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TEST REPORT

PENTA-OCEAN CONSTRUCTION CO. LTD.

OPERATION OF FILL BANK AT TSEUNG KWAN O AREA 137 AND BARGING FACILITIES AT HONG KONG ISLAND AND MUI WO (CONTRACT NO.: CV/2005/05)

TSEUNG KWAN O AREA 137

MONTHLY EM&A REPORT (DECEMBER 2005)

Prepared by: Linda Law
Linda Law
Environmental Officer

Checked by: _____
C. L. Lau
Environmental Team Leader

Approved by: _____
Tony Wong
Operations Manager

BMT Asia Pacific Limited
13 January 2006
Our Ref: 8116/2329

By Hand

Penta-Ocean Construction Co., Ltd.
30 Floor
248 Queen's Road East
Wanchai
Hong Kong

For the attention of Mr. Stephen Choi

Dear Sir

Contract No. CV/2005/05
Fill Bank at Tseung Kwan O Area 137
Monthly EM&A Report

Following review of the Monthly EM&A Report No. 6 for the reporting period December 2005, the IEC has verified the information presented.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned.

Yours sincerely
BMT Asia Pacific Limited

Ben Ridley
IEC

cc:			
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EXECUTIVE SUMMARY

This is the sixth monthly Environmental Monitoring and Audit (EM&A) report prepared by ETS-Testconsult Ltd (ET) for the "Contract No. CV/2005/05 Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Wo" (The Project).

This report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at Tseung Kwan O Area 137 in December 2005.

Construction Progress

As informed by the Contractor, the construction activities in this reporting month were as below:

- *Manage the incoming public fill dump trucks arriving through land access;*
- *Transport temporary stockpiled public fill from the Barge Handling Area (BHA) to Stockpile Areas or the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Transport stockpile public fill from Stockpile Areas to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Direct some incoming public fill dump trucks to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2) for unloading;*
- *Routine site cleaning and maintenance of internal haul roads and access roads; and*
- *Routine implementation of environmental mitigation measures such as dust suppression by water spraying, cleaning of nearby public roads by using road sweeper and collection of floating debris inside a berthing basin within the site boundary.*

Environmental Monitoring Progress

The summary of the monitoring activities in this monitoring month is listed below:

- *Noise Monitoring (Day-time): 1 Occasion at 1 designated location*
- *24-hour TSP Monitoring: 6 Occasions at 2 designated locations*
- *1-hour TSP Monitoring: 18 Occasions at 2 designated locations*
- *Marine Water Quality Monitoring: 12 Occasions at 2 designated locations*
- *Weekly-site inspection: 5 Occasions*

Noise Monitoring

No exceedances of Action and Limit levels for noise monitoring were recorded in the reporting month.

Air Monitoring

No exceedances of Action and Limit levels were recorded for 24-hr and 1-hr TSP monitoring in the reporting month.

Marine Water Quality Monitoring

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

Site Inspection

Environmental site inspections conducted in this reporting month are presented as follows:

Concerned Parties	*Dates of Audit / Inspection*
ET Weekly site inspection	*01, 07, 13, 20, 29*
IEC site inspection	*01, 13, 20*

In general, performance on environmental mitigation measures implemented was found to be satisfactory in this reporting month. The major findings observed during site inspections are presented in the Section 7.0.

Landscape and Visual

The germination rate on the panel at Portion A, B, G and H was satisfactory in this reporting month. However, the vegetation growth on the last hydroseeded panel in Portion I appeared to be poor. The Contractor should properly maintain the panel properly.

Environmental Complaints, Notification of summons and successful prosecutions

No environmental complaints, notification of summons and prosecutions with respect to environmental issues were received in this monitoring month.

Permits and Licenses

An Amended Environmental Permit (No.: EP-134/2002/E) (the EP) was granted to the Project by EPD on 02 February 2005. Effluent discharge licence (Ref. No.: TE/D1152/839/1) for the site toilet and shower room issued on 06 June 2003 obtained from the previous contract continued to be valid in this Project. Construction Noise Permit (GW-RE0226-05) was valid from 15 August 2005 to 31 December 2005 to the Project and Chemical Waste Producer Licence (WPN No.: 5213-839-P2800-23) was also valid from 04 August 2005.

Future Key Issues

Since the Contract was completed on 31 December 2005, no impact monitoring will be carried out in the coming month. Hence, no future key issues will be required for the coming month.

1.0 INTRODUCTION

Penta-Ocean Construction Co Ltd (POC) appointed Environmental Team (ET) of ETS-Testconsult Limited (ETL) to undertake the Environmental Monitoring and Audit (EM&A) for the "Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Wo" (Contract No.: CV/2005/05) (The Project).

In accordance with the Amended Environmental Permit (No.: EP-134/2002/E) (the EP), an EM&A programme should be implemented in accordance with the procedures and requirements in the EM&A Manual of the approved EIA report (Registration No. AEIAR-060/2002). The EM&A programme for this study as stated in Section 2.3.1 of the EM&A Manual covers the following environmental aspects during the establishment, operation and removal phases of the Fill Bank at Tseung Kwan O Area 137:

- Fugitive Dust;
- Noise generation from onsite activities;
- Water Quality; and
- Landscape and Visual.

The EM&A programme requires environmental monitoring for air quality, noise and water quality and environmental site inspections for air quality, noise, water quality, landscape and visual, and waste management. The EM&A requirements for each parameter described in the following sections include:

- All monitoring parameters;
- Monitoring schedules for the reporting month and forthcoming months;
- Action and Limit levels for all environmental parameters;
- Event/Action Plans;
- Environmental mitigation measures, as recommended in the Project EIA study final report; and
- Environmental requirements in contract documents.

Baseline monitoring was completed in August and September 2002 by MateriaLab. Action and Limit Levels were established for air and water quality parameters based on the baseline monitoring results.

This report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at Tseung Kwan O Area 137 in December 2005.

2.0 PROJECT INFORMATION

2.1 Scope of the Project

The scale and scope of the Project as stated in the EP include:

- Site clearance;
- Construction of 6 million m^3 of public fill;
- Stockpile up two barging points;
- Setting up two barging points: one at the Tseung Kwan O Basin (TKO Basin) and one at the Construction and Demolition Material Sorting Facility (C&DMSF) for transporting the stockpiled public fill by barges;
- Setting up a temporary barging point at the existing Explosive Off-loading Barging Point located in the south-eastern part of Area 137 for the period of May 2004 to December 2004 for transporting the stockpiled public fill by barge;
- Construction and operation of a Construction and Demolition Material Sorting Facility (C&DMSF);
- Setting up a Construction and Demolition Material Crushing Facility at the TKO Basin; and
- Remove the temporary fill bank.

2.2 Site Description

Tseung Kwan O Area 137 is located at the southern end of Wan Po Road. In the vicinity of the site are other industrial uses such as SENT landfill, TKO Industrial Estate, etc. Both Island Resort and Fullview Garden are also situated at more than 1.8km from the site. Other existing ASRs and NSRs, including resident developments and schools, are located at a further distance away from TKO Area 137.

2.3 Construction Programme

Details of construction programme are shown in Appendix G.

2.4 Project Organization and Management Structure

The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in Appendix A.

2.5 Contact Details of Key Personnel

The key personnel contact names and telephone numbers are shown in Table 2.1.

Table 2.1 Contact Details of Key Personnel

Organization	*Name of Key Staff*	*Project Role*	*Tel. No.*	*Fax No.*
CEDD	*Mr. Lawrence Ng*	*Engineer*	*2762 5582*	*2714 0113*
IEC (BMT)	*Mr Ben Ridley*	*IEC*	*2815 2221*	*2815 3377*
Contractor (POC)	*Mr. Stephen Choi*	*Site Agent*	*9400 7690*	*2623 9128*
ET (ETL)	*Mr C. L. Lau*	*ET Leader*	*2946 7791*	*2695 3944*

3.0 CONSTRUCTION PROGRESS IN THIS REPORTING MONTH

As informed by the Contractor, the activities in the reporting month include:

- *Manage the incoming public fill dump trucks arriving through land access;*
- *Transport temporary stockpiled public fill from the Barge Handling Area (BHA) to Stockpile Areas or the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Transport stockpile public fill from Stockpile Areas to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Direct some incoming public fill dump trucks to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2) for unloading;*
- *Routine site cleaning and maintenance of internal haul roads and access roads; and*
- *Routine implementation of environmental mitigation measures such as dust suppression by water spraying, cleaning of nearby public roads by using road sweeper and collection of floating debris inside a berthing basin within the site boundary.*

4.0 AIR QUALITY MONITORING

4.1 Monitoring Requirement

TSP levels were monitored in the reporting month in accordance with the EM&A Manual. Table 4.5 shows the Action and Limit Levels for the environmental monitoring works.

4.2 Monitoring Equipment

Both 1-hour and 24-hour TSP air quality monitoring was performed using a GMWS2310 High Volume Air Sampler (HVS) located at each of the designated monitoring station. Table 4.1 summarizes the equipment used in the air quality monitoring programme. A copy of the calibration certificates for the HVS and portable dust meter are attached in Appendix B1.

Table 4.1 Air Quality Monitoring Equipment

Equipment	*Model and Make*
HVS	*Greasby GMWS2310*
Calibrator	*Tisch TE-5025A*
Wind Data Logger	*Davis Weather Monitor II*

4.3 Monitoring Parameters, Frequency and Duration

Table 4.2 summarizes the monitoring parameters, monitoring duration and frequencies of air quality monitoring.

Table 4.2 Monitoring parameters, duration, frequency of air quality monitoring

Parameter	*Duration*	*Frequency*
24-hr TSP	*24 hr*	*Once every six days*
1-hr TSP	*1 hr*	*Three times per day every six days*

4.4 Monitoring Locations and Schedule

Table 4.3 tabulates the air quality monitoring locations of this project.

Table 4.3 Air quality monitoring locations

Monitoring station	*Location*
AA1	*Outside CEDD Site Office*
AA2	*Site Egress*

During the reporting month, 1-hr and 24-hr TSP monitoring were carried out as the schedule. The details for 24-hr and 1-hr TSP monitoring carried out in this reporting month are summarized in table 4.4.

Table 4.4 Monitoring Schedule for the air quality monitoring stations

Air quality monitoring stations	Location	Monitoring Period						
		24-hr TSP				1-hr TSP		
		Start		Finish		Date	Start	Finish
		Date	Time	Date	Time			
AA1	Outside CEDD Site Office	---				01/12/05	08:30	09:30
							09:45	10:45
							11:00	12:00
						07/12/05	08:30	09:30
							09:45	10:45
							11:00	12:00
						13/12/05	09:10	10:10
							11:00	12:00
							13:00	14:00
						19/12/05	11:00	12:00
							13:30	14:30
							14:35	15:35
						23/12/05	11:00	12:00
							13:00	14:00
							14:05	15:05
						29/12/05	09:30	10:30
							11:00	12:00
							13:00	14:00
AA2	Site Egress	---				01/12/05	08:30	09:30
							09:45	10:45
							11:00	12:00
						07/12/05	08:30	09:30
							09:45	10:45
							11:00	12:00
						13/12/05	09:28	10:28
							11:00	12:00
							13:00	14:00
						19/12/05	11:00	12:00
							13:40	14:40
							14:45	15:45
						23/12/05	11:00	12:00
							13:09	14:09
							14:13	15:13
						29/12/05	09:30	10:30
							11:00	12:00
							13:00	14:00
AA1	Outside CEDD Site Office	01/12/05	13:00	02/12/05	13:25	---		
		07/12/05	12:03	08/12/05	12:22			
		13/12/05	14:15	14/12/05	14:17			
		19/12/05	15:39	20/12/05	15:39			
		23/12/05	15:08	24/12/05	15:08			
		29/12/05	16:00	30/12/05	16:03			
AA2	Site Egress	01/12/05	13:00	02/12/05	13:02	---		
		07/12/05	12:10	08/12/05	12:21			
		13/12/05	14:05	14/12/05	14:18			
		19/12/05	15:49	20/12/05	15:49			
		23/12/05	15:18	24/12/05	15:18			
		29/12/05	16:00	30/12/05	16:14			

4.5 Monitoring Methodology

Both 1-hr and 24-hr air quality monitoring (High Volume Sampler)

Instrumentation

High volume sampler, as HVS, (Greasby GMWS2310) complete with appropriate sampling inlets were employed for both 1-hour and 24-hour TSP monitoring. The sampler is composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complies with that required by USEPA standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

Installation
The installation of HVS refers to the requirement stated in EM&A Manual.

Operation/Analytical Procedures
Operating/analytical procedures for the operation of HVS are as below:

Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 0.6m^3/min and 1.7m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

- For TSP sampling, fiberglass filters (GA-55) were used.
- The power supply was checked to ensure the sampler worked properly.
- On sampling, the sampler was operated 5 minutes to establish thermal equilibrium before placing any filter media at designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an air-tight seal on the outer edges of the filter. Then the filter holder frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The programmable timer will be set for a sampling period of 24 hours. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number.).
- After sampling, the filter was transferred from the filter holder of the HVS to a sealed plastic bag and sent to the laboratory for weighting. The elapsed time was also recoded.
- Before weighting, all filters were equilibrated in a desiccator for 24 hour with the temperature of 25°C ± 3°C and the relative humidity (RH) <50% ±5%.
- All measurement procedures in Section 2.3 of the EM&A Manual were followed during the reporting month.

Maintenance & Calibration

- The HVS and their accessories should be maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- HVS should be calibrated at bi-monthly intervals.

