Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	07-May-11
Time	8:45 AM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine surface)
Action & Limit Levels (mg/L)	6.84 / 6.81
Measured Level (mg/L)	6.81
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.99
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) was below the baseline action level but was within the ranges of 3-year (2007 - 2009) marine surface DO records between 4.3 and 9.4 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 4.2 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks and survey check on installed seawall blocks were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine surface) recorded at O-1(FT) on 07-May-11

Site photo

Contract No. DC/2007/12
Design and Construction of Tsuen Wan Drainage Tunnel
Environmental Monitoring & Audit

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	07-May-11
Time	8:45 AM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine mid-depth)
Action & Limit Levels (mg/L)	6.84 / 6.81
Measured Level (mg/L)	6.79
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.91
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine mid-depth DO records between 2.6 and 9.1 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.9 and 8.5 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks and survey check on installed seawall blocks were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine mid-depth) recorded at O-1(FT) on 07-May-11

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	07-May-11
Time	8:45 AM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine bottom)
Action & Limit Levels (mg/L)	6.99 / 6.96
Measured Level (mg/L)	6.91
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.78
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine bottom) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine bottom DO records between 2.2 and 8.8 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.4 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks and survey check on installed seawall blocks were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine bottom) recorded at O-1(FT) on 07-May-11

Site photo

Contract No. DC/2007/12
Design and Construction of Tsuen Wan Drainage Tunnel
Environmental Monitoring & Audit

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	07-May-11
Time	12:28 PM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (marine surface)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.90
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	6.88
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine surface DO records between 4.3 and 9.4 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 4.2 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks and survey check on installed seawall blocks were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine surface) recorded at O-1(ET) on 07-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	07-May-11
Time	12:28 PM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (marine mid-depth)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.84
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	6.76
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine mid-depth DO records between 2.6 and 9.1 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.9 and 8.5 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks and survey check on installed seawall blocks were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine mid-depth) recorded at O-1(ET) on 07-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	03-May-11
Time	5:35 PM
Monitoring Location	O-1(FT)
Parameter	Suspended Solids (SS)
Action & Limit Levels (mg/L)	14.10 / 18.08 (derived from the baseline monitoring data)
Measured Level (depth-averaged) at Monitoring Location	8.45
Control Station	O-1-C(FT)
Measured Level (depth averaged) at Control Station (mg/L)	6.97
Possible reason for Action or Limit Level Non-compliance	The measured SS level (depth-averaged) at O-1(FT) was below the baseline action/limit level but was higher than 120% of the control station's SS level (O-1-C(FT)) at the same tide of the same day. Only placing seawall blocks was undertaken and there was no other marine works conducted during the monitoring. Silt curtain was deployed along the Portion E boundary line and extended from seawater level to seabed. Floating type silt curtain was also employed at the inner side. As such, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature:

Date: 13-May-11

Photographic record for exceedance of Suspended Solids (SS) recorded at O-1(FT) on 03-May-11

Site photo

Interim Notifications of Environmental Quality Limits Exceedances

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	10:20 AM
Monitoring Location	Squatters (I-3)
Parameter	Turbidity
Action & Limit Levels (NTU)	3.99 / 4.18
Measured Level (NTU)	19.08
Control Station	I-3-C
Measured Level at the Control Station (NTU)	19.19
Possible reason for Action or Limit Level Non-compliance	The measured turbidity level was higher than baseline limit level, but lower than the turbuidity level of the control station (I-3-C). General site cleaning and housekeeping, monitoring of deformation monitoring point (DMP), drilling and rock breaking in shaft, installation of concrete blocks in shaft, digging trail pit and breaking of blinding layer at PB wall were undertaken during measurement. No direct disturbance was observed from the site and 33.5 mm rainfall was recorded on the same day. The exceedance was considered to be contributed by high turbidity level at upsteam location and rainfall. Since the exceedance was non-projected related, no further action was required.
Actions taken / to be taken	The following mitigation measures were provided on-site during monitoring: (1) All waste water were collected and diverted to waste water treatment plant prior to discharge; (2) Existing stream was diverted and bunded by sealed concrete block wall; and (3) Excavated area had been bunded and sealed by concrete block wall to prevent any excavated material runoff from working area.
Remarks	None

Prepared by: Fan Cheong Tsang

Designation: Environmental Team Leader

Signature: 

Date: 16-May-11

Photographic record for exceedance of Turbidity recorded at Squatters (I-3) on 13-May-11

