



<u>Investigation Report for Exceedance of Limit Level of Water Quality Monitoring on 1</u> March 2023

Investigation was carried out in response to exceedance of limit level during the water quality monitoring on 1 March 2023. The following table summarizes details of the exceedance.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –
Site Formation and Engineering Infrastructure

Date	Station	Parameter	Depth- averaged	Action Limit		Excee	Project Related	
		(Unit) Measured Value	Level	Level	AL	LL	(Y/N)	
01/03	SW	Suspended Solids (SS) (mg/L)	14.0	8.8	10.5		√	N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 1 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Rolling pass.
- Dismantle formwork for box culvert.
- Backfilling for site formation works.
- Rebar fixing for box culvert.
- Curing for box culvert.
- Demolition and removal of the existing temporary access road to Hung Shui Kiu Community Isolation Facility.
- Transportation of the concrete blocks to Site 3-7 for construction platform of bored pile wall.
- Remove the LED Light.

Construction activities carried out at Road D1 during the investigation period

The construction works carried out at adjoining non-DP works area on 1 March 2023 include:

Site 3-6 and Site 3-7 at Portion B2

- Breaking of Artificial Hard Material.
- Cut and trim filled slope.
- Excavation to formation level at upper platform.

<u>Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion B1</u>

No construction activity.

Site 3-6 near Ray On at Portion B2

• No construction activity.





	Site 3-6 (Wing Hong) at Portion B2Make good safety.
	Site 3-7 (near Bee Bee Garden) at Portion A2No construction activity.
	Site 3-7 (near gate B) at Portion A2 • General electric work.
	Site 3-7 and Site 3-8 at Portion B6 • No construction activity.
	Site 3-8 (Community Isolation Facility) at Portion B5 • Saw cut and excavate for inspection pit.
	General site clearance. Site 3-8 (Kai Pak Ling Road) at Portion B6
	No construction activity
	Site 3-8 (Hung Wan) at Portion B7No construction activity.
	Site 3-8 (near Fung Yip) at Portion B7Casting concrete for u-channel.
	Site inspections were carried out on 27 February 2023 and 1 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.
Possible reason for Action or Limit Level Non-compliance:	No evidence was found to indicate that the exceedance on 1 March 2023 were affected by the site activities. The non-compliance at SW may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site.
	In conclusion, the water quality monitoring exceedance recorded on 1 March 2023 was considered non-project related.
	Repeated in-situ measurement was not applicable for laboratory measurement of SS level. The source of impact may be related to surface runoff and
Action taken / to be taken:	2. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.
	3. A notification of exceedance has been issued to the IEC, the Contractor, and the EPD.

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4.	Duplicate	water	sample	es were	colle	cted	on	site,	and	the
	monitoring	data	were	checked	and	conf	firm	ed. A	All p	lant,
	equipment	and the	e Contr	actor's w	orking	g met	hod	s were	e chec	cked
	during the	site ins	pection	. No non-	-comp	lianc	e wa	as obs	erved	•

- 5. As no evidence was found to indicate that the exceedance on 1 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels / earth bunds / sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 27 February 2023

Site 3-8 and Road D1



Stockpile of dusty materials was covered properly to avoid generation of muddy runoff



No muddy surface runoff and direct effluent discharge was observed during site inspection.





Groundwater was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.





Site Photos on 1 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.



(R2)

Rolling pass was provided to prevent duct emission and generation of muddy runoff.



(R3)

Earth bund was provided to avoid muddy surface runoff. No muddy surface runoff and direct discharge of ground water was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.

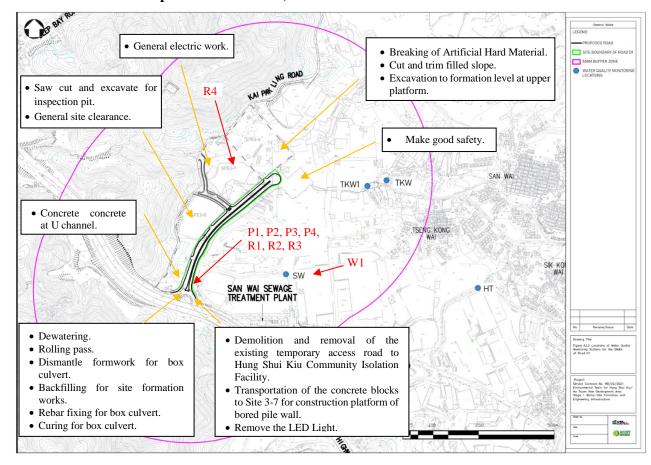




Site Observation Photos around Water Quality Monitoring Stations taken by the ET on 1 March 2023



Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 1 March 2023 were reported in text boxes)



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Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Fandbearg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedances of Limit Levels of Water Quality Monitoring on 9</u> March 2023

Investigation was carried out in response to exceedances of limit levels during the water quality monitoring on 9 March 2023. The following table summarizes details of the exceedances.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –
Site Formation and Engineering Infrastructure

	_		Depth-			Exceedance		Project	
Date	Station	Parameter (Unit)	averaged Measured Value	Action Level	Limit Level	AL	LL	Related (Y/N)	
00/02	TKW1	Turbidity	19.3	16.4	17.6		✓	N	
09/03	HT	(NTU)	20.3	18.2	20.1		✓	N	

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 9 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Installation of scaffolding.
- Erection of formwork for box culvert wall.

The construction works carried out at adjoining non-DP works area on 9 March 2023 include:

Site 3-6 to Site 3-8 at Portion B2

- Trim formation level at upper platform.
- Excavation to formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.
- Filling of granular material for contaminated soil treatment Biopile System.