Wind Data Monitoring

Measuring Procedure

Upon installation of the wind data logger on site, temperature, wind speed and direction was automatically stored in the logger. Regular downloading of the information was carried out weekly.

Maintenance

Cleaning was provided for all the rotational parts of the wind data logger regularly. Replacement of battery was carried out weekly. The wind data logger was checked once per week and no calibration was required for the equipment as instructed by the manufacturer.

4.6 Action and Limit Levels

Table 4.5 shows the Action and Limit levels for 24-hr TSP and 1-hr TSP monitoring.

Table 4.5 Action and Limit Levels for 24-hr TSP and 1-hr TSP

Monitoring Location	*24-hr TSP (μg/m^3)*		*1-hr TSP (μg/m^3)*	
	*Action Level **	*Limit Level **	*Action Level **	*Limit Level **
AA1	*210*	*260*	*376*	*500*
AA2	*210*	*260*	*376*	*500*

* Traceable to Method Statement (Marine Water Quality Monitoring and Audit Manual) of Contract No.CV/2002/08, Rev. 2, Section 3.1 – 3.21

4.7 Event-Action Plans

Please refer to Appendix F for details.

4.8 Results and Observation

4.8.1 1-hour and 24-hour TSP Monitoring results

All monitoring data of both 1-hour and 24-hour TSP monitoring is provided in Appendix B2. Graphical presentation of 1-hour and 24-hour TSP monitoring results for the reporting month is shown in Appendix B3. Wind data, including wind speed and wind direction, are annexed in Appendix E. Table 4.6 summarizes 1-hr TSP and 24-hr TSP monitoring results.

Table 4.6 Summary of 1-hr TSP and 24-hr TSP Monitoring Results

Air quality monitoring stations	*Location*	*Monitoring Period*						
		24-hr TSP			*1-hr TSP*			
		Date	*Result (μg/m³)*	*Exceedance #*	*Date*	*Start Time*	*Result (μg/m³)*	*Exceedance #*
AA1	*Outside CEDD Site Office*	*01/12/05*	*185*	*X*	*01/12/05*	*08:30*	213	*X*
						09:45	255	
						11:00	306	
		07/12/05	*179*	*X*	*07/12/05*	*08:30*	241	*X*
						09:45	288	
						11:00	369	
		13/12/05	*208*	*X*	*13/12/05*	*09:10*	289	*X*
						11:00	372	
						13:00	304	
		19/12/05	*208*	*X*	*19/12/05*	*11:00*	310	*X*
						13:30	263	
						14:35	297	
		23/12/05	*200*	*X*	*23/12/05*	*11:00*	375	*X*
						13:00	362	
						14:05	359	
		29/12/05	*194*	*X*	*29/12/05*	*09:30*	304	*X*
						11:00	361	
						13:00	324	
AA2	*Site Egress*	*01/12/05*	*172*	*X*	*01/12/05*	*08:30*	227	*X*
						09:45	246	
						11:00	317	
		07/12/05	*170*	*X*	*07/12/05*	*08:30*	229	*X*
						09:45	257	
						11:00	343	
		13/12/05	*195*	*X*	*13/12/05*	*09:28*	295	*X*
						11:00	366	
						13:00	353	
		19/12/05	*195*	*X*	*19/12/05*	*11:00*	224	*X*
						13:40	234	
						14:45	271	
		23/12/05	*189*	*X*	*23/12/05*	*11:00*	283	*X*
						13:09	293	
						14:13	289	
		29/12/05	*179*	*X*	*29/12/05*	*09:30*	311	*X*
						11:00	354	
						13:00	334	

Remark (#): L=Limit Level exceedance, A=Action Level exceedance and X= not an exceedance

No exceedances of Action and Limit Level of both 1-hour and 24-hour TSP monitoring results were recorded during the reporting month.

4.8.2 Observation

Generally, the Contractor implemented sufficient dust mitigation measures, including operation of the mist spraying systems at the CEDD Combined Reception Office and the site egress area, wheel washing facilities, road dampening by water bowsers and automatic water sprinklers on the main haul roads. Furthermore, hydroseeding had been conducted on several slopes on the stockpiling areas as a means to prevent dust generation from wind erosion of the exposed surfaces. Besides the Fill Bank operation, the other dust sources near TKO Area 137 also included operation of C&DMSF at PBR2 Project, temp C&DMSF at Portion K and dumping activities at the SENT Landfill.

5.0 Noise Monitoring

5.1 Monitoring Requirements

Noise monitoring was conducted at 1 monitoring station as specified in the approved EM&A Monitoring Proposal for good site practice. The equipment, parameter, frequency, duration, methodology, calibration details, results and observations of the noise monitoring for the reporting month are presented in this section.

5.2 Monitoring Equipment

An Integrating Sound Level Meter was used for noise monitoring. It was a Type 1 sound level meter capable of giving a continuous readout of the noise level reading including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (Lx). It complies with International Electro Technical Commission Publications 651:1979 (Type1) and 804:1985 (Type1), and speed in m/s was used to monitor the wind speed.

Table 5.1 summarizes noise monitoring equipment model being used. A copy of the calibration certificate for noise meter and calibrator are attached in Appendix C1.

Table 5.1 Noise Monitoring Equipment

Equipment	*Model*
Integrating Sound Level Meter	*Rion NL-31 Sound Level Meter*
Calibrator	*Rion NC-73 Sound Level Calibrator*
Portable Wind Speed Indicator	*TSI Model 8340-M Air Velocity Meter*

5.3 Monitoring Parameters, Duration and Frequency

Duration, frequencies and parameters of noise measurement are presented in Table 5.2.

Table 5.2 Duration, Frequencies and Parameters of Noise Monitoring

Time period	*Duration/min*	*Parameters*	*Frequency*
Day-time: 0700-1900 hrs on normal weekday	*30*	L_{eq}, L_{10}, L_{90}	*Once per month*

5.4 Monitoring Locations and Period

Noise monitoring was conducted at the noise monitoring location, N1 as shown in Figure 3.1 during the reporting month. Table 5.3 describes the location of the monitoring station.

Table 5.3 Noise Monitoring Locations

Monitoring station	*Location*	*Type of Measurement*
N1	*Outside site Egress along Wan Po Road*	*Façade*

The noise-monitoring period of monitoring station is summarized in Table 5.4.

Table 5.4 Monitoring Period for noise monitoring stations

Noise monitoring stations	*Monitoring Period*	
	Day-time	
N1	*01/12/05*	*09:46*

5.5 Monitoring Procedures and Calibration Details

Operation/Analysis Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces.
- The battery condition was checked to ensure the correct functioning of the meter.

- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - *Frequency weighting: A*
  - *Time weighting : Fast*
  - *Time measurement : 5 mins*
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1000HZ. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with a portable wind meter.
- During the monitoring period, the Leq, L10 and L90 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Free Field correction to the measurements should be made. Correction factor of +3dB(A) should be made to the free Field measurements.
- Noise monitoring would be cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind gusts exceeding 10m/s.

Maintenance and Calibration

- The microphone head of the sound level meter and calibrator are cleaned with soft cloth in quarterly intervals.
- The meter is sent to the supplier or HOKLAS laboratory to check and calibrated in yearly intervals.

5.6 Action and Limit Levels

The Action and Limit levels for noise levels derived as illustrated in Table 5.5.

Table 5.5 Action and Limit Levels for noise monitoring

Time Period	*Time Period*	*Action **	*Limit **
Normal hours	*0700-1900 hrs on normal weekdays*	*When one documented complaint is received*	*75 dB(A)*

*Traceable to Method Statement (Marine Water Quality Monitoring and Audit Manual) of Contract No.CV/2002/08, Rev. 2, Section 3.1 – 3.21

5.7 Event-Action Plans

Please refer to the Appendix F for details.

5.8 Results and Observation

5.8.1 Results

Only Day-time noise monitoring was carried out at monitoring station, N1 in this reporting month. Noise level is provided in Appendix C2. Graphical presentation of the monitoring result for the reporting month is shown in Appendix C3. A summary of the monitoring result is presented in Table 5.6.

Table 5.6 Summary of Impact Noise Level

Date	*Start Sampling Time (hh:mm)*	*Noise Level dB (A)*		
		$L_{eq(30min)}$	L_{10}	L_{90}
01/12/05	*09:46*	*66.1*	*69.9*	*58.2*

No Day-time noise monitoring result at monitoring station N1 exceeded the Action Level since no documented complaints on noise issue were received in this reporting month. Besides, no exceedances in Limit Level were recorded according to the result from Day-time noise monitoring.

5.8.2 Observation

The major noise source during the monitoring event was the dump truck traffic. Operation of the Fill Bank was from 08:00 to 21:00 from Monday to Sunday in the reporting month. Whereas the operation hours for barge activities in the TKO Basin was from 08:00 to 23:00. The monitoring result complied with the noise limit of 75 dB(A).

6.0 MARINE WATER QUALITY MONITORING

6.1 Monitoring Requirements

In accordance with the EM&A Manual, impact marine water quality monitoring was conducted three days per week. Measurements were taken at both mid-flood and mid-ebb tides at three depths (i.e. 1m below surface, mid depth and 1m from seabed) at the Control Station, C1 and Monitoring Station, M4.

6.2 Monitoring Locations

For the Reclamation Project, there were 4 Designated Monitoring Stations and 2 Designated Control Stations specified in the EM&A Manual. Upon the completion of the monitoring programme under Stage 2 reclamation works, the ET started monitoring events at the impact station M4 and the control station C1 from 18 May 2004 onwards. Figure 4.1 shows the location of the marine water quality monitoring stations. Table 6.1 describes the locations of the monitoring stations in the reporting month.

Table 6.1 Location of Marine Water Monitoring Stations

Station Description	*Code*	*HK Metric Grid E*	*HK Metric Grid N*
Control Station (Ebb tide)	*C1*	*844 740.208*	*815 371.502*
Monitoring Station, Tung Lung Chau Fish Culture Zone	*M4*	*847 741.029*	*812 977.878*

6.3 Monitoring Parameters

Monitoring of the marine water quality parameters are listed in Table 6.2.

Table 6.2Marine Water Quality Monitoring Parameters

In-situ measurement	*Laboratory analysis*
Depth (m)	*Suspended solids (mg/L)*
Temperature (°C)	
Dissolved Oxygen (mg/L and % saturation)	
Turbidity (NTU)	
Salinity (ppt)	

6.4 Monitoring Frequency

The monitoring frequency of the marine water monitoring is summarized in Table 6.3.

Table 6.3 The monitoring frequency of the marine water

Parameter	*Frequency*	*No. of Location*	*No. of Depths*
Temperate	*3 days/week, 2 tides/day*	*2 (C1 and M4)*	*3 (Surface, mid-depth & bottom)*
Salinity			
DO			
Turbidity			
pH value			
Suspended solids			

6.5 Monitoring Methodology and Equipment Used

For Location of the monitoring stations

Global Positing System (GPS)
A hand-held digital GPS was used to identify the designated monitoring stations prior to water sampling.

For Water Depth measurement

Echo Sounder
A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring station.

For In-situ Water Quality Measurement

All in-situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals or sometimes longer throughout all stages of the water quality monitoring.

Dissolved Oxygen (DO) and temperature measuring equipment
A portable, weatherproof DO-measuring meter with built-in salinity compensation (YSI model 95) was used in the impact monitoring. It can be capable for measuring:

- a dissolved oxygen level in the range of 0-20 mg/L and 0-200 % saturation; and
- a temperature of 0-45 degree Celsius

This type of DO-measuring meter has a membrane electrode with automatic temperature compensation complete with a 50-feet cable. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring location

Turbidity Measurement Instrument
A portable and weatherproof turbidity meter (HACH model 2100P) was used during impact monitoring. It has a photoelectric sensor capable of measuring turbidity between 0-1000 NTU. Response of the sensor was checked with certified standard Turbidity solutions before the start of measurement.

Salinity Meter
A portable salinity meter capable of measuring salinity in the range 0-40 ppt (YSI Model 30M) was provided for measuring salinity of the water at each monitoring location. It was checked with standard 30 ppt Salinity solutions before the start of measurement.

For Water Sampling and Sample Analysis

In-situ monitoring was carried out at three depths: 1 meter below water surface, at mid-depth and 1 meter above the seabed. If the water depth is less than 6 m, the mid-depth station shall be omitted and if the water depth is below 3 m, only the mid depth station shall be monitored.

Water Sampler
A water sampler comprising a transparent PVC cylinder, with a capacity of not less than 2 liters, was lowered into the water body at the predetermined depth. The both opening ends of the sampler were then closed accordingly by dead weight and water samples were collected.

Water Container
The sample container, made by high-density polythene, was rinsed with a portion of the water sample. The water sample was then transferred to the container, labelled with a unique sample ID and sealed with a screw cap. The water samples were stored in a cool box maintained at 4°C. The water samples were then delivered to a local HOKLAS-accredited laboratory (Environmental Laboratory, ETS-Testconsult Ltd, HOKLAS Registration No. 022) on the same day for analysis.

The summary of testing method of testing parameter as recommended by EIA or required by EPD, with the QA/QC results in accordance with the requirement of HOKLAS or international accredited scheme is shown in Table 6.4.

Table 6.4 Summary of testing procedures

Laboratory Analysis	*Testing Procedure*	*Detection Limit*
Total suspended solids	*In house method based on APHA 19th ed 2540D*	*1.0 mg/L*

In-situ measurement

All in-situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring location.