Site photo

Photo taken at I-3

Photo taken at I-3-C

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	2:32 PM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine bottom)
Action & Limit Levels (mg/L)	6.99 / 6.96
Measured Level (mg/L)	6.83
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.89
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine bottom) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine bottom DO records between 2.2 and 8.8 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.4 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Loading seawall blocks onto installed seawall blocks and preparation work for geotextile were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 16-May-11

Photographic record for exceedance of Dissolved Oxygen (marine bottom) recorded at O-1(FT) on 13-May-11

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	9:40 AM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (marine surface)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.90
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	7.08
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine surface DO records between 4.3 and 9.4 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 4.2 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Loading seawall blocks onto installed seawall blocks and preparation work for geotextile were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 13-May-11

Photographic record for exceedance of Dissolved Oxygen (marine surface) recorded at O-1(ET) on 13-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	9:40 AM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (marine mid-depth)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.85
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	7.01
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine mid-depth DO records between 2.6 and 9.1 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.9 and 8.5 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Loading seawall blocks onto installed seawall blocks and preparation work for geotextile were conducted at the Outfall basin (Portion E) during monitoring. Since there was no other marine works conducted during the monitoring, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 16-May-11

Photographic record for exceedance of Dissolved Oxygen (marine mid-depth) recorded at O-1(ET) on 13-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	18-May-11
Time	5:30 PM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine surface)
Action & Limit Levels (mg/L)	6.84 / 6.81
Measured Level (mg/L)	6.81
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.90
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) was below the baseline action level but was within the ranges of 3-year (2007 - 2009) marine surface DO records between 4.3 and 9.4 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 4.2 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks was conducted at the Outfall basin (Portion E) during monitoring and there was no other marine works conducted. Since the difference bewteen DO level at impact and control station was around 1.3% and the DO level at impact station was only 0.03 mg/L lower than the baseline action level, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 19-May-11

Photographic record for exceedance of Dissolved Oxygen (marine surface) recorded at O-1(FT) on 18-May-11

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	18-May-11
Time	5:30 PM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine mid-depth)
Action & Limit Levels (mg/L)	6.84 / 6.81
Measured Level (mg/L)	6.78
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.79
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was below the baseline limit level but was within the ranges of 3-year (2007 - 2009) marine mid-depth DO records between 2.6 and 9.1 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.9 and 8.5 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks was conducted at the Outfall basin (Portion E) during monitoring and there was no other marine works conducted. Since both DO levels at impact station and control station were just below the baseline limit level and the difference bewteen them was only 0.01 mg/L, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 19-May-11

Photographic record for exceedance of Dissolved Oxygen (marine mid-depth) recorded at O-1(FT) on 18-May-11

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	18-May-11
Time	5:30 PM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine bottom)
Action & Limit Levels (mg/L)	6.99 / 6.96
Measured Level (mg/L)	6.98
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.74
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine bottom) was below the baseline action level but was within the ranges of 3-year (2007 - 2009) marine bottom DO records between 2.2 and 8.8 mg/L at EPD WM4 marine water quality monitoring station near Ma Wan and between 3.4 and 8.6 mg/L at EPD VM14 marine water quality monitoring station towards the north of Rambler Channel. Adjusting level of installed seawall blocks was conducted at the Outfall basin (Portion E) during monitoring and there was no other marine works conducted. Since the DO level at impact station was just below the baseline action level and the DO level at impact station was higher than that at control station, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 19-May-11

Photographic record for exceedance of Dissolved Oxygen (marine bottom) recorded at O-1(FT) on 18-May-11

Site photo

Interim Notifications of Environmental Quality Limits Exceedances

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	10:55 AM
Monitoring Location	Hong Hoi Chee Hong Temple (I-2)
Parameter	Suspended Solid
Action & Limit Levels (mg/L)	7.68 / 8.34
Measured Level (mg/L)	6.30
Control Station	I-2-C
Measured Level at the Control Station (mg/L)	4.10
Possible reason for Action or Limit Level Non-compliance	The measured SS level was below than baseline action level, but higher than 130% of the SS level of the control station (I-2-C). General site cleaning, housekeeping and temporary traffic arrangement, rock splitting and mucking at vortex drop shaft, drilling holes for rock splitting, construction of H-pile and excavation for pipe jacking at Portion G were undertaken during measurement. No direct disturbance was observed from the site and about 33.5 mm rainfall was recorded on the same day. The exceedance was considered to be contributed by natural variation and high rainfall. Since the exceedance was non-projected related, no further action was required.
Actions taken / to be taken	The following mitigation measures were provided on-site during monitoring: (1) All waste water were collected and diverted to waste water treatment plant prior to discharge; (2) Existing stream was diverted and bunded by sealed concrete block wall; and (3) Existing stream was bunded off by sand bags to prevent any excavated material washing out from working area.
Remarks	None