Site 3-6 (near Chun Tusen) (Temporary Stockpile Area) at Portion <u>B1</u>

• No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Excavation at detention pond for outlay.

Site 3-6 (near Ray On) at Portion B2

• No construction activity.

Site 3-7 (near Bee Bee Garden) at Portion A2

• No construction activity.

Construction activities carried out at Road D1 during the investigation period





	Site 3-7 (near gate B) at Portion A2					
	General electric work.					
	General site clearance.					
	Contrar Bate Greataneer					
	Site 3-7 (Community Isolation Facility) at Portion B3					
	Saw cut and excavate for inspection pit.					
	F. W.					
	Site 3-8 (Community Isolation Facility) at Portion B5					
	Installation of groundwater well for environmental borehole.					
	General site work.					
	Site 3-8 (Kai Pai Ling Road) at Portion B7					
	No construction activity.					
	·					
	Site 3-8 (Hung Wan) at Portion B7					
	No construction activity.					
	-					
	Site inspection was carried out on 9 March 2023. The effluent					
	discharge license was under application. No direct effluent discharge					
	from the site was observed during the site inspection.					
	Construction works carried out on 9 March 2023 were located away					
	from the water quality monitoring stations HT and TKW1, no water-based construction activity was conducted on 9 March 2023. The					
	possibility of the exceedances due to the construction activities was					
	considered minimal.					
Possible reason for Action or						
Limit Level Non-compliance:	No evidence was found to indicate that the exceedances on 9 March					
	2023 were affected by the site activities. The non-compliances at					
	TKW1 and HT may be related to surface runoff and effluent					
	discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment					
	downstream of the site, as well as natural variation of upstream water					
	quality.					
	In conclusion, the water quality monitoring exceedance recorded on					
	9 March 2023 was considered non-project related.					
	1. Repeated in-situ measurement was carried out to confirm the					
	turbidity levels measured at TKW1 and HT.					
	2. The source of impact may be related to surface runoff and					
	effluent discharges from workshops, open storages, warehouse,					
Action taken / to be taken:	and/ or private toilet(s) along the catchment downstream of the site.					
	3. A notification of exceedance has been issued to the IEC, the					
	Contractor, and the EPD.					
	4. Duplicate water samples were collected on site, and the					
	monitoring data were checked and confirmed. All plant,					

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equipment and the Contractor's working methods were checked
during the site inspection. No non-compliance was observed.

- 5. As no evidence was found to indicate that the exceedance on 9 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC, the RE and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels / earth bunds / sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 9 March 2023

Site 3-8 and Road D1



(P1)

Groundwater was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.



(P2)

No muddy surface runoff, pollution discharge and direct effluent discharge was observed during the site inspection.

Site Photos on 9 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



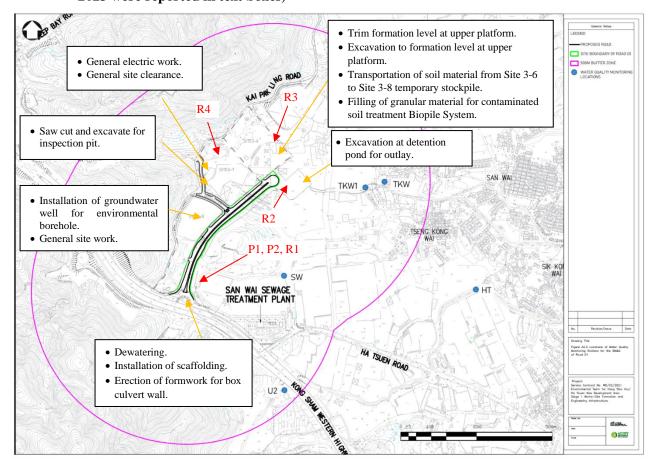
(R4)

No effluent discharge from the site was observed.





Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 9 March 2023 were reported in text boxes)



Prepared by:	Prepared by: Angel Lee		F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Fandberg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedance of Limit Level of Water Quality Monitoring on 11</u> March 2023

Investigation was carried out in response to exceedance of limit level during the water quality monitoring on 11 March 2023. The following table summarizes details of the exceedance.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –
Site Formation and Engineering Infrastructure

Date	Station	Parameter	Depth- averaged	Action	Limit	.imit Exceedance		Project Related
Dute		(Unit)	Measured Value	Level	Level	AL	LL	(Y/N)
11/03	НТ	Turbidity (NTU)	28.2	18.2	20.1		✓	N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 11 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Installation of scaffolding.
- Erection of formwork for box culvert wall.

The construction works carried out at adjoining non-DP works area on 11 March 2023 include:

Site 3-6 and Site 3-7 at Portion B2

Construction activities carried out at Road D1 during the investigation period

- Trim formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion <u>B1</u>

• No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Filling of granular material for contaminated soil treatment Biopile System.

Site 3-6 (near Ray On) at Portion B2

• No construction activity.

Site 3-7 (near Bee Bee Garden) at Portion A2

• Preparation work.





	Site 3-7 (near gate B) at Portion A2
	• General electric work.
	General site clearance.
	Site 3-7 (Community Isolation Facility) at Portion B3
	General site cleaning.
	Site 3-8 (Kai Pai Ling Road) at Portion B7
	No construction activity.
	Site 3-8 (Hung Wan) at Portion B7
	• No construction activity.
	110 construction denvity.
	Site 3-8 (near Fung Yip) at Portion B7
	Breaking concrete.
	Site inspections were carried out on 9 and 11 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.
	Construction works carried out on 11 March 2023 were located away from the water quality monitoring station HT. No water-based construction activity was conducted on 11 March 2023. The possibility of the exceedance due to the construction activities was considered minimal.
Possible reason for Action or Limit Level Non-compliance:	As shown in the drainage utilities plan provided by the RE (Figure 2), any discharge from the construction site will not travel through the river section of HT. Thus, it is unlikely that the exceedance is related to the construction works on site.
	No evidence was found to indicate that the exceedance on 11 March 2023 was affected by the site activities. The non-compliance at HT may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.
	In conclusion, the water quality monitoring exceedance recorded on 11 March 2023 was considered non-project related.
Action taken / to be taken:	 Repeated in-situ measurement was carried out to confirm the turbidity levels measured at HT. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.