At each measurement/sampling depth, two consecutive measurements of dissolved oxygen (DO), dissolved oxygen saturation (DOS), turbidity and salinity were taken. For turbidity measurement, the sample was collected by using sampler and then transferred to the cell. The reading of turbidity of the sample was directly recorded from the Turbidimeter (HACH 2100P) after inserting the cell to the Turbidimeter. For DO, DOS and Salinity, duplicate measurements were performed by dropping the calibrated probes of the corresponding monitoring equipments to the designated depths of the water column and taking readings after stabilized. The duplicate measurements were averaged if the difference was not greater than 25%.

Table 6.5 shows the equipment used for in-situ monitoring of water quality. The calibration certificates are attached in Appendix D1.

Table 6.5 Details of Marine Water Quality Monitoring Equipment (In-site measurement)

Parameter	*Model*	*Date of Calibration*	*Due Date*	*Equipment No.*
Coordinate of Monitoring stations	*MLR GPS Navigator, SP24*	-----	-----	*EW/005/01**
Dissolved Oxygen (Saturation), Temperature	*YSI Dissolved Oxygen Meter, YSI 95*	*01-12-2005*	*31-01-2006*	*EW/003/001**
Turbidity	*HACH Model 2100P Turbid Meter*	*27-10-2005*	*26-01-2006*	*ET/0505/002*
Salinity	*YSI Model 30M*	*27-10-2005*	*26-01-2006*	*ET/0527/001*
Water Depth	*EAGLE Strata 128 Sonar*	-----	-----	*EW/002/02*

Remark:(*) indicates the instrument should be calibrated on use.

6.6 Action and Limit Level

The water quality criteria, namely Action and Limit (A/L) levels are presented in the table below.

Table 6.6 Water Quality Action and Limit Levels

Parameter	*Action Level* *	*Limit Level* *
DO (mg/L)	*Surface & Middle* *<5.45 mg/L (5%-ile of baseline data)* *Bottom* *<4.72 mg/L (5%-ile of baseline data)*	*Surface & Middle* *<5.10 mg/L (1%-ile of baseline data)* *Bottom* *<2.00 mg/L*
SS (mg/L) (Depth-averaged)	*>6.74 mg/L (95%-ile of baseline data) or >120% of the upstream control station's SS at the same tide on the same day*	*>7.67 mg/L (99%-ile of baseline data) or >130% of the upstream control station's SS at the same tide on the same day*
Turbidity (NTU) (Depth-averaged)	*>4.28 NTU (95%-ile of Impact data) or >120% of the upstream control station's turbidity at the same tide on the same day*	*>4.58 NTU (99%-ile of Impact data) or >130% of the upstream control station's turbidity at the same tide on the same day*

*** Traceable to Method Statement (Marine Water Quality Monitoring and Audit Manual) of Contract No.CV/2002/08, Rev. 2, Section 3.1 – 3.21**

6.7 Event and Action Plan

Please refer to the Appendix F for details.

6.8 Monitoring Duration and Period in this reporting month

Below is the time schedule that water quality monitoring was conducted in this reporting month:

Table 6.7 Time Schedule of Water Quality Monitoring

December 2005						
Sunday	*Monday*	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*
				1	2 ▼	3
4	5 ▼	6	7 ▼	8	9 ▼	10
11	12 ▼	13	14 ▼	15	16 ▼	17
18	19 ▼	20	21 ▼	22	23 ▼	24
25	26 Public Holiday	27 Public Holiday	28 ▼	29	30 ▼	31

▼ = *Marine water quality monitoring carried out by ET*

The daily marine water quality monitoring duration are detailed in Appendix D2.

6.9 Marine Water Quality Monitoring Results

The impact water quality measurement results are detailed in Appendix D2. Appendix D3 presents the water quality monitoring data and graphical presentations of monitoring results respectively.

The summary of marine water quality exceedances is shown in Table 6.8.

Table 6.8 Summary of Marine Water Quality Exceedances in this reporting month

Station	*Exceedance Level*	*DO*		*Turbidity*		*SS*		*Total*	
		Flood	*Ebb*	*Flood*	*Ebb*	*Flood*	*Ebb*	*Flood*	*Ebb*
C1	*Action*	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
M4	*Action*	0	0	0	0	0	0	0	0
	Limit	0	0	0	1	0	0	0	1

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

7 Site Audits

7.1.1 During this reporting period, the IEC team conducted three independent site audits.

7.1.2 Findings of the site audits have been recorded on site checklists, copies of which were submitted to the Contractor for their further action as appropriate, and to the Client for their records. Key issues were highlighted to the Contractor's representative at the completion of each site audit to ensure that they were aware of the problem(s) identified and where necessary, to take immediate corrective actions. A copy of the completed checklists are appended to this report in Appendix H.

Table 3.1: Dates of Site Audits in December 2005

Date of Audit	Work Period	Site Audit Checklist Submitted Under IEC's Ref No.
01 December 2005	Operation of Fill Bank	8116/2223
13 December 2005	Operation of Fill Bank	8116/2251
20 December 2005	Operation of Fill Bank	8116/2260

7.1.3 The major findings recorded during the site audits conducted during this reporting period are summarized below. Full details are provided in the site audit checklists presented in Appendix H.

Table 3.2: Key Findings of Site Audits in November 2005

Date	Key Findings	Action
01 Dec 05	• There were several containers containing lubricating oil stored in the Chemical Waste Shed and without appropriate labeling, and some of them were uncapped. Also, some 20L and 200L containers were not placed in drip tray.	• The Contractor should properly cap and label all the chemical / oil containers, place all the chemical wastes into drip trays inside the Shed as per EPD's guidelines, and regularly arrange for the collection and disposal of these wastes
	• Silt curtains in BHA were found damaged.	• The Contractor should fix the silt curtains ASAP.
	• Some rubbish was found at the water filling station.	• The Contractor should keep the site tidiness.
	• A new air compressor without Noise Emission Label (NEL) was placed at DP3 near the wheel washing facilities.	• The Contractor should fit a copy of NEL on the compressor although it was not in use.
	• Two uncovered stockpiles of sand were found adjacent to the U-channel at DP3 near the wheel washing facilities.	• The stockpiles should be moved at least 1m from the channel and covered by impervious sheeting for preventing fugitive dust emission and dirtying the channel.
13 Dec 05	• The Chemical Waste Shed was fully stored with waste oil containers (20L & 200L) and some of them were uncapped/unlabelled. Also, waste oil had spilled onto the floor of the Shed and a number of the containers were stored without any drip trays.	• The Contractor should cap and label all the chemical / oil containers and immediately arrange for a licensed chemical waste collector to collect the waste oil ASAP, and clean the floor of the Shed.

Date	Key Findings	Action
13 Dec 05	• Two patches of ground at the maintenance workshop area were contaminated with lubricating oil.	• The Contractor should clean up the contaminated ground ASAP and provide impermeable sheeting on the ground before conducting maintenance works.
	• Two unlabelled containers (18L and 200L) were placed directly on the ground at the maintenance workshop area without drip trays and the 18L container was uncapped.	• The Contractor should properly label and cap all the chemicals and place them into drip trays.
	• C&D material stockpile was too close to the waterfront of the BHA.	• The Contractor should keep the stockpiles behind the concrete walkway and clean the spilled material regularly.
	• An unlabelled 200L drum was observed in a drip tray by the excavation works for the waste-checking platform close to the site offices.	The Contractor should properly label it.
20 Dec 05	• The Chemical Waste Shed was fully stored with waste oil containers (20L & 200L) and some of them were uncapped/unlabelled. Also, waste oil had spilled onto the floor of the Shed and a number of the containers were stored without any drip trays.	The Contractor should properly cap and label all the chemical / oil containers and immediately arrange for a licensed chemical waste collector to collect the waste oil ASAP, and clean the floor of the Shed.
	• Two patches of ground at the maintenance workshop area were contaminated with lubricating oil.	• The Contractor should clean up the contaminated ground ASAP. Also, please be reminded to provide impermeable sheeting on the ground before conducting maintenance works.
	• Two unlabelled containers (18L and 200L) were placed directly on the ground at the maintenance workshop area without drip trays and the 18L container was uncapped	• The Contractor should properly label and cap all the chemicals and place them into drip trays
	• C&D material stockpile was too close to the waterfront of the BHA.	• The Contractor should keep the stockpiles behind the concrete walkway and clean the spilled material regularly.
	• An unlabelled 200L drum was observed in a drip tray by the excavation works for the waste-checking platform close to the site offices.	• The Contractor should properly label it.

7.1.4 Following from the previous two reporting periods (October and November 2005), there were again no air quality exceedances recorded during this reporting period. Based on observations recorded during site inspections and site supervision events, the Contractor was observed to have

implemented most of their dust prevention measures during the reporting period. However, on occasion fugitive dust emission was observed when the trucks were travelling on the main haul road. As such, the CV/2005/05 Contractor was reminded to ensure that all dust mitigation measures, particularly those near the site entrance, were operated according to their design merits to ensure that fugitive dust impacts to neighbouring land users was minimized.

7.1.5 The frequency of road / platform watering was considered to be acceptable in the reporting period. Nevertheless, the Contractor has been reminded to regularly review the frequency of road watering in light of the seasonally dry weather conditions in Hong Kong.

7.1.6 During the site inspections conducted during this reporting period, it was observed that lubricating oil had been allowed to drip directly onto the work floor of the Maintenance Workshop Area where an excavator was undergoing maintenance. The Contractor was immediately notified of this and requested to take immediate action to clean up the lubricating oil. The IEC further reminded the Contractor that any sand used to soak up the lubricating oil should be treated as chemical waste and thus should be collected and stored properly in the Chemical Waste Storage Shed. The ET was also reminded to review this issue during their weekly site inspections. A slight improvement was noted as at the end of the reporting period although constant reminders have been given to both the Contractor and their ET regarding this issue.

7.1.7 Containers containing waste lubricating oil continued to be observed to have been left uncovered in the Chemical Waste Storage Shed during the site inspections. The Contractor has been reminded on numerous occasions to cover all the containers as per EPD's guidelines and as outlined in their latest Waste Management Plan. Although the Contractor stated (during the Progress Meeting) that they would rectify this issue, it was not observed to have been completely addressed as at the end of the reporting period. This is considered ineffective at providing the primary spill prevention mechanism for the waste lubricating oil.

7.1.8 Some chemical containers were unlabelled and stored without drip trays during the site inspections. The Contractor was notified of the spillage potential and requested to either provide a drip tray for these containers or to remove them to a dedicated chemical storage area. Moreover, the Contractor was reminded that all containers with chemicals should be properly labeled.

(Note: the Contractor advised on 10 January 2006, that they had arranged for the disposal of 600L of chemical waste from the site as at the end of December 2005.)

7.2 Weekly ET Site Inspections

Weekly ET site inspections were carried out by ET to monitor the timely implementation of proper environmental pollution control and mitigation measures for the Project. In this reporting month, four weekly site inspections were conducted (01, 07, 13, 20 and 29 December 2005). After each site inspection, the Contractor was notified of the ET's observations and recommendations. A follow-up action plan detailing the environmental observations had also been prepared by the ET. The Contractor then completed this plan to propose / report their remedial works. The Contractor should also submit the completed the follow-up action report to ET by e-mail. This follow-up action plan submission procedure was adopted for each subsequent ET's inspection to notify all the relevant parties of the Contractor's follow up actions. The weekly site inspection reports are attached in Appendix I. Summaries of the weekly site inspection findings in this reporting month are described as follows:

Air quality

- The major dust sources were dump truck movement on the unpaved haul roads and loading & unloading activities on various working platforms in the Fill Bank. The Contractor deployed water bowsers to dampen the haul roads and the working platforms;
- A road sweeper was used to remove settled dust particulates outside the site egress on Wan Po Road;

- Several automatic sprinklers served to dampen the haul roads outside the site office and on the ramp to the stockpiling area;
- Wheel washing facilities were operating during weekly site inspections. Besides, the Contractor operated several mist spraying systems at the site egress and weighbridge respectively. The truckloads were dampened during inspection of fill material at the CEDD Combined Reception Office;
- Potential fugitive dust from vehicle movement was observed at the haul road of Barging Handling Area during weekly site inspection at 01 December 2005. The Contractor was reminded to water the haul road more frequently or if necessary during dry season. The finding was improved during the subsequent weekly site inspection;
- The dump trucks were operating below the speed limit in the Fill Bank. There were sufficient speed limit signs on site to advise the drivers;
- The fill material was usually dampened on the barge. Dust impact was minimal from the barge delivery and unloading activity at the BHA;
- No dark emission was noted from the site machines in the reporting month. Generally, all the powered mechanical equipment (PME) were maintained regularly; and
- Other than the Fill Bank operation, dust sources also included road paving works of Wan Po Road outside the site egress, operation of PBR2 at Portion J of the Fill Bank, temp C&DMSF at Portion K, delivery of rock fill material from the SENT Landfill to the EPD's barging point and associated dumping activity, operation of the SENT Landfill, vehicular movement and wind erosion on Wan Po Road.

Noise

- The major noise source was dump truck traffic in the Fill Bank. Since the nearby NSR were remote from the Fill Bank, the noise impact was minimal. There was no specific observation noted regarding noise issue.

Water Quality

- A substantial amount of dead vegetation and mud observed in front of the gates at the Permanent Desilting Chamber C during the weekly site inspections in September 2005 was cleaned up. However, the Contractor was still advised to remove any blockage at the gates regularly to prevent any potential flooding on site;
- Fill materials were accumulated on the concrete embankment at the BHA. The Contractor should clean up the fill materials as soon as each unloading activity is completed to avoid the fill materials from being washed into the sea.

