upstream area was found			
	Annex A – Location of Water Quality Monitoring Stations Annex B – Water Quality Monitoring Results Annex C – Photo of Investigation Annex D – Site Inspection			

Note: The box is checked to represent the statement is applicable, and vice versa.

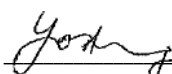
Prepared by: Toby Wan

Signature: 

Date (dd/mm/yyyy): 27/4/2021

Certified by: David Hung

Designation: Environmental Team Leader

Signature: 

Date (dd/mm/yyyy): 27/4/2021

Notes:

- Abbreviation:

DO – Dissolved Oxygen

NTU - Turbidity

SS – Suspended Solids

AL – Action Level

LL – Limit Level

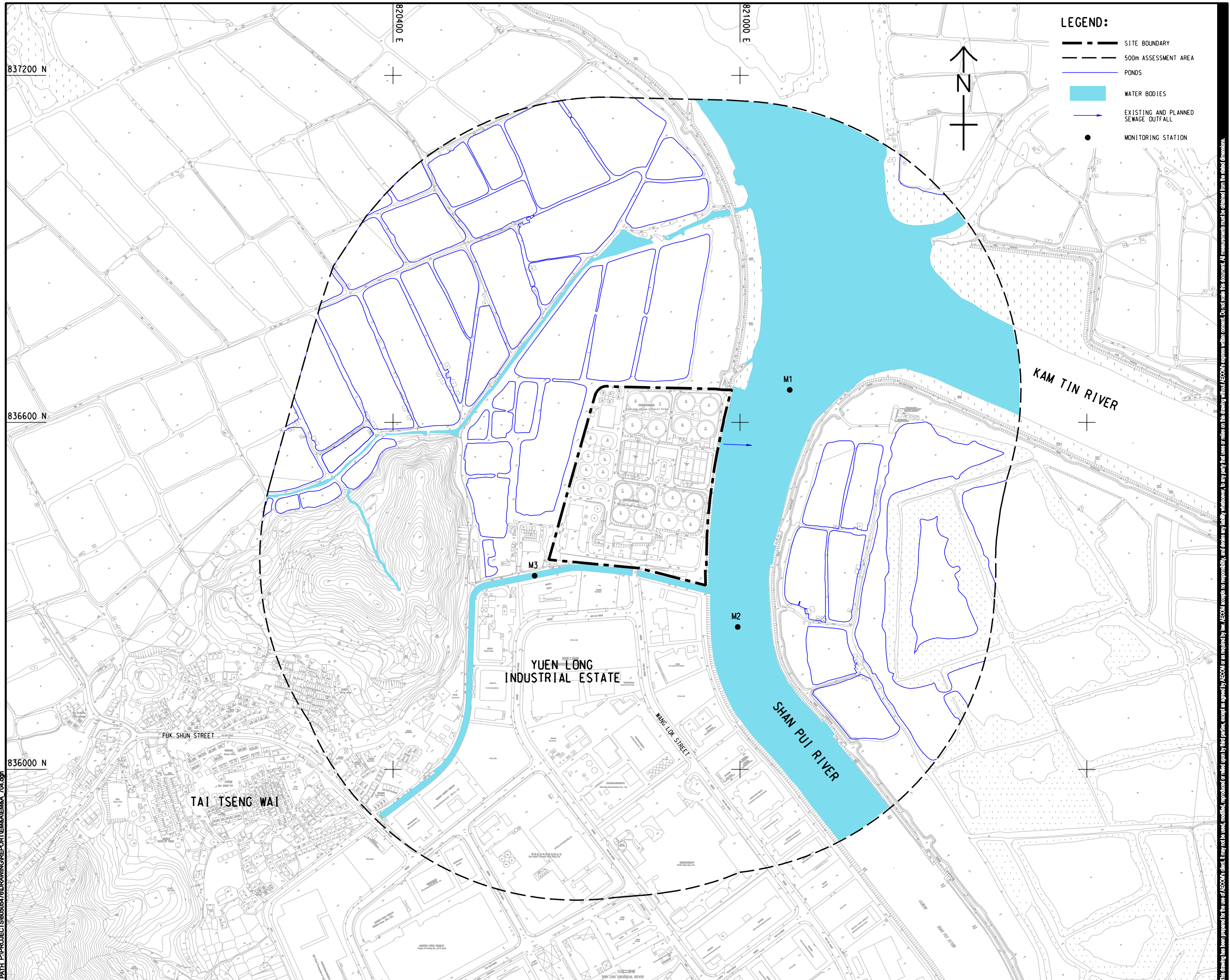
ER – Engineer's Representative

IEC – Independent Checker



Annex A – Location of Water Quality Monitoring Stations

Plot File by: GaoYU 12/18
PATH: P:\PROJECTS\050578\DRAINING\REPORT\EM&A\EM&A_T04.dgn
Project Management Initials: Designer: Checked: Approved: ISO A1 594mm x 841mm