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- 3. A notification of exceedance has been issued to the IEC and the Contractor.
- 4. Duplicate water samples were collected on site, and the monitoring data were checked and confirmed. All plant, equipment and the Contractor's working methods were checked during the site inspection. No non-compliance was observed.
- 5. As no evidence was found to indicate that the exceedance on 11 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels / earth bunds / sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 9 March 2023

Site 3-8 and Road D1



(P1)

Groundwater was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.



No muddy surface runoff, pollution discharge and direct effluent discharge was observed during the site inspection.

Site Photos on 11 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.





Site Observation Photo around Water Quality Monitoring Station HT taken by the ET on 11 March 2023



Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 11 March 2023 were reported in text boxes

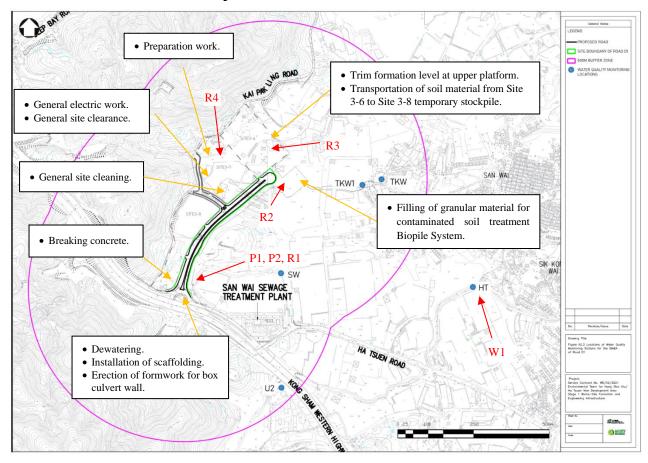
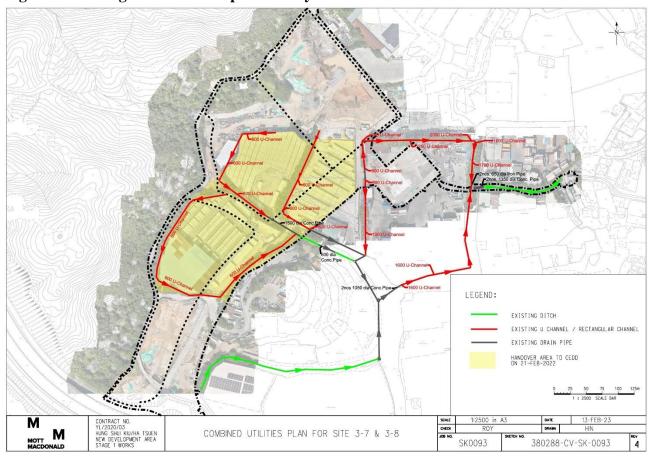






Figure 2 Drainage Utilities Plan provided by the RE



Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Fandbearg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedance of Limit Level of Water Quality Monitoring on 15</u> March 2023

Investigation was carried out in response to exceedance of limit level during the water quality monitoring on 15 March 2023. The following table summarizes details of the exceedance.

Enviro	Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –							
	Site Formation and Engineering Infrastructure							

Date	Station	Parameter	Depth- averaged	Action	Limit	Excee	dance	Project Related
Date St		(Unit)	Measured Value	Level	Level	AL	LL	(Y/N)
15/03	НТ	Turbidity (NTU)	24.7	18.2	20.1		√	N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 15 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Erection of formwork for box culvert top slab.
- Erection of formwork for box culvert base slab.
- Breaking concrete pavement.

The construction works carried out at adjoining non-DP works area on 15 March 2023 include:

Construction activities carried out at Road D1 during the investigation period

Site 3-6 and Site 3-7 at Portion B2

- Trim formation level at upper platform.
- Excavation to formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Site 3-6 (near gate A) at Portion A2

• General site clearance.

<u>Site 3-6 (near Chun Tsuen) (Temporary Stockpile area) at Portion B1</u>

No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Excavation to expose existing 600mm DI pipe.

Site 3-6 (near Ray On) at Portion B2





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	No construction activity.		
	Site 3-7 (near Bee Bee Garden) at Portion A2		
	No construction activity.		
	Site 3-7 (near gate B) at Portion A2		
	General electric work.		
	Site 3-8 (Kai Pai Ling Road) at Portion B7		
	No construction activity.		
	Site 3-8 (Hung Wan) at Portion B7		
	No construction activity.		
	Site inspections was carried out on 15 and 16 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.		
	Construction works carried out on 15 March 2023 were located away from the water quality monitoring station HT, no water-based construction activity was conducted on 15 March 2023. The possibility of the exceedances due to the construction activities was considered minimal.		
Possible reason for Action or Limit Level Non-compliance:	As shown in the drainage utilities plan provided by the RE (Figure 2), any discharge from the construction site will not travel through the river section of HT. Thus, it is unlikely that the exceedance is related to the construction works on site.		
	No evidence was found to indicate that the exceedances on 15 March 2023 were affected by the site activities. The non-compliances at HT may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.		
	In conclusion, the water quality monitoring exceedance recorded on 15 March 2023 was considered non-project related.		
Action taken / to be taken:	 Repeated in-situ measurement was carried out to confirm the turbidity levels measured at HT. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the 		
	site. 3. A notification of exceedance has been issued to the IEC and the Contractor.		

Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure Investigation Report (15 March 2023)





4.	Duplicate	water	sampl	es were	colle	cted	on	site,	and	the
	monitoring	g data	were	checked	and	conf	firm	ed. A	All p	lant,
	equipment	and the	e Contr	actor's w	orking	g met	hod	s were	e che	cked
	during the	site ins	pection	. No non-	-comp	lianc	e wa	as obs	erved	l .

- 5. As no evidence was found to indicate that the exceedance on 15 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels / earth bunds / sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 16 March 2023

Site 3-8 and Road D1



(P1)

Breaking up temporary access road of community isolation facility were carried out at Road D1. The works location was far away from any watercourse. No muddy surface runoff was observed during site inspection.



(P2)

No muddy surface runoff, pollution discharge and direct effluent discharge was observed during the site inspection.

Site Photos on 15 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.





Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 15 March 2023 were reported in text boxes)

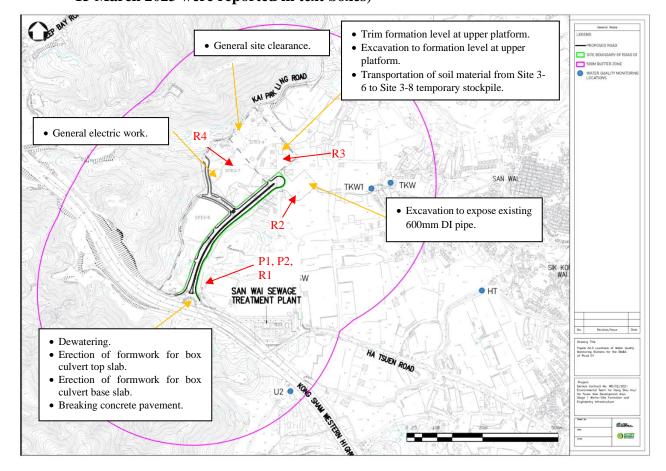
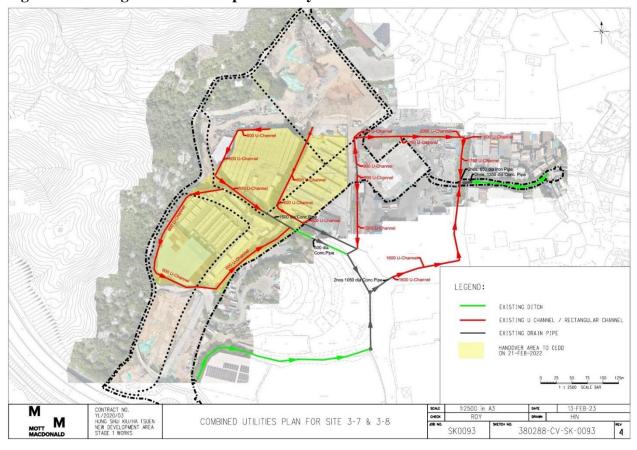






Figure 2 Drainage Utilities Plan provided by the RE



Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Faulberg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedance of Limit Level of Water Quality Monitoring on 17</u> March 2023

Investigation was carried out in response to exceedance of limit level during the water quality monitoring on 17 March 2023. The following table summarizes details of the exceedance.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –
Site Formation and Engineering Infrastructure

Date	Station	Parameter (Unit)	Depth- averaged	Action	Limit	Excee	dance	Project Related
Date State	2.00202		Measured Value	Level	Level	AL	LL	(Y/N)
17/03	НТ	Turbidity (NTU)	26.5	18.2	20.1		√	N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 17 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Dismantle formwork for box culvert base slab.
- Curing box culvert base slab.
- Breaking concrete pavement.

The construction works carried out at adjoining non-DP works area on 17 March 2023 include:

Construction activities carried out at Road D1 during the investigation period

Site 3-6 to Site 3-8 at Portion B2

- Trim formation level at upper platform.
- Excavation to formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion B1

• No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Excavation to expose existing 600mm DI pipe.

Site 3-6 (near Ray On) at Portion B2

• No construction activity.

Site 3-7 (near Bee Bee Garden) at Portion A2





Investigation Report (17 March 2023)	
	No construction activity.
	 Site 3-7 (near gate B) at Portion A2 General site work. Installation of horizontal tie and vertical tie to fix concrete blocks for working platform of bored pile wall. Make good soil surface.
	Site 3-8 • Maintenance of security measure for Hung Shui Kui Community Isolation Facility.
	Site 3-8 (Kai Pai Ling Road) at Portion B7No construction activity.
	Site 3-8 (Hung Wan) at Portion B7 • No construction activity.
	 Site 3-8 (near Fung Yip) at Portion B7 Maintenance of lighting, signing and guarding along the asconstructed temporary access road at the southern part of Site 3-8.
	Site inspections were carried out on 16 and 17 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.
	Construction works carried out on 17 March 2023 were located away from the water quality monitoring station HT, no water-based construction activity was conducted on 17 March 2023. The possibility of the exceedances due to the construction activities was considered minimal.
Possible reason for Action or Limit Level Non-compliance:	As shown in the drainage utilities plan provided by the RE (Figure 2), any discharge from the construction site will not travel through the river section of HT. Thus, it is unlikely that the exceedance is related to the construction works on site.
	No evidence was found to indicate that the exceedance on 17 March 2023 was affected by the site activities. The non-compliance at HT may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.

Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure Investigation Report (17 March 2023)





	In conclusion, the water quality monitoring exceedance recorded on 17 March 2023 was considered non-project related.
Action taken / to be taken:	 Repeated in-situ measurement was carried out to confirm the turbidity levels measured at HT. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site. A notification of exceedance has been issued to the IEC and the Contractor. Duplicate water samples were collected on site, and the monitoring data were checked and confirmed. All plant, equipment and the Contractor's working methods were checked during the site inspection. No non-compliance was observed. As no evidence was found to indicate that the exceedance on 17 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC and the Contractor. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures: No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained. Channels/ earth bunds/ sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 16 March 2023

Site 3-8 and Road D1



Breaking up temporary access road of community isolation facility were carried out at Road D1. The works location was far away from any watercourse. No muddy surface runoff was observed during the site inspection.



No muddy surface runoff, pollution discharge and direct effluent discharge was observed during site inspection.

Site Photos on 17 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.





Site Observation Photo around Water Quality Monitoring Station (HT) taken by the ET on 11 March 2023

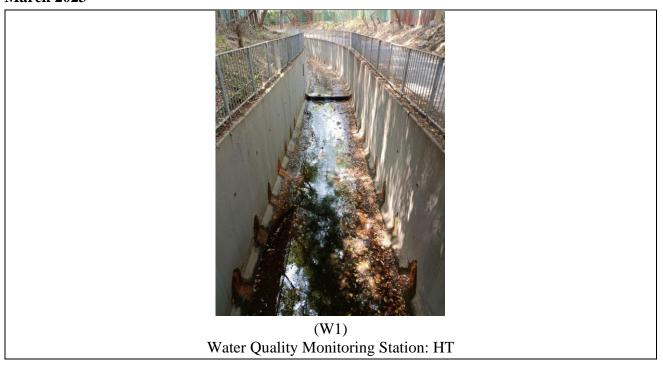


Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 17 March 2023 were reported in text boxes)

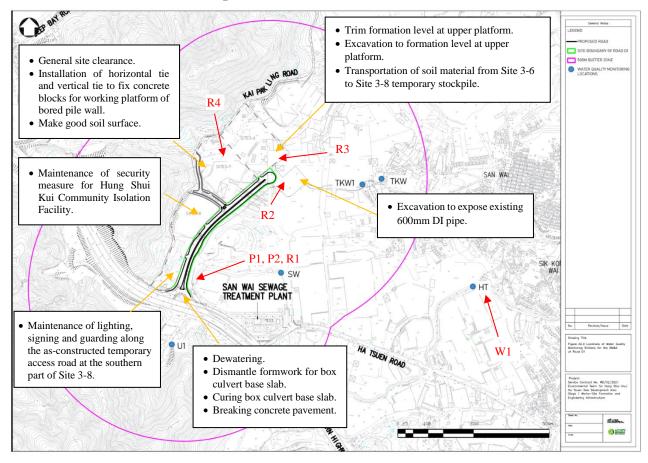
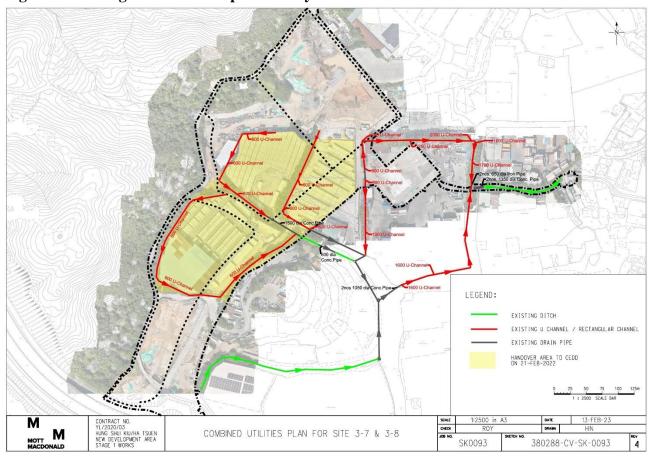






Figure 2 Drainage Utilities Plan provided by the RE



Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Fandbearg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedances of Limit Level of Water Quality Monitoring on 21</u> March 2023

Investigation was carried out in response to exceedances of Limit Levels during the water quality monitoring on 21 March 2023. The following table summarizes details of the exceedances.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –
Site Formation and Engineering Infrastructure

Date	Station	Parameter (Unit)	Depth- averaged Measured Value	Action Level	Limit Level	Exceedance		Project Related
						AL	LL	(Y/N)
21/03	TKW1	Turbidity (NTU)	23.3	16.4	17.6		✓	N
	НТ		31.1	18.2	20.1		✓	N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 21 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Rebar fixing for box culvert.
- Erection of formwork for box culvert.
- Installation of scaffolding for construction of box culvert.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Construction activities carried out at Road D1 during the investigation period

The construction works carried out at adjoining non-DP works area on 21 March 2023 include:

Site 3-6 to Site 3-8 at Portion B2

- Trim formation level at upper platform.
- Excavation for u-channel.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Site 3-6 (Project Manager's Instruction demolish Box Culvert) at Portion B2

No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Excavation to expose existing 600mm DI pipe.





	Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion					
	B1No construction activity.					
	1 to construction activity.					
	Site 3-6 (near Ray On) at Portion B2					
	No construction activity.					
	Site 3-7 (near Bee Bee Garden) at Portion A2					
	No construction activity.					
	Site 3-7 (near gate B) at Portion A2					
	General electric work.					
	General site work.					
	Site 3-8 at Portion B6					
	Excavation of inspection pits for soil samples taking.					
	Soil samples taken for land decontamination work.					
	Site 3-8 (Kai Pai Ling Road) at Portion B7					
	No construction activity.					
	Site 3-8 (Hung Wan) at Portion B7					
	• No construction activity.					
	Site inspections was carried out on 21 and 23 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.					
Possible reason for Action or	Construction works carried out on 21 March 2023 were located away from the water quality monitoring stations HT and TKW1. No water-based construction activity was conducted on 21 March 2023. The possibility of the exceedances due to the construction activities was considered minimal.					
Limit Level Non-compliance:	No evidence was found to indicate that the exceedances on 21 March 2023 were affected by the site activities. The non-compliances at TKW1 and HT may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.					
	In conclusion, the water quality monitoring exceedance recorded on 21 March 2023 was considered non-project related.					
Action taken / to be taken:	1. Repeated in-situ measurement was carried out to confirm the turbidity levels measured at TKW1 and HT.					

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- 2. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.
- 3. A notification of exceedance has been issued to the IEC, the Contractor, and the EPD.
- 4. Duplicate water samples were collected on site, and the monitoring data were checked and confirmed. All plant, equipment and the Contractor's working methods were checked during the site inspection. No non-compliance was observed.
- 5. As no evidence was found to indicate that the exceedance on 21 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC, the RE and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels / earth bunds / sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 23 March 2023

Site 3-8 and Road D1



(P1)

A stockpile of dusty materials was covered properly to avoid generation of muddy runoff. No muddy surface runoff and direct effluent discharge was observed during the site inspection.



(P2)

Groundwater and surface runoff was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.

Site Photos on 21 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.

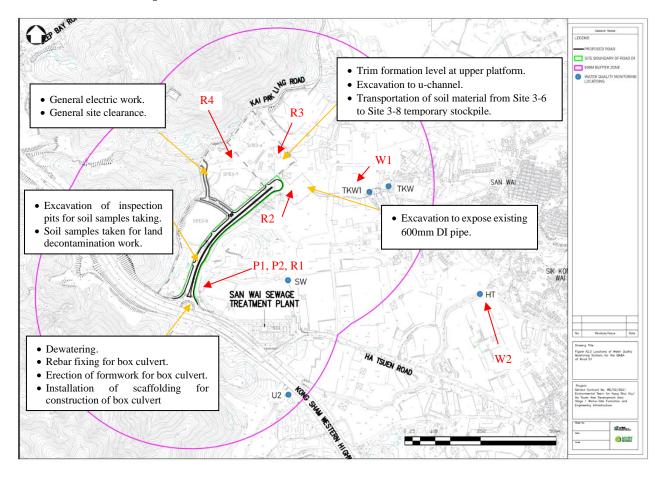




Site Observation Photos around Water Quality Monitoring Stations taken by the ET on 21 March 2023



Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 21 March 2023 were reported in text boxes)



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Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Designation Environmental Team Member		Environmental Team Leader
Signature:	A	Signature:	Toay Fankberg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedance of Action Level of Water Quality Monitoring on 23</u> March 2023

Investigation was carried out in response to exceedance of action level during the water quality monitoring on 23 March 2023. The following table summarizes details of the exceedance.

Enviro	Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works –							
Site Formation and Engineering Infrastructure								

Date	Station	Parameter	8		Limit			Project Related
		(Unit) Measured Value	Level	Level	AL	LL	(Y/N)	
23/03	SW	Suspended Solids (SS) (mg/L)	10.3	8.8	10.5	✓		N

According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 23 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Rebar fixing for box culvert.

The construction works carried out at adjoining non-DP works area on 23 March 2023 include:

Site 3-6 to Site 3-8 at Portion B2

- Trim formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Construction activities carried out at Road D1 during the investigation period

Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion B1

No construction activity.

<u>Site 3-6 (Project Manager's Instruction demolish Box Culvert) at Portion B2</u>

• No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Erection formwork for outlet chamber at detention pond.

Site 3-6 (near Ray On) at Portion B2

No construction activity.





<u> </u>	
	 Site 3-7 (near Bee Bee Garden) at Portion A2 Set up for crawler crane for bored pile wall.
	 Site 3-7 (near gate B) at Portion A2 Drilling work. Rock head inspection. General electric work. General site work Point load test.
	 Site 3-8 at Portion B6 Excavation of inspection pits for soil samples taking. Soil samples taken for land decontamination work.
	Site 3-8 (Kai Pai Ling Road) at Portion B7No construction activity.
	Site 3-8 (Hung Wan) at Portion B7No construction activity.
	Site inspection was carried out on 23 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.
Possible reason for Action or	Construction works carried out on 23 March 2023 were located away from the water quality monitoring station SW. No water-based construction activity was conducted on 23 March 2023. The possibility of the exceedances due to the construction activities was considered minimal.
Limit Level Non-compliance:	No evidence was found to indicate that the exceedances on 23 March 2023 was affected by the site activities. The non-compliance at SW may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.
	In conclusion, the water quality monitoring exceedance recorded on 23 March 2023 was considered non-project related.
Action taken / to be taken:	 Repeated in-situ measurement was not applicable for laboratory measurement of SS level at SW. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.
Action taken / to be taken:	measurement of SS level at SW. 2. The source of impact may be related to surface runoff an effluent discharges from workshops, open storages, warehouse

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- 3. A notification of exceedance has been issued to the IEC and the Contractor.
 - 4. Duplicate water samples were collected on site, and the monitoring data were checked and confirmed. All plant, equipment and the Contractor's working methods were checked during the site inspection. No non-compliance was observed.
 - 5. As no evidence was found to indicate that the exceedance on 23 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC and the Contractor.
 - 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained.
 - b. Channels/ earth bunds/ sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
 - 7. The frequency of monitoring was not increased as the exceedance was considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 23 March 2023

Site 3-8 and Road D1



(P1)

A stockpile of dusty materials was covered properly to avoid generation of muddy runoff. No muddy surface runoff was observed during the excavation of inspection pit and the process of soil sampling. No direct effluent discharge was observed during the site inspection.