Chemical and Waste Management

- The Contractor provided waste skips to collect general refuse and disposal of them regularly to the SENT Landfill. 3.17 tons C&D waste and 600L waste oil were disposed to SENT Landfill in this reporting month.
- The chemical waste was stored in the Chemical Waste Storage Area (CWSA). The Contractor should dispose chemical wastes regularly to avoid over accumulation of chemical waste on site.
- Equipment maintenance was undertaken at the workshop area. Oil spillage from the maintenance work of site machines was observed during weekly site inspection at 20 December 2005. The Contractor was reminded to clean up the oil spillage immediately and treated all the materials used in this event as chemical waste. Tarpaulin sheeting and containers should be laid underneath the maintained equipment to collect leaked oil and avoid further contamination. The oil strain from this leakage was cleaned up at the last weekly site inspection in December 2005.
- During weekly site inspections at 20 December 2005, one 200L metal container and one 20L plastic bottle, which filled with waste oil, were placed on the ground without labels and drip tray at Workshop. These oil containers should be labeled and placed in appropriate chemical storage area such as Chemical Waste Storage Shed. The Contractor was also recommended to provided cover or cap for chemical waste containers. The oil containers were found removed during the last weekly site inspection of this reporting month and hence no further actions were required to be taken.

- A number of filled waste oil drums were not labeled and open buckets containing waste oil were found inside the Chemical Waste Storage Shed. The Contractor should collect, store and dispose the chemical waste following the revised Waste Management Plan. Labels should be provided on every chemical waste container. Besides, regular collection of chemical waste should also be arranged by the Contractor.
- Follow-up action of the finding noted at the previous month, valid license of "The Registration of Waste Producer" for the previous contract was posted at Chemical Waste Storage Shed.

Landscape and Visual

- The germination rate on the panel at Portion A, B, G, H and I was satisfactory in this reporting month. The Contractor was still advised to maintain the panel properly;
- Sufficient lighting was provided for the Fill Bank operation in the evening.

Site Practices

- Sufficient rubbish skips had been provided at site by the Contractor and the site area was found tidy and clean;
- The Contractor had provided drip tray for all generator in order to avoid oil spillage;
- Lubricating oil leakage from the site machines at Workshop was found cleaned up during the ET weekly site inspection on 20 December 2005. The Contractor should clean up the contaminated soil and treated as chemical waste.

Landfill Gas

- The registered safety officer carried out landfill gas monitoring (oxygen, carbon dioxide and methane) twice per day for each temporary office in this reporting month;
- The equipments used in the monitoring have been calibrated for all these three parameters;
- All the monitoring results were satisfactory.

7.3 Review of Environmental Monitoring Procedures

The monitoring works conducted by the Environmental Team were inspected regularly. The observations for the monitoring works were recorded and summarized as follows:

Air Quality Monitoring

- The monitoring team recorded the observations around the monitoring stations within and outside of the construction site.
- The monitoring team recorded the temperature, air pressure and general weather condition on the monitoring day.

Noise Monitoring

- The monitoring team recorded the observations around the monitoring station, which might affect the results.
- Major noise sources were identified and recorded.

Water Quality Monitoring

The monitoring team recorded the observations around the monitoring stations, which might affect the results.

7.4 Assessment of Environmental Monitoring Results

All monitoring results were audited against the Action and Limit levels and any exceedances would be validated.

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

No exceedances were recorded in air quality and noise monitoring in this reporting month.

The monitoring results in this reporting period were comparable with those of baseline period. Detailed discussions were given in Section 2, 3 and 4 of this Report.

7.5 Advice on the Solid and Liquid Waste Management Status

During the site inspection, drip trays were found covered by tarpaulin sheets. However, some tarpaulin sheets were dirty and broken. The Contractor should replace the old and broken tarpaulin sheets to minimize rainfall accumulation.

The Contractor should provide sufficient preventive measures during equipment maintenance works so as to avoid oil leakage on the ground. In the event of any oil leakage, the Contractor should clean up the polluted soil and handle all the materials using for this cleaning works as chemical waste.

Concrete bundings were erected outside the CEDD combined reception office and near automatic wheel washing facilities for storing generator sets and oil drums. The drain outlet of all the bunded areas should be plugged properly. Besides, pre-cast drip trays were provided for oil drums at several areas, such as workshop and chemical storage area. The Contractor should collect and dispose of any stagnant water accumulated in the concrete bunding and drip trays and handle them as chemical waste.

The Contractor should use suitable containers with proper labels to store chemical wastes in accordance with Code of Practice on the Packaging, Labeling and Storage of Chemical Waste. The Contractor should also advise their workers of the proper procedures in handling the chemical waste. All the trip tickets for chemical waste disposal were properly kept in the site office. No chemical waste disposal was undertaken in the reporting month.

The Contractor was reminded to increase the frequency of inspection and cleaning at the drainage system, including permanent desilting chambers, desilting facilities, oil interceptor bypass tank, DP3 and DP4 and all the trapezoidal channels. Moreover, the Contractor should apply pesticides in the stagnant water ponds.

All the runoff from the parking area should be pumped to the treatment tank to remove suspended solids and oil & grease prior to discharge.

8.0 Status of Environmental Licensing and Permitting

All permits/licenses valid in this reporting month are summarized in Table 8.1.

Table 8.1 Summary of environmental licensing and permit status

Description	*Permit No.*	*Valid Period*		*Section*
		From	*To*	
Amended Environmental Permit	*EP-134/2002/E*	*02/02/05*	*---*	*(Valid)* ▪ *Site clearance* ▪ *Construction of a temporary storm water system* ▪ *Stockpiling of 6 million m3 of public fill* ▪ *Setting up two barging points for transporting the stockpiled public fill by barges* ▪ *Setting up a temporary barging point at the existing Explosive Off-loading Barging Point for the period of May 2004 to December 2004 for transporting the stockpiled public fill by barge* ▪ *Construction of operation of a construction and Demolition Material Sorting Facility (C&DMSF)* ▪ *Setting up a Construction and Demolition Material Crushing Facility at the TKO Basin* ▪ *Remove the temporary fill bank*
Effluent Discharge License	*TE/D1152/839/1*	*06/06/03*	*30/06/08*	▪ *For effluent from site toilet and shower room* ▪ *For aerobic wastewater treatment plant*
Construction Noise Permit	*GW-RE0226-05*	*15/08/05*	*31/12/05*	*Group A:* • *1 Compactor, vibratory (CNP 050)* • *2 Dump truck, 5.5 tonne<gross vehicle weight ≤ 38 tonne (CNP 068)* • *2 Excavator, tracked (CNP 081)* • *1 Roller, vibratory (CNP 186)* • *1 Saw, circular, wood (CNP 201)* *Group B:* • *1 Breaker, excavator mounted (hydraulic) (CNP 028)* • *2 Concrete lorry mixer (CNP 044)* • *2 Poker, vibratory, hand-held (CNP 170)*
Chemical Waste Producer	*5213-839-P2800-23*	*13/07/05*	*---*	▪ *Spent Lubricating Oil* ▪ *Solvent & Battery* ▪ *Surplus Paint Bank & Fuel* ▪ *Contaminated Soil* ▪ *Empty Chemical Containers*

9.0 ENVIRONMENTAL NON-CONFORMANCE

9.1 Summary of air quality, noise and marine water quality

No exceedances of Action and Limit Level of 24-hour and 1-hour TSP monitoring results were recorded during the reporting month.

No day-time noise level measured at all monitoring stations exceeded the Action and Limit Level in the reporting month.

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

9.2 Summary of Environmental Complaints

No environmental complaints were received in this monitoring month.

9.3 Summary of Notification of Summons and Prosecution

There was no notification of summons respect to environmental issues registered in this month.

10.0 IMPLEMENTATION STATUS

10.1 Implementation Status of Environmental Mitigation Measures

An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in Appendix J. Most of the necessary mitigation measures were implemented properly. Any deficiencies were noted in the remarks of the schedule.

10.2 Implementation Status of Event and Action Plan

There was no exceedance on air quality and noise monitoring parameters recorded in this monitoring month. Hence no further actions were required.

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

10.3 Implementation Status of Environmental Complaint, Notifications of Summons and Successful Prosecutions Handling

No complaints, notifications of summons and successful prosecutions were received in this reporting month. A summary of environmental complaints and prosecutions was given in Table 10.1.

Table 10.1 Summary of Environmental Complaints and Prosecutions

Complaints logged		*Summons served*		*Successful Prosecution*	
December 2005	*Cumulative*	*December 2005*	*Cumulative*	*December 2005*	*Cumulative*
0	*0*	*0*	*0*	*0*	*0*

11.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Impact monitoring of air quality and noise were carried out at designated locations in accordance with the EM&A Manual in this reporting month.

According to the summary of air monitoring results, no exceedances of Action and Limit Level of 24-hour and 1-hour TSP monitoring results were recorded during the reporting month.

Impact noise level monitoring was performed on 01 December 2005. The noise level measured at the monitoring station complied with the Limit Level of 75dB(A). No complaint was received regarding noise issue.

According to the summary of marine water monitoring results, one exceedance of Turbidity on Limit Level at Monitoring Stations M4 was recorded at 21 December 2005 (mid-ebb). According to the site observation, no abnormal site activities were observed at the Fill Bank. As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.

According to the ET weekly site inspection and IEC site audit carried out this month, it indicated that site practices of the Contractor were generally undertaken in an environmentally acceptable manner and the overall site environmental performance was satisfactory. The Contractor generally implemented sufficient dust mitigation measures, including operation of the mist spraying systems and automatic wheel washing facilities, dampening of haul roads and stockpiling areas.

No complaints, prosecutions or notifications of summons were received in this reporting month.

Recommendations

According to the environmental site inspections performed in the reporting month, the following recommendations were provided:

Air Quality

- Ensure the frequency of water spraying on haul roads, unloading areas and stockpiles to be sufficient to suppress the dust sources;
- Provide proper maintenance for the powered mechanical equipment and barges to avoid emission of dark smoke;
- Provide water spraying onto the truckloads during inspection of fill material;
- Conduct road sweeping on the public road and the main haul roads outside and near the site egress by the road sweeper. Undertake water spraying on stockpiling area by water bowers;
- Erect adequate speed limit signs to advise the truck drivers of the speed limit;
- Operate mist spraying systems and automatic water sprinklers in the Fill Bank;
- Implement the dust mitigation measures for the construction activities;
- Designate proper haul roads to ensure effective water spraying; and
- Ensure all vehicles to be washed before leaving the site egress b provision, operation and maintenance of automatic wheel washing facilities.

Noise

- Conduct noisy activities at a farther location from the NSRs.

Water Quality

- Maintain the drainage system, including the trapezoidal channels, permanent desilting chambers, DP3 & DP4 regularly;
- Operate and maintain the silt curtains regularly;
- Check and maintain the silt curtain regularly;
- Operate the cleaning vessel within the TKO Basin regularly;
- Provide proper treatment for the oil discharge from the area near air monitoring station AA1;
- Clean up the fill material on the concrete pavement at BHA frequently; and
- Remove the stagnant water or provide pesticide for the stagnant water in the permanent desilting chambers, if any.

Chemical and Waste Management

- Remove waste materials from the site to avoid accumulation regularly;
- Handle and store chemical wastes properly;
- Remove unwanted material in the existing stockpiles and avoid further dumping of such material;
- Provide and maintain sufficient drip trays for diesel drums, chemical containers, chemical waste storage drums and diesel operated generator set;
- Maintain mesh screen on top of the additional drainage, DP3 to avoid improper dumping of rubbish;
- Maintain good housekeeping at the workshop area;
- Ensure sufficient tarpaulin sheets are provided to cover drip trays; and
- Avoid soil being polluted during oil filling and equipment maintenance; hence, properly remove and store the contaminated soil, if any.

Landscape and Visual

- Provide hydroseeding on the exposed slopes, on which the final profile has been formed;
- Erect all the site hoarding / chaining fences in accordance with agreed design at proper location; and
- Maintain the hydroseeding slopes in accordance with the Landscape Plan.

12.0 FUTURE KEY ISSUES

12.1 Construction Programme for the Coming Month

As informed by the Contractor, the activities to be conducted by them in the next month included:

- *Manage the incoming public fill dump trucks arriving through land access;*
- *Transport temporary stockpiled public fill from the Barge Handling Area (BHA) to Stockpile Areas or the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Transport stockpile public fill from Stockpile Areas to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2);*
- *Direct some incoming public fill dump trucks to the Sorting Facility for Penny's Bay Reclamation Stage 2 (PBR2) for unloading;*
- *Routine site cleaning and maintenance of internal haul roads and access roads; and*
- *Routine implementation of environmental mitigation measures such as dust suppression by water spraying, cleaning of nearby public roads by using road sweeper and collection of floating debris inside a berthing basin within the site boundary.*

12.2 Key Issues for the Coming Month

Key issues to be considered in the coming month include:

- Chemical and waste management
- Treatment of runoff and wastewater prior to discharge
- Dust generated from loading and unloading activities; and
- Dust generated from dump trucks traffic.

Mitigation measures to be required in the coming month:

Air Quality Impact

- To provide adequate water spraying on haul roads and working platform;
- To operate and maintain automatic wheel washing facilities properly;
- To dampen the fill material prior to unloading or movement;
- To provide road sweeping on the haul road near site egress and the public roads outside site egress;
- To ensure implementation of the dust mitigation measures for the construction activities;
- To maintain proper operation of the mist spraying system;
- To provide proper maintenance for vehicles and machines on site; and
- To investigate any other dust sources around the air sensitive receivers.

Noise

- To switch off equipment if not in use;
- To operate silent equipment;
- To identify the noise sources inside and outside of the site;
- To follow up any exceedance caused by the Fill Bank operation; and
- To re-schedule the work activities in the event of valid noise exceedance.