- LEGEND:**
- SITE BOUNDARY
 - 500m ASSESSMENT AREA
 - PONDS
 - WATER BODIES
 - EXISTING AND PLANNED SEWAGE OUTFALL
 - MONITORING STATION

CLIENT
渠務署
Drainage Services Department

SHEET TITLE
LOCATIONS OF WATER QUALITY MONITORING STATIONS FOR CONSTRUCTION PHASE

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Annex B – Water Quality Monitoring Results

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement												Laboratory Analysis			
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
												Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	13/4/2021	Mid-Flood	Fine	Smooth	08:26	1.8	M	0.9	1	0.177	307	7.49	7.49	12.81	12.80	25.69	25.70	66.9	67.1	5.07	5.08	19.8	19.9	16	15
M1	13/4/2021	Mid-Flood	Fine	Smooth	08:26	1.8	M	0.9	2			7.49	7.49	12.79	12.80	25.71	25.70	66.9	67.1	5.07	5.08	19.8	19.9	13	15
M2	13/4/2021	Mid-Flood	Fine	Smooth	08:42	1	M	0.5	1	0.109	324	7.51	7.51	10.25	10.25	26.06	26.06	72.9	73.0	5.58	5.58	23.9	24.0	58	55
M2	13/4/2021	Mid-Flood	Fine	Smooth	08:42	1	M	0.5	2			7.50	7.51	10.25	10.25	26.06	26.06	73.0	73.0	5.58	5.58	24.1	24.0	52	55
M3	13/4/2021	Mid-Flood	Fine	Calm	09:00	0.8	M	0.4	1	0.038	62	7.28	7.28	7.48	7.49	24.87	24.88	50.3	50.3	3.99	3.99	44.2	44.2	130	125
M3	13/4/2021	Mid-Flood	Fine	Calm	09:00	0.8	M	0.4	2			7.27	7.28	7.49	7.49	24.88	24.88	50.2	50.3	3.98	3.98	44.2	44.2	120	125
M1	13/4/2021	Mid-Ebb	Fine	Smooth	15:04	1.4	M	0.7	1	0.108	307	7.43	7.43	6.92	6.92	26.95	26.97	66.9	67.2	5.12	5.14	29.4	29.3	29	25
M1	13/4/2021	Mid-Ebb	Fine	Smooth	15:04	1.4	M	0.7	2			7.43	7.43	6.92	6.92	26.99	26.97	67.4	67.2	5.16	5.14	29.1	29.3	21	25
M2	13/4/2021	Mid-Ebb	Fine	Smooth	14:52	0.8	M	0.4	1	0.043	144	7.42	7.42	6.92	6.93	27.28	27.25	68.5	68.0	5.25	5.21	23.8	23.7	25	25
M2	13/4/2021	Mid-Ebb	Fine	Smooth	14:52	0.8	M	0.4	2			7.42	7.42	6.93	6.93	27.21	27.25	67.4	68.0	5.17	5.21	23.6	23.7	24	25
M3	13/4/2021	Mid-Ebb	Fine	Calm	15:00	0.5	M	0.25	1	0.018	139	7.28	7.29	7.26	7.25	27.31	27.36	84.6	84.7	6.58	6.50	27.5	27.6	19	19
M3	13/4/2021	Mid-Ebb	Fine	Calm	15:00	0.5	M	0.25	2			7.29	7.29	7.24	7.25	27.40	27.36	84.7	84.7	6.41	6.50	27.6	27.6	18	19

Remark

1. Orange and Bold: Action Level Exceedance
2. Red and Bold: Limit Level Exceedance
3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.
4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.
5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.
6. Limit Level for SS: 99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day.

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1	2.25	1.91	48.4	50.4	59.0	68.0
M2	1.88	1.79	43.0	52.4	81.0	112.0
M3	3.28	3.14	74.3	78.0	104.0	167.0

Annex C – Photo of investigation

Date of investigation: 13 April 2021 (Flood Tide)
Monitoring Station: M3



Annex D – Site Inspection



Date of site inspection: 7 April 2021

Gullies were covered by geotextiles and banded to prevent surface runoff.



Date of site inspection: 21 April 2021

The drainages near the construction site areas were temporarily sealed.