(P2)

Groundwater was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.

Site Photos on 23 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.





Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.

Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



(R4)

No effluent discharge from the site was observed.

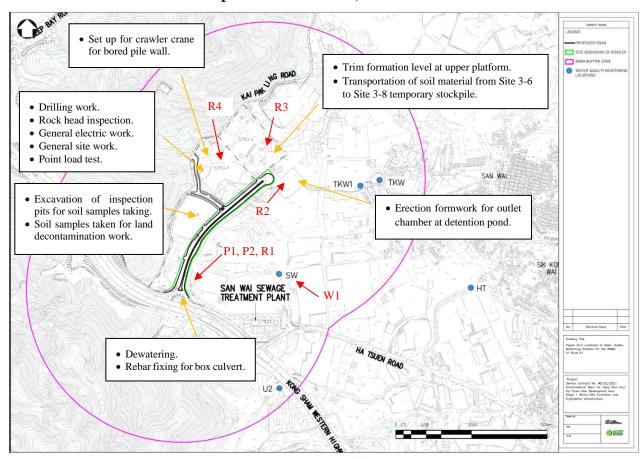




Site Observation Photo around Water Quality Monitoring Station (SW) taken by the ET on 23 March 2023



Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 23 March 2023 were reported in text boxes)



Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure Investigation Report (23 March 2023)



Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Fandbearg
Date	17 October 2023	Date:	17 October 2023





<u>Investigation Report for Exceedances of Action Level and Limit Level of Water Quality Monitoring on 25 March 2023</u>

Investigation was carried out in response to exceedances of limit levels during the water quality monitoring on 25 March 2023. The following table summarizes details of the exceedances.

Enviro	Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure							
			Depth-			Exceedance		Project
Date	Station	Parameter (Unit)	averaged Measured Value	Action Level	Limit Level	AL	LL	Related (Y/N)
	TKW1	Turbidity (NTU)	131.5	16.4	17.6		✓	N
	TKW		144.5	26.0	26.7		✓	N
	SW		372.0	22.0	22.3		✓	N
25/03	HT		83.4	18.2	20.1		✓	N
23/03	TKW1	Suspended Solids (SS) (mg/L)	31.0	7.1	7.8		✓	N
	TKW		19.5	7.0	7.1		✓	N
	SW		19.0	8.8	10.5		✓	N
	HT	(IIIg/L)	8.9	7.2	7.5		✓	N





According to the information provided by the engineer representative (RE), the construction works carried out within the site area of Road D1 (Designated Project (DP)) on 25 March 2023 include:

Site 3-8 (Road D1) at Portion B7

- Dewatering.
- Rebar fixing for box culvert.

The construction works carried out at adjoining non-DP works area on 25 March 2023 include:

Site 3-6 to Site 3-8 at Portion B2

- Trim formation level at upper platform.
- Transportation of soil material from Site 3-6 to Site 3-8 temporary stockpile.

Site 3-6 (near Chun Tsuen) (Temporary Stockpile Area) at Portion B1

No construction activity.

Construction activities carried out at Road D1 during the investigation period

Site 3-6 (Project Manager's Instruction demolish Box Culvert) at Portion B2

No construction activity.

Site 3-6 (Wing Hong) at Portion B2

• Erection formwork for outlet chamber at detention pond.

Site 3-7 (near Bee Bee Garden) at Portion A2

• Set up for crawler crane for bored pile wall.

Site 3-7 (near gate B) at Portion A2

- Drilling work.
- Rock head inspection.
- General electric work.
- General site work.
- Point load test.

Site 3-8 at Portion B6

- Excavation of inspection pits for soil samples taking.
- Soil samples taken for land decontamination work.

Site 3-8 (Kai Pai Ling Road) at Portion B7

• No construction activity.

Site 3-8 (Hung Wan) at Portion B7





No construction activity.					
	Site inspections were carried out on 23 and 25 March 2023. The effluent discharge license was under application. No direct effluent discharge from the site was observed during the site inspection.				
	According to the records of the Hong Kong Observatory, about 70 to 100 mm rainfalls were recorded over Hung Shui Kiu on 25 March 2023, respectively, which led to river runoff with high turbidity/ SS levels due to surface runoff from the catchment, effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.				
Possible reason for Action or Limit Level Non-compliance:	As observed during the site inspections on 25 March 2023, the Contractor had implemented on site measures to control site runoff from Site 3-8 and Road D1, including sump, WetSep and portable pumps for temporary storage and treatment of surface water and site effluent. As no effluent discharge licence was applied for Site 3-6 and Site 3-7, no direct discharge from the sites was allowed. Effluent and surface runoff at Site 3-6 and Site 3-7 were collected and diverted to retention ponds on-site for ground infiltration.				
	No evidence was found to indicate that the exceedances on 25 March 2023 were affected by the site activities. The non-compliances at HT, SW, TKW1 and TKW may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, private toilet(s) and/ or residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.				
	No further action or limit levels exceedance of turbidity and suspended solid was detected during the water quality monitoring on 28 and 30 March 2023.				
	In conclusion, the water quality monitoring exceedance recorded on 25 March 2023 was considered non-project related.				
	1. Repeated in-situ measurement was carried out to confirm the turbidity levels measured at TKW, TKW1, SW and HT. Repeated in-situ measurement was not applicable for laboratory measurement of SS level.				
Action taken / to be taken:	2. The source of impact may be related to surface runoff and effluent discharges from workshops, open storages, warehouse, and/ or private toilet(s) along the catchment downstream of the site.				
	3. A notification of exceedance has been issued to the IEC, the Contractor, and the EPD.				
	4. Duplicate water samples were collected on site, and the monitoring data were checked and confirmed. All plant,				

Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure Investigation Report (25 March 2023)





equipment and the Contractor's working methods were checked
during the site inspection. No non-compliance was observed.