Water Quality Impact

- To maintain the drainage system in the Fill Bank;
- To ensure the cleanliness of oil interceptor bypass tanks and all the drainage channels;
- To maintain the existing silt trap to ensure good efficiency of wheel wash facilities;
- To repair, inspect and maintain the silt curtains regularly;
- To provide covers for the drip trays to avoid stagnant water pond due to rainfall;
- To provide proper treatment for oily water discharged form the area around air monitoring station AA1;
- To deploy a cleaning vessel to remove floating rubbish in the TKO Basin;

- To clean up the concrete paved area at Portion I every night to avoid fill materials form being washed into the sea; and
- To avoid any stagnant water or provide insecticide to avoid mosquito breeding in the Fill Bank.

Chemical and Waste Management

- To remove waste from the site regularly;
- To properly store and handle chemical wastes on site;
- To implement trip ticket system for all the imported public fill and general refuse disposal;
- To provide and manage sufficiently sized drip trays for diesel drums or chemical containers;
- To remove existing unwanted material in the stockpiles and avoid improper disposal at the Fill Bank through inspection of imported truckloads;
- To maintain proper housekeeping at the workshop area;
- To remove the oil stains in the event of leakage and handle all materials using for this cleaning works as chemical waste;
- To maintain mesh screen on top of the additional drainage, DP3 opening to avoid improper dumping of rubbish into this channel; and
- To identify C&D material by packaging, labeling, storage, transportation and disposal in accordance with statutory regulations.

12.3 Monitoring Schedule for the Coming Month

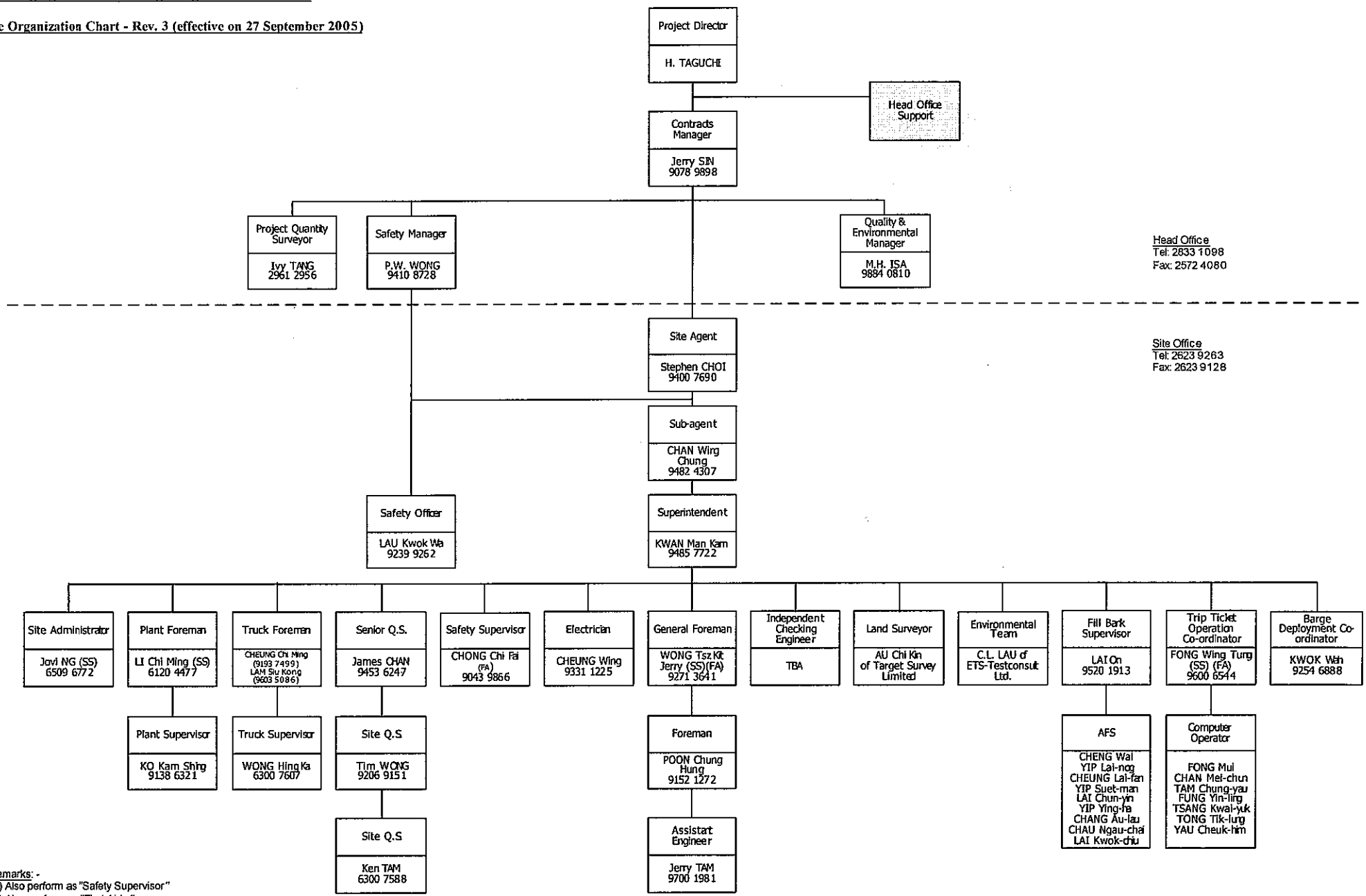
Since the Contract was completed on 31 December 2005, no impact monitoring will be carried out in the coming month. Hence, no Proposed EM&A program will be required for the coming month.

Appendix A

Organization Chart and Lines of Communication

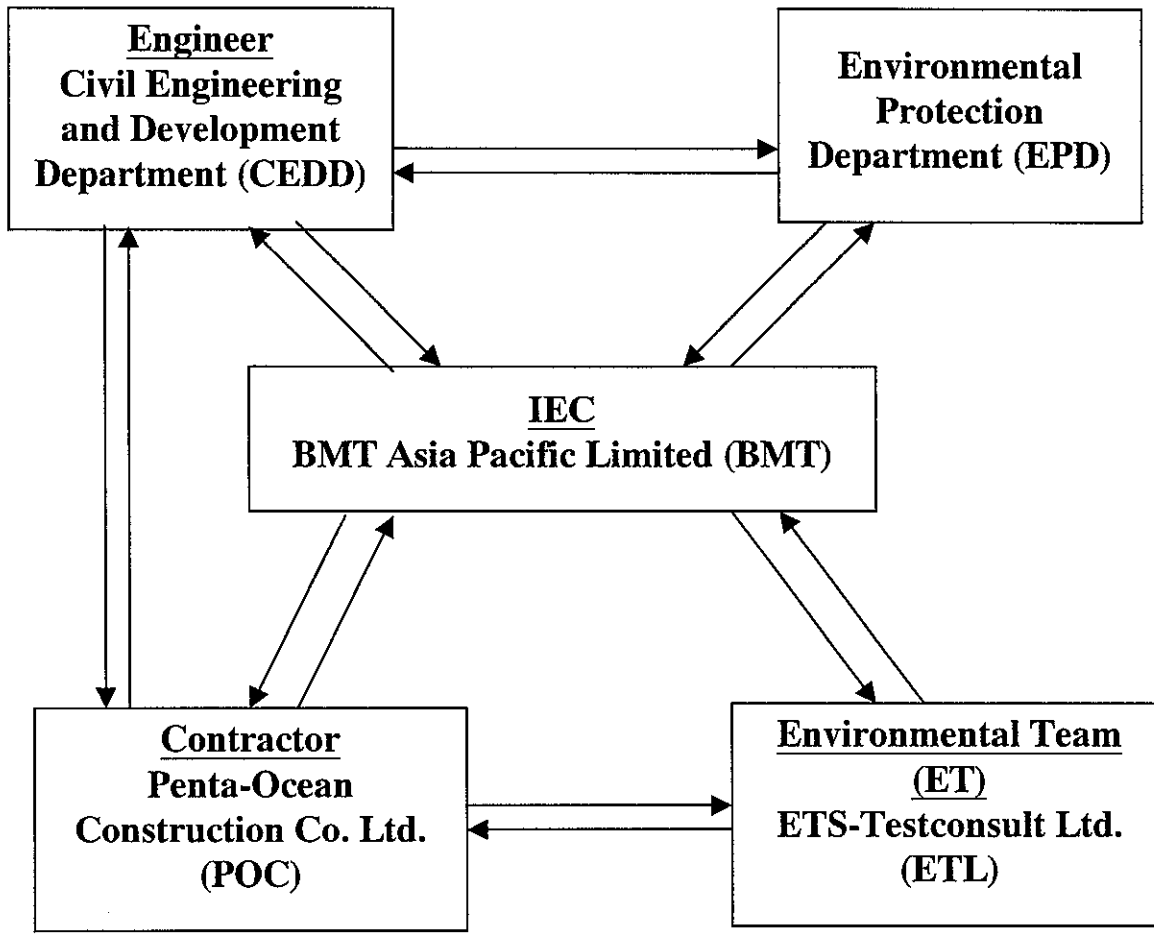
Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137
and Barging Facilities at Hong Kong Island and Mui Wo

Site Organization Chart - Rev. 3 (effective on 27 September 2005)



* Remarks: -
(SS) Also perform as "Safety Supervisor"
(FA) Also perform as "First Aider"

Lines of Communication



Appendix B1

Calibration Certificates for Air Quality Monitoring Equipments

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED
8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW

Date of Calibration : 15 November 2005

Serial No. : 10347 (ET / EA / 003 / 06)

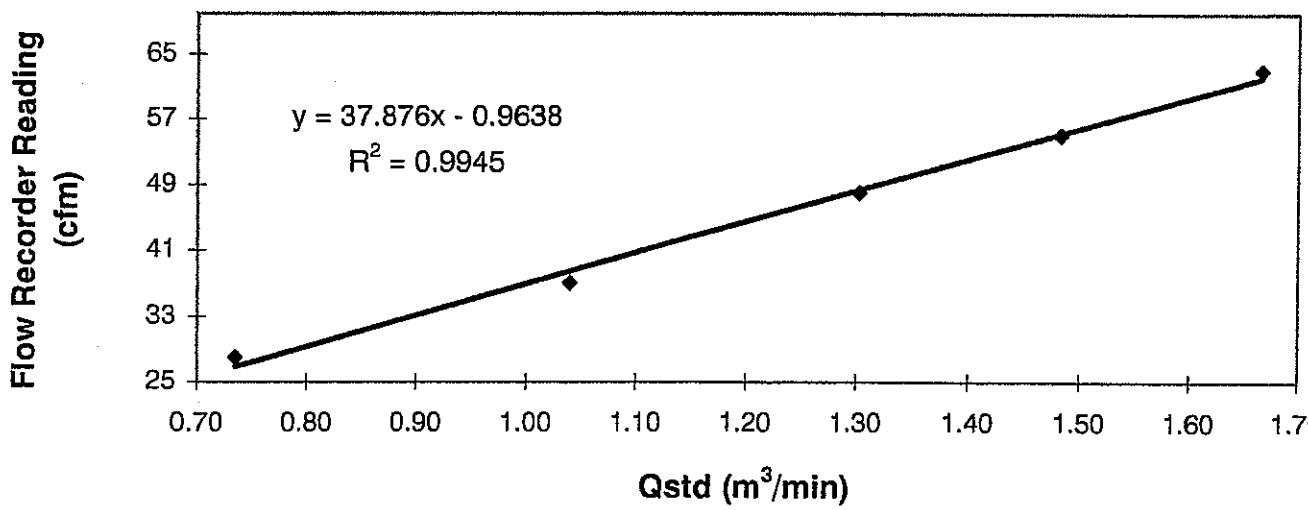
Calibration Due Date : 14 January 2006

Method : Based on Operations Manual for in series calibration method by TISCH ENVIROMENTAL Model Te-5025A calibration kit

Results :

Flow recorder reading (cfm)	63	55	48	37	28
Qstd (Actual flow rate, m^3/min)	1.67	1.48	1.30	1.04	0.73
Pressure : 763.56 mm Hg		Temp. : 298 K			

Air Sampler 10347 Calibration Curve
Site:Tseung Kwan O (AA1)
Date of Calibration: 15 November 2005



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5 point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : H. T. Chow
(Asst. Environmental Officer)

Approved by : Linda Law
(Environmental Officer)

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED
8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW

Date of Calibration : 15 November 2005

Serial No. : 1176 (ET / EA / 003 / 05)