Prepared by: Fan Cheong Tsang

Designation: Environmental Team Leader

Signature: 

Date: 24-May-11

Photographic record for exceedance of Suspended Solid recorded at Hong Hoi Chee Hong Temple (I-2) on 13-May-11

Site photo

Photo taken at I-2

Photo taken at I-2-C

Interim Notifications of Environmental Quality Limits Exceedances

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	13-May-11
Time	10:20 AM
Monitoring Location	Squatters (I-3)
Parameter	Suspended Solid
Action & Limit Levels (mg/L)	6.13 / 7.23
Measured Level (mg/L)	21.50
Control Station	I-3-C
Measured Level at the Control Station (mg/L)	22.15
Possible reason for Action or Limit Level Non-compliance	The measured SS level was higher than baseline limit level, but lower than the SS level of the control station (I-3-C). General site cleaning and housekeeping, monitoring of deformation monitoring point (DMP), drilling and rock breaking in shaft, installation of concrete blocks in shaft, digging trail pit and breaking of blinding layer at PB wall were undertaken during measurement. No direct disturbance was observed from the site and about 33.5 mm rainfall was recorded on the same day. The exceedance was considered to be contributed by high SS level at upsteam location and rainfall. Since the exceedance was non-projected related, no further action was required.
Actions taken / to be taken	The following mitigation measures were provided on-site during monitoring: (1) All waste water were collected and diverted to waste water treatment plant prior to discharge; (2) Existing stream was diverted and bunded by sealed concrete block wall; and (3) Excavated area had been bunded and sealed by concrete block wall to prevent any excavated material runoff from working area.
Remarks	None

Prepared by: Fan Cheong Tsang

Designation: Environmental Team Leader

Signature: 

Date: 24-May-11

Photographic record for exceedance of Suspended Solid recorded at Squatters (I-3) on 13-May-11

Site photo

Photo taken at I-3

Photo taken at I-3-C

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	20-May-11
Time	1:07 PM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (marine surface)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.99
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	6.96
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) was below the baseline action level but higher than the marine surface DO level of the control station O-1-C(ET). Maintenance of the inner silt curtain was undertaken at the Outfall basin (Portion E) during monitoring and no other marine works was conducted. No direct disturbance from the site was observed. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 24-May-11

Photographic record for exceedance of Dissolved Oxygen (marine surface) recorded at O-1(ET) on 20-May-11

Site photo

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	20-May-11
Time	1:07 PM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (mid-depth)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.92
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	7.07
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was below the baseline limit level and the DO level of the corresponding control station (O-1-C(ET)). Maintenance of the inner silt curtain was undertaken at the Outfall basin (Portion E) during monitoring and no other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 24-May-11

Photographic record for exceedance of Dissolved Oxygen (mid-depth) recorded at O-1(ET) on 20-May-11

Site photo

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	18-May-11
Time	12:28 PM
Monitoring Location	O-1(ET)
Parameter	Suspended Solids
Action & Limit Levels (mg/L)	13.25 / 14.39
Measured Level (mg/L)	7.02
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	5.78
Possible reason for Action or Limit Level Non-compliance	The measured SS level was below the baseline action level but was slightly higher than 120% of that of the control station (O-1-C(ET)). Adjusting level of installed seawall blocks was conducted at the Outfall basin (Portion E) during monitoring and there was no other marine works conducted. As no direct disturbance from the site was observed and the measured SS level was relatively low comparing with the baseline action level, the exceedance was considered to be contributed by natural variation and non-project related. Therefore, no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 25-May-11

Photographic record for exceedance of Suspended Solids recorded at O-1(ET) on 18-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	20-May-11
Time	1:07 PM
Monitoring Location	O-1(ET)
Parameter	Suspended Solids
Action & Limit Levels (mg/L)	13.25 / 14.39
Measured Level (mg/L)	5.75
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	4.27
Possible reason for Action or Limit Level Non-compliance	The measured SS level at the monitoring station was well below the baseline action level but higher than the 130% of the SS level measured at the control station. Only maintenance of the inner silt curtain was undertaken at the Outfall basin (Portion E) during monitoring and no other marine works was conducted. No direct disturbance from the site was observed. Therefore, the exceedance was considered to be contributed by natural variation and relatively low SS level at the control station. Since the exceedance was non-project related, no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 27-May-11

Photographic record for exceedance of Suspended Solids recorded at O-1(ET) on 20-May-11