- 5. As no evidence was found to indicate that the exceedance on 25 March 2023 was affected by the site activities, no additional mitigation measure was discussed with the IEC, the RE and the Contractor.
- 6. During the site inspection, the Contractor had implemented on site measures to control site runoff. The Contractor was reminded to implement/ maintain the following mitigation measures:
 - a. No direct discharge of treated/ untreated wastewater is allowed before the effluent discharge license is obtained .
 - b. Channels/ earth bunds/ sandbag barriers should be provided on site to properly direct stormwater to silt removal facilities.
- 7. The frequency of monitoring was not increased as the exceedances were considered non-project related and no further water quality monitoring was considered.





Photo Records of Site Inspection held by the ET on 23 March 2023

Site 3-8 and Road D1



(P1)

A stockpile of dusty materials was covered properly to avoid generation of muddy runoff. No muddy surface runoff was observed during the excavation of inspection pit and the process of soil sampling. No direct effluent discharge was observed during the site inspection.



(P2)

Groundwater and surface runoff was collected and diverted to WetSep for temporary storage and deposition before the water was used for fugitive dust suppression on site. No direct effluent discharge was allowed.





Site Photos on 25 March 2023 provided by the RE

Site 3-8 and Road D1 (Portion B7)



(R1)

Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.

Contaminated Soil Treatment Area (Portion B2) (Non-DP area)



(R2)

No surface runoff or effluent was leaked from the contaminated soil treatment area during the site inspection.





Site 3-6 (Portion B2) (Non-DP area)



(R3)

No effluent discharge from the site was observed.

Site 3-7 (Portion A2)



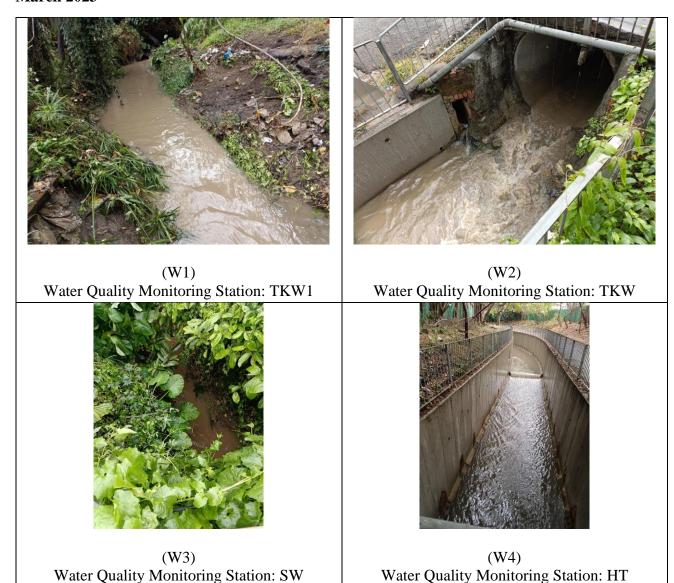
(R4)

No effluent discharge from the site was observed.





Site Observation Photos around Water Quality Monitoring Stations taken by the ET on 25 March 2023







Rainfall Record from Hong Kong Observatory:

Total rainfall on 25-Mar-2023 (based on raingauges and radar data)

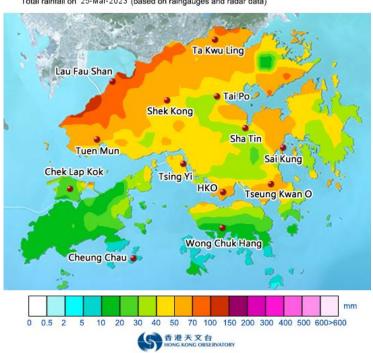
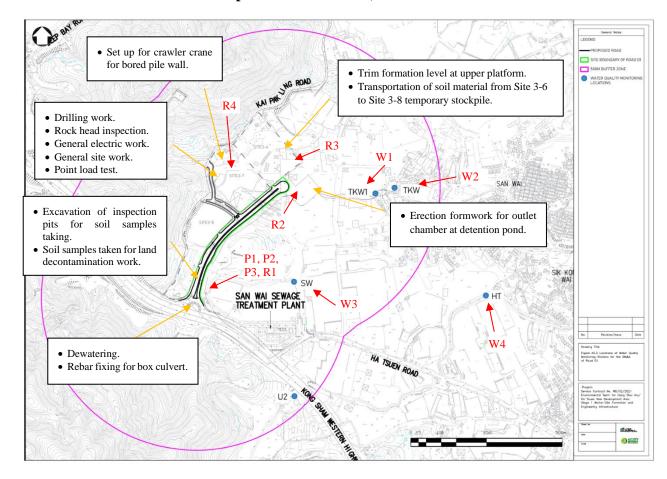


Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held on 25 March 2023 were reported in text boxes)



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Prepared by:	Angel Lee	Certified by:	F. C. Tsang
Designation	Environmental Team Member	Designation:	Environmental Team Leader
Signature:	A	Signature:	Toay Faulberg
Date	17 October 2023	Date:	17 October 2023