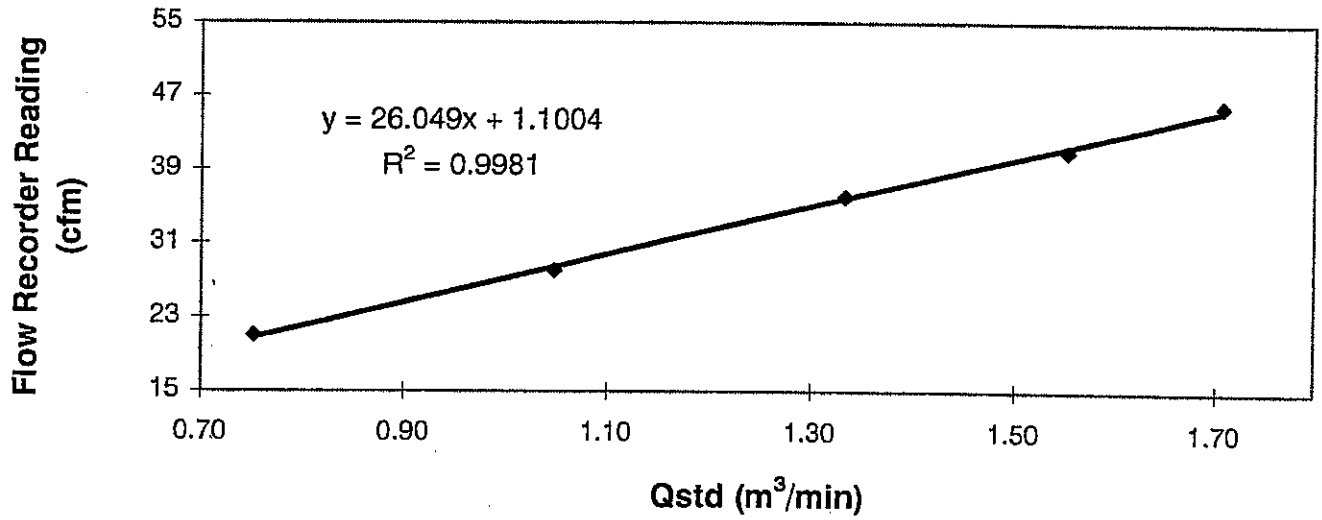
Calibration Due Date : 14 January 2006

Method : Based on Operations Manual for in series calibration method by TISCH ENVIROMENTAL Model Te-5025A calibration kit

Results :

Flow recorder reading (cfm)	46	41	36	28	21
Qstd (Actual flow rate, m^3/min)	1.71	1.55	1.33	1.05	0.75
Pressure : 763.56 mm Hg		Temp. : 297 K			

Air Sampler 1176 Calibration Curve
Site: Tseung Kwan O (AA2)
Date of Calibration: 15 November 2005



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5 point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : _____
H. T. Chow
(Asst. Environmental Officer)

Approved by : _____
Linda Law
(Environmental Officer)

TISCH ENVIROMENTAL, INC.
145 SOUTH MIAMI AVE.
VILLAGE OF CLEVES, OH 45002
513.467.9000
877.263.7610 TOLL FREE
513.467.9009 FAX
WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jun 24, 2005 Rootsmeter S/N 9833620 Ta (K) - 292
Operator Tisch Orifice I.D. - 0873 Pa (mm) - 761.24

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.4090	3.1	2.00
2	NA	NA	1.00	0.9980	6.2	4.00
3	NA	NA	1.00	0.8930	7.8	5.00
4	NA	NA	1.00	0.8510	8.6	5.50
5	NA	NA	1.00	0.7020	12.5	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
1.0180	0.7225	1.4298		0.9959	0.7068	0.8759
1.0139	1.0159	2.0221		0.9919	0.9938	1.2387
1.0118	1.1330	2.2608		0.9898	1.1084	1.3849
1.0106	1.1876	2.3711		0.9887	1.1618	1.4525
1.0054	1.4322	2.8597		0.9835	1.4010	1.7518
Qstd slope (m) =		2.01640		Qa slope (m) =		1.26264
intercept (b) =		-0.02588		intercept (b) =		-0.01585
coefficient (r) =		0.99998		coefficient (r) =		0.99998
y axis = SQRT[H2O(Pa/760)(298/Ta)]				y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m{[SQRT(H2O(Pa/760)(298/Ta))]- b}
Qa = 1/m{[SQRT H2O(Ta/Pa)]- b}

TISCH ENVIROMENTAL, INC.
145 SOUTH MIAMI AVE.
VILLAGE OF CLEVES, OH 4500;
513.467.9000
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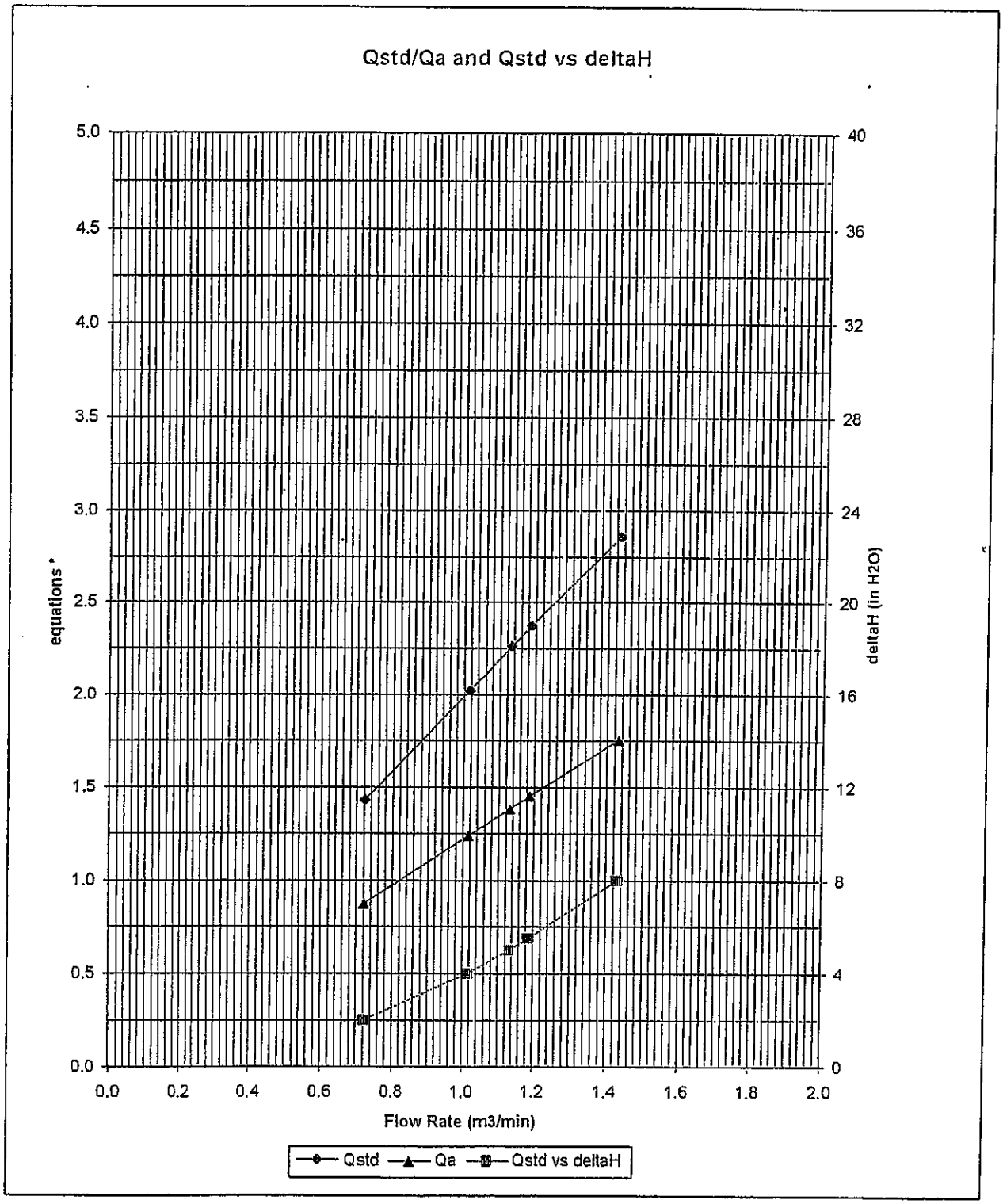
513.467.9009 FAX
WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT



*** y-axis equations:**

Qstd series: $\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$

Qa series: $\sqrt{(\Delta H\ (Ta\ /\ Pa))}$

#0873

Appendix B2

Air Quality Monitoring Results

Summary of 24-hr TSP Monitoring Results

Monitoring Station : AA1
Location : Outside CEDD Site Office

Start		Finish		Elapse Time		Sampling	Flow Rate (m^3/min.)		Average	Filter Weight (g)		Conc.
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m^3/min.)	Initial	Final	($\mu g/m^3$)
01/12/05	13:00	02/12/05	13:25	8024.06	8048.48	24.42	1.08	1.08	1.08	2.8842	3.1769	185
07/12/05	12:03	08/12/05	12:22	8051.48	8075.80	24.32	1.06	1.06	1.06	2.9134	3.1903	179
13/12/05	14:15	14/12/05	14:17	8078.81	8102.84	24.03	1.08	1.08	1.08	2.9027	3.2266	208
19/12/05	15:39	20/12/05	15:39	8105.84	8129.84	24.00	1.13	1.13	1.13	2.8899	3.2289	208
23/12/05	15:08	24/12/05	15:08	8132.84	8156.84	24.00	1.13	1.13	1.13	2.8859	3.2109	200
29/12/05	16:00	30/12/05	16:03	8159.84	8183.89	24.05	1.13	1.13	1.13	2.8365	3.1528	194

Monitoring Station : AA2
Location : Site Egress

Start		Finish		Elapse Time		Sampling	Flow Rate (m^3/min.)		Average	Filter Weight (g)		Conc.
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m^3/min.)	Initial	Final	($\mu g/m^3$)
01/12/05	13:00	02/12/05	13:02	11313.72	11337.76	24.04	1.42	1.42	1.42	2.9198	3.2721	172
07/12/05	12:10	08/12/05	12:21	11340.76	11364.95	24.19	1.38	1.38	1.38	2.9134	3.2539	170
13/12/05	14:05	14/12/05	14:18	11367.96	11392.17	24.21	1.42	1.42	1.42	2.9079	3.3101	195
19/12/05	15:49	20/12/05	15:49	11395.17	11419.17	24.00	1.49	1.49	1.49	2.8911	3.3085	195
23/12/05	15:18	24/12/05	15:18	11422.17	11446.17	24.00	1.57	1.57	1.57	2.9019	3.3301	189
29/12/05	16:00	30/12/05	16:14	11449.17	11473.40	24.23	1.57	1.57	1.57	2.8729	3.2815	179

Summary of 1-hr TSP Monitoring Results

Monitoring Station : AA1
Location : Outside CEDD Site Office

Date	Time		Elapse Time		Sampling Time (hrs)	Flow Rate (m^3/min.)		Average (m^3/min.)	Filter Weight (g)		Conc. ($\mu g/m^3$)
	Start	Finish	Initial	Final		Initial	Final		Initial	Final	
01/12/05	08:30	09:30	8021.06	8022.06	1.00	1.08	1.08	1.08	2.8957	2.9095	213
	09:45	10:45	8022.06	8023.06	1.00	1.08	1.08	1.08	2.8428	2.8593	255
	11:00	12:00	8023.06	8024.06	1.00	1.08	1.08	1.08	2.8676	2.8874	306
07/12/05	08:30	09:30	8048.48	8049.48	1.00	1.06	1.06	1.06	2.9014	2.9167	241
	09:45	10:45	8049.48	8050.48	1.00	1.06	1.06	1.06	2.8943	2.9126	288
	11:00	12:00	8050.48	8051.48	1.00	1.06	1.06	1.06	2.8985	2.9220	369
13/12/05	09:10	10:10	8075.80	8076.80	1.00	1.08	1.08	1.08	2.9133	2.9320	289
	11:00	12:00	8076.80	8077.80	1.00	1.08	1.08	1.08	2.9261	2.9502	372
	13:00	14:00	8077.80	8078.81	1.00	1.08	1.08	1.08	2.9085	2.9284	304
19/12/05	11:00	12:00	8102.84	8103.84	1.00	1.24	1.24	1.24	2.9029	2.9260	310
	13:30	14:30	8103.84	8104.84	1.00	1.24	1.24	1.24	2.9019	2.9215	263
	14:35	15:35	8104.84	8105.84	1.00	1.24	1.24	1.24	2.9008	2.9229	297
23/12/05	11:00	12:00	8129.84	8130.84	1.00	1.11	1.11	1.11	2.8960	2.9210	375
	13:00	14:00	8130.84	8131.84	1.00	1.11	1.11	1.11	2.8917	2.9158	362
	14:05	15:05	8131.84	8132.84	1.00	1.11	1.11	1.11	2.8962	2.9201	359
29/12/05	09:30	10:30	8156.84	8157.84	1.00	1.13	1.13	1.13	2.8764	2.8970	304
	11:00	12:00	8157.84	8158.84	1.00	1.13	1.13	1.13	2.8554	2.8799	361
	13:00	14:00	8158.84	8159.84	1.00	1.13	1.13	1.13	2.8323	2.8543	324