Site photo

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	27-May-11
Time	10:40 AM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (mid-depth)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.98
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	7.19
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) was only 0.04 mg/L (about 0.6%) below the baseline action level and was below the DO level of the corresponding control station (O-1-C(ET)). Backfilling grade 700 rockfill and type II armour behind seawall blocks was undertaken at the Outfall basin (Portion E) during monitoring. No other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was only undertaken within the inner silt curtain area.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 01-Jun-11

Photographic record for exceedance of Dissolved Oxygen (mid-depth) recorded at O-1(ET) on 27-May-11

Site photo

Photo taken at O-1(ET)

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	30-May-11
Time	9:42 AM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (Surface)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.97
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	7.09
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine surface) at the monitoring station was only 0.05 mg/L (about 0.7%) below the baseline action level and was below the DO level of the corresponding control station. Backfilling type II armour behind seawall blocks at the eastern side was undertaken at the Outfall basin (Portion E) during monitoring. No other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was only undertaken within the inner silt curtain area.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 02-Jun-11

Photographic record for exceedance of Dissolved Oxygen (Surface) recorded at O-1(ET) on 30-May-11

Site photo

Photo taken at O-1(ET)

Photo taken at O-1-C(ET)

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Action Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	30-May-11
Time	9:42 AM
Monitoring Location	O-1(ET)
Parameter	Dissolved Oxygen (Mid-depth)
Action & Limit Levels (mg/L)	7.02 / 6.94
Measured Level (mg/L)	6.94
Control Station	O-1-C(ET)
Measured Level at the Control Station (mg/L)	6.98
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine mid-depth) at the monitoring station was below the baseline action level and slightly below than the DO level of the corresponding control station. Backfilling type II armour behind seawall blocks at the eastern side was undertaken at the Outfall basin (Portion E) during monitoring. No other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was only undertaken within the inner silt curtain area.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 02-Jun-11

Photographic record for exceedance of Dissolved Oxygen (Mid-depth) recorded at O-1(ET) on 30-May-11

Site photo

Photo taken at O-1(ET)

Photo taken at O-1-C(ET)

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	30-May-11
Time	5:30 PM
Monitoring Location	O-1(FT)
Parameter	Dissolved Oxygen (marine bottom)
Action & Limit Levels (mg/L)	6.99 / 6.96
Measured Level (mg/L)	6.95
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	6.92
Possible reason for Action or Limit Level Non-compliance	The measured DO level (marine bottom) at the monitoring station was below the baseline limit level but higher than the DO level of the correpsonding control station. Backfilling type II armour behind seawall blocks at eastern side was undertaken at the Outfall basin (Portion E) during monitoring. No other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by natural variation and no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was undertaken within the inner silt curtain area only.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 02-Jun-11

Photographic record for exceedance of Dissolved Oxygen (marine bottom) recorded at O-1(FT) on 30-May-11

Site photo

Site photo

Interim Notification of Environmental Quality Limit Exceedance

Incident Report on Limit Level Non-compliance

Project	Tsuen Wan Drainage Tunnel
Date	27-May-11
Time	3:28 PM
Monitoring Location	O-1(FT)
Parameter	Suspended Solids
Action & Limit Levels (mg/L)	14.10 / 18.08
Measured Level (mg/L)	3.10
Control Station	O-1-C(FT)
Measured Level at the Control Station (mg/L)	2.33
Possible reason for Action or Limit Level Non-compliance	The measured SS level at the monitoring station was well below the baseline action/limit level but slightly higher than 130% of the SS level of the control station. Backfilling grade 700 rockfill and type II armour behind seawall blocks was undertaken at the Outfall basin (Portion E) during monitoring. No other marine works was conducted. No direct disturbance from the site was observed during monitoring. Therefore, the exceedance was considered to be contributed by low SS level of the control station and natural variation. Since the exceedance was non-project related, no further action was required.
Actions taken / to be taken	(1) Silt curtain was provided along the Portion E boundary line and extended from seawater level to the bottom of seabed; (2) floating type silt curtain was employed at the inner side; (3) sufficient slack of silt curtain was allowed to cope with the wave and tidal action to ensure the curtains (outer and inner) were rested on seabed; (4) condition of silt curtains was checked by the supervisor daily; and (5) seawall blocks installation was only undertaken within the inner silt curtain area.
Remarks	None

Prepared by: F. C. Tsang

Designation: Environmental Team Leader

Signature: 

Date: 02-Jun-11

Photographic record for exceedance of Suspended Solids recorded at O-1(FT) on 27-May-11

Site photo

Site photo