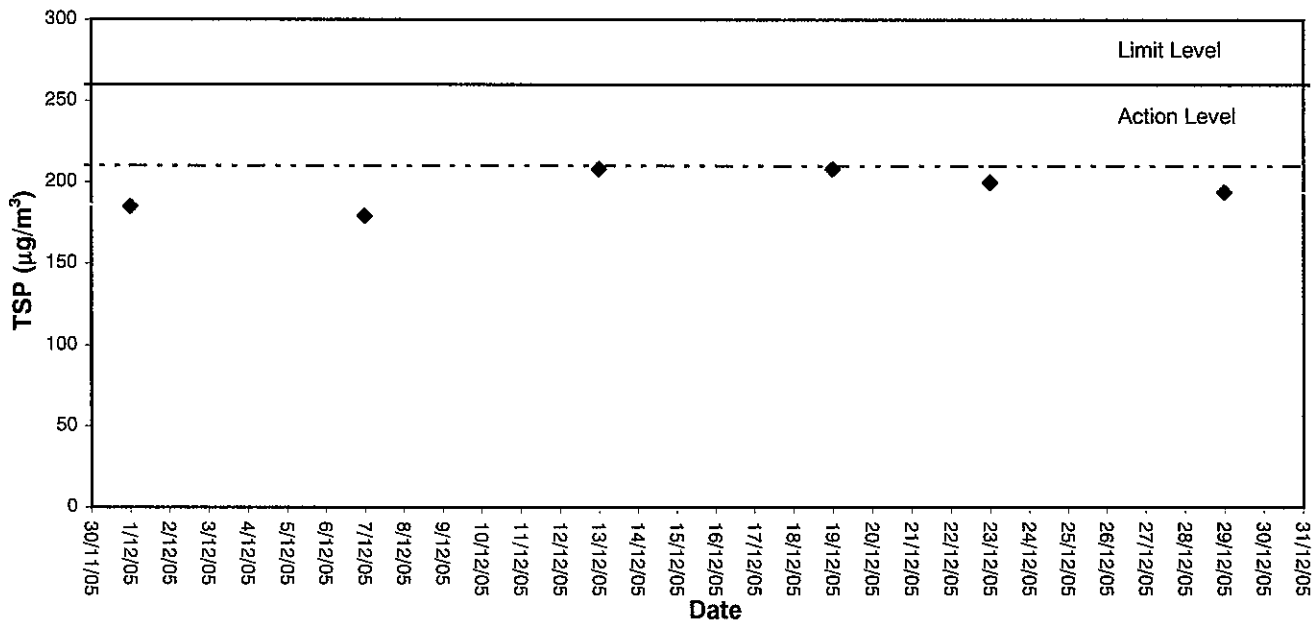
Monitoring Station : AA2
Location : Site Egress

Date	Time		Elapse Time		Sampling Time (hrs)	Flow Rate (m^3/min.)		Average (m^3/min.)	Filter Weight (g)		Conc. ($\mu g/m^3$)
	Start	Finish	Initial	Final		Initial	Final		Initial	Final	
01/12/05	08:30	09:30	11310.73	11311.73	1.00	1.42	1.42	1.42	2.8853	2.9046	227
	09:45	10:45	11311.73	11312.73	1.00	1.42	1.42	1.42	2.8759	2.8969	246
	11:00	12:00	11312.73	11313.73	1.00	1.42	1.42	1.42	2.8802	2.9072	317
07/12/05	08:30	09:30	11337.76	11338.76	1.00	1.38	1.38	1.38	2.8972	2.9162	229
	09:45	10:45	11338.76	11339.76	1.00	1.38	1.38	1.38	2.9017	2.9230	257
	11:00	12:00	11339.76	11340.73	1.00	1.38	1.38	1.38	2.8925	2.9209	343
13/12/05	09:28	10:28	11364.95	11365.92	1.00	1.42	1.42	1.42	2.9063	2.9314	295
	11:00	12:00	11365.95	11366.95	1.00	1.42	1.42	1.42	2.9062	2.9377	366
	13:00	14:00	11366.95	11367.95	1.00	1.42	1.42	1.42	2.9304	2.9605	353
19/12/05	11:00	12:00	11392.17	11393.17	1.00	1.49	1.49	1.49	2.9014	2.9214	224
	13:40	14:40	11393.17	11394.17	1.00	1.49	1.49	1.49	2.9001	2.9210	234
	14:45	15:45	11394.17	11395.17	1.00	1.49	1.49	1.49	2.8997	2.9219	271
23/12/05	11:00	12:00	11419.17	11420.17	1.00	1.57	1.57	1.57	2.8930	2.9197	283
	13:09	14:09	11420.17	11421.17	1.00	1.57	1.57	1.57	2.8911	2.9187	293
	14:13	15:13	11421.17	11422.17	1.00	1.57	1.57	1.57	2.8906	2.9178	289
29/12/05	09:30	10:30	11446.17	11447.17	1.00	1.57	1.57	1.57	2.8918	2.9211	311
	11:00	12:00	11447.17	11448.17	1.00	1.57	1.57	1.57	2.8806	2.9139	354
	13:00	14:00	11448.17	11449.17	1.00	1.57	1.57	1.57	2.8461	2.8776	334

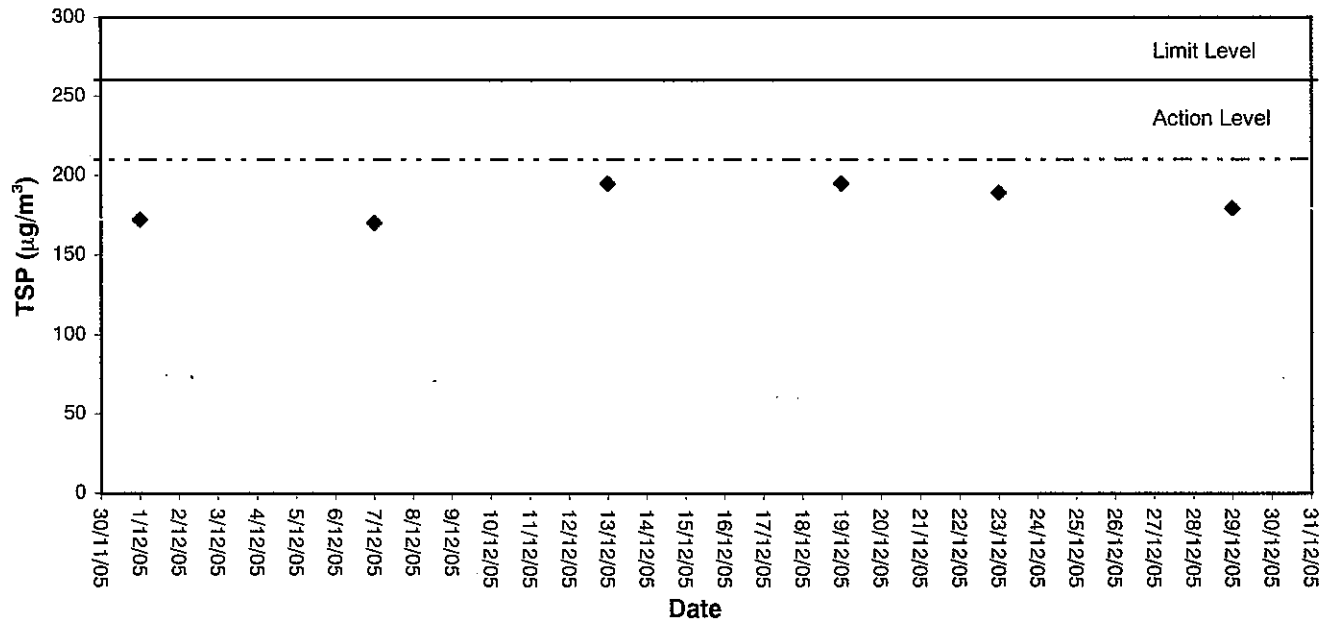
Appendix B3

Graphical Plots of Air Quality Monitoring Data

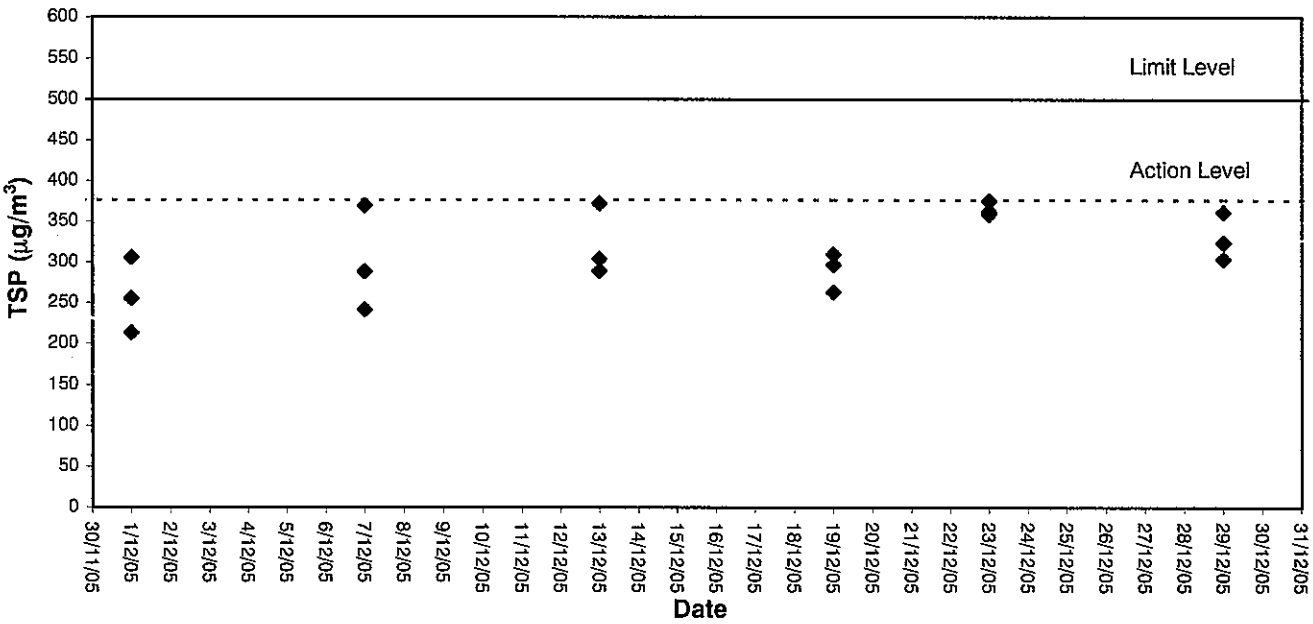
24-hour TSP level at AA1 (Outside CEDD Site Office)



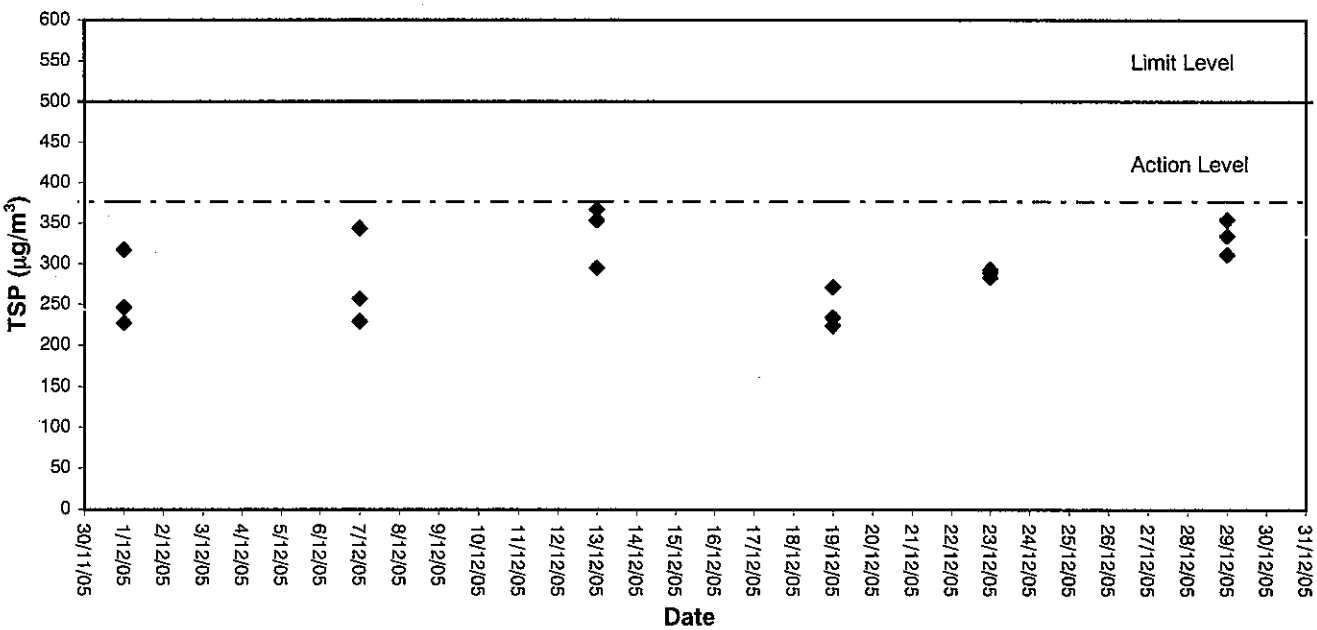
24-hour TSP level at AA2 (Site Egress)



1-hour TSP level at AA1 (Outside CEDD Site Office)



1-hour TSP level at AA2 (Site Egress)



Appendix C1

Calibration Certificates for Noise Monitoring Equipments

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

Calibration Certificate

Certificate No. 51473 Page 1 of 2 Pages

Customer : ETS-Testconsult Limited

Address : 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan St., Fotan, Hong Kong.

Order No. : Q50535 **Date of receipt :** 7-Apr-05

Item Tested

Description : Sound Level Calibrator (Eqip No.: ET/0527/004)

Manufacturer : Rion

Model : NC-73 **Serial No. :** 10196943

Test Conditions

Date of Test : 20-Apr-05 **Supply Voltage :** --

Ambient Temperature : (22.5 ± 2.5)°C **Relative Humidity :** (50 ± 20) %

Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : F21, Z02.

Test Results

All results were within the manufacturer's specification.

The results are shown in the attached page(s).

Test equipment used:

Equipment No.	Cert. No.	Due Date	Traceable to
S014	43147	7-Jul-05	PRC-NIM
S024	S41431	22-May-05	PRC-NIM
S041	43734	12-Aug-05	PRC-NIM

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI).
The test results apply to the above Unit-Under-Test only

Calibrated by : _____

Approved by : _____
Alan Chu - Manager

Date: 20-Apr-05

This Certificate is issued by:
Hong Kong Calibration Ltd.
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

Calibration Certificate

Results :

1. Level Accuracy (at 1 kHz)

UUT Nominal Value	Measured Value	Mfr's Spec.
94 dB	94.1 dB	± 1 dB

Uncertainty : ± 0.2 dB

2. Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's Spec.
1 kHz	0.991 kHz	± 2 %

Uncertainty : ± 0.1 %

3. Level Stability : 0.0 dB
Uncertainty : ± 0.01 dB

4. Total Harmonic Distortion : < 0.3 %
Mfr's Spec. : < 3 %
Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test
2. The uncertainty claimed is for a confidence probability of not less than 95%.
3. Atmospheric Pressure : 1 000 hPa
4. The above measured values are the mean of 3 measurement.

---------- END ----------

Hong Kong Calibration Ltd.
香港校正有限公司

Calibration Certificate

Certificate No. 51472

Customer : ETS-Testconsult Limited

Address : 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan St., Fotan, Hong Kong.

Order No. : Q50535 **Date of receipt :** 7-Apr-05

Item Tested

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion

Model : NL-31 **Serial No. :** 00531142

Test Conditions

Date of Test : 20-Apr-05 **Supply Voltage :** --

Ambient Temperature : (22.5 ± 2.5)°C **Relative Humidity :** (50 ± 20) %

Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : Z01.

Test Results

All results were within the manufacturer's, IEC 651 Type 1, IEC 804 Type 1 specification.

The results are shown in the attached page(s).

Test equipment used:

Equipment No.	Cert. No.	Due Date	Traceable to
S017	C051022	21-Mar-06	PRC-NIM
S024	S41431	22-May-05	PRC-NIM

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI).
The test results apply to the above Unit-Under-Test only

Calibrated by : _____

Approved by : _____
Alan Chu - Manager

Date: 20-Apr-05

This Certificate is issued by:
Hong Kong Calibration Ltd.
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

Calibration Certificate

Results :

1. SPL Accuracy

UUT Setting			UUT Reading (dB)	Correction (dB)
Level Range (dB)	Weight	Response		
20 – 100	L_A	Fast	94.0	+ 0.1
		Slow		+ 0.1
	L_C	Fast		0.0
	Lp	Fast		0.0
30 – 120	L_A	Fast	94.0	+ 0.1
		Slow		+ 0.1
	L_C	Fast		+ 0.1
	Lp	Fast		+ 0.1
30 – 120	L_A	Fast	114.0	+ 0.1
		Slow		+ 0.1
	L_C	Fast		0.0
	Lp	Fast		0.0

IEC 651 Type 1 Spec. : ± 0.7 dB
Uncertainty : ± 0.2 dB

2. Level Stability : 0.0 dB

IEC 651 Type 1 Spec. : ± 0.3 dB
Uncertainty : ± 0.01 dB

Calibration Certificate

3. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 651 Type 1 Spec.
31.5 Hz	- 39.6	- 39.4 dB, ± 1.5 dB
63 Hz	- 26.2	- 26.2 dB, ± 1.5 dB
125 Hz	- 16.2	- 16.1 dB, ± 1 dB
250 Hz	- 8.7	- 8.6 dB, ± 1 dB
500 Hz	- 3.2	- 3.2 dB, ± 1 dB
1 kHz	0.0 (Ref.)	0 dB, ± 1 dB
2 kHz	+ 1.3	+ 1.2 dB, ± 1 dB
5 kHz	+ 1.1	+ 1.0 dB ,± 1 dB
8 kHz	- 1.1	- 1.1 dB, + 1.5 dB ~ - 3 dB
16 kHz	- 6.7	- 6.6 dB, + 3 dB ~- ∞

Uncertainty : ± 0.1 dB

4. Time Averaging

Applied Burst duty Factor	UUT Reading (dB)	Correction (dB)	IEC 804 Type 1 Spec.
continuous	40.0	--	--
1/10	39.9	+ 0.1	± 0.5 dB
$1/10^2$	39.9	+ 0.1	
$1/10^3$	39.9	+ 0.1	± 1.0 dB
$1/10^4$	39.8	+ 0.2	

Uncertainty : ± 0.1 dB

Remark : 1. UUT : Unit-Under-Test
2. True Value = UUT Reading + Correction.
3. The uncertainty claimed is for a confidence probability of not less than 95%.
4. Atmospheric Pressure : 1 000 hPa.

--------- END ---------

Appendix C2

Noise Monitoring Results

Day-time Noise Monitoring

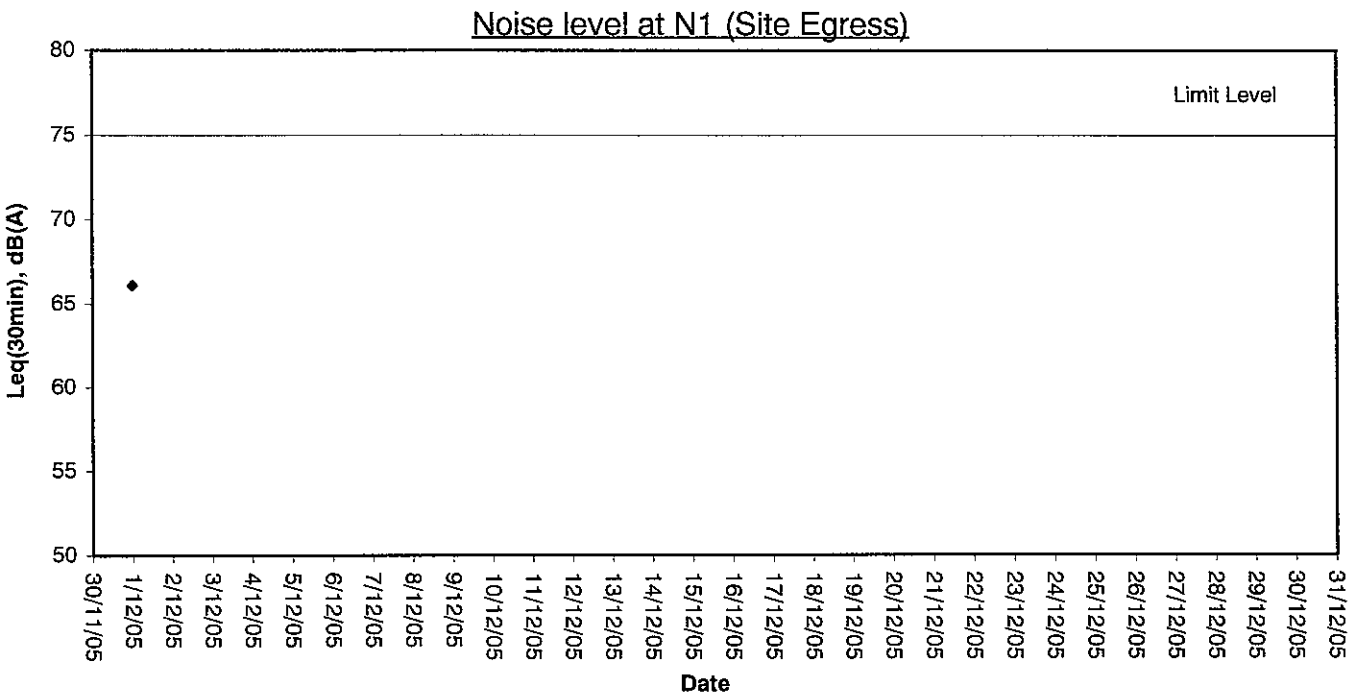
Monitoring Location: N1 (Site Egress)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		$L_{eq(30min)}$	L_{10}	L_{90}		
01/12/05	09:46	66.1	69.9	58.2	1.1	Sunny

Appendix C3

Graphical Plots of Noise Monitoring Data

Noise Monitoring (Day-time)



Appendix D1

Calibration Certificates for Marine Water Quality Monitoring Equipments

Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No.	:	ET/EW/003/001	Manufacturer	:	YSI
Model No.	:	95	Serial No.	:	97H 04071 AD
Date of Calibration	:	01/12/05	Calibration Due Date	:	28/02/06

Ref. No. of Reference Thermometer : ET/2403/01

Ref. No. of Potassium Dichromate : ET/0520/003/02

Temperature Verification

	Temperature (°C)
Thermometer reading	20.0
Meter reading	20.0

Lineality Checking

Purging time, min	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.00	7.02	7.01	7.11	7.09	7.10	1.28
5	5.44	5.46	5.45	5.36	5.38	5.37	1.48
10	3.56	3.54	3.55	3.61	3.63	3.62	1.95
Linear regression coefficient				0.9972			

Zero Point Checking

DO meter reading, mg/L	0.00

Salinity Checking

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	6.94	6.96	6.95	6.81	6.83	6.82	1.89
30	6.34	6.36	6.35	6.22	6.20	6.21	2.23

Acceptance Criteria

(1) Differenc between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
(2) Linear regression coefficient : >0.99
(3) Zero checking: 0.0mg/L
(4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : Linda Lam

Approved by :

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Internal Calibration Report of Turbidimeter

Equipment Ref. No. : ET/0505/002 Manufacturer : HACH

Model No. : 2100P Serial No. : 9309000037?8

Date of Calibration : 27/10/05 Calibration Due : 26/11/06

Data

(4.95) 0 - 10 NTU Gelex Vial	(49.0) 10 - 100 NTU Gelex Vial	(409) 100 - 1000 NTU Gelex Vial
4.94	48.3	407

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : RL Approved by : Linda Lau

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Salinity Meter

Equipment Ref. No. : ET/0527/001 Manufacturer : YSI

Model No. : Model 30 Serial No. : 99G 1183

Date of Calibration : 27 Oct. 2005 Due Date : 26 Jan, 2006

Ref. No. of Salinity Standard used (30ppt)	T196A

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30	29.4	2.0%

Acceptance Criteria

Difference : <10 %

The salinity meter complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use. Measurements are traceable to national standards.

Checked by : RL Approved by : Linda Lau

Appendix D2

Impact Marine Water Quality Monitoring Results

Mid-Flood Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : C1

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
02/12/05	07:30 - 07:43	23/Sunny	Surface	1.0	22.7	32.2	32.2	6.77	6.76	6.61	100.1	99.9	3.89	3.89	3.70	6.0	5.9	5.6
						32.2		6.74			99.7		3.88			5.7		
			Middle	10.0	22.5	32.3	32.3	6.49	6.47		96.0	95.7	3.52	3.53		5.5	5.5	
						32.3		6.45			95.4		3.53			5.5		
			Bottom	19.0	22.5	32.3	32.4	6.58	6.57	6.57	96.7	96.6	3.67	3.68		5.5	5.5	
						32.4		6.56			96.4		3.69			5.5		
05/12/05	10:00 - 10:14	17/Cloudy	Surface	1.0	20.6	32.7	32.7	6.39	6.35	6.25	96.3	95.8	3.71	3.66	3.44	6.0	6.0	5.7
						32.7		6.30			95.3		3.61			6.0		
			Middle	9.3	22.4	33.1	33.1	6.18	6.15		93.1	92.8	3.50	3.45		5.5	5.5	
						33.1		6.12			92.4		3.40			5.5		
			Bottom	17.6	21.9	33.4	33.4	5.89	5.85	5.85	88.7	88.4	3.15	3.20		5.5	5.5	
						33.4		5.80			88.0		3.25			5.5		
07/12/05	10:45 - 10:58	11/Cloudy	Surface	1.0	20.5	33.9	33.9	6.25	6.26	6.24	83.9	84.1	3.79	3.83	3.88	4.0	4.0	4.1
						33.9		6.26			84.2		3.86			4.0		
			Middle	9.0	19.9	33.2	33.3	6.25	6.23		84.4	83.9	3.94	3.93		3.8	3.9	
						33.3		6.21			83.4		3.92			4.0		
			Bottom	17.0	19.9	33.6	33.5	6.36	6.39	6.39	83.7	83.9	3.89	3.90		4.5	4.5	
						33.3		6.41			84.1		3.90			4.5		
09/12/05	13:00 - 13:16	18/Sunny	Surface	1.0	18.2	32.2	32.2	6.45	6.48	6.33	99.9	100.4	1.91	1.87	1.73	3.5	3.5	3.3
						32.2		6.51			100.9		1.83			3.5		
			Middle	10.5	17.6	33.0	33.0	6.21	6.18		96.2	95.7	1.63	1.59		3.0	3.0	
						32.9		6.14			95.2		1.55			3.0		
			Bottom	20.0	17.0	32.8	32.8	5.72	5.76	5.76	88.6	89.0	1.78	1.74		3.5	3.5	
						32.8		5.80			89.4		1.70			3.5		
12/12/05	13:45 - 14:00	19/Cloudy	Surface	1.0	19.0	32.5	32.5	6.20	6.17	6.10	97.0	96.5	2.66	2.63	2.58	5.0	5.0	4.9
						32.5		6.14			96.0		2.60			5.0		
			Middle	9.7	18.7	33.0	33.0	6.06	6.03		94.8	94.4	2.51	2.46		4.5	4.5	
						33.0		6.00			94.0		2.41			4.5		
			Bottom	18.4	18.5	32.8	32.8	5.81	5.78	5.78	91.1	90.7	2.70	2.66		5.2	5.2	
						32.8		5.74			90.3		2.62			5.2		
14/12/05	15:00 - 15:13	13/Cloudy	Surface	1.0	20.3	32.8	32.8	6.67	6.66	6.58	101.3	101.1	3.27	3.28	3.00	6.0	6.0	5.6
						32.8		6.64			100.9		3.28			6.0		
			Middle	10.0	20.7	32.8	32.9	6.49	6.51		98.6	98.9	2.92	2.93		5.2	5.2	
						32.9		6.52			99.1		2.93			5.2		
			Bottom	19.0	20.5	33.1	33.1	6.44	6.43	6.43	97.2	97.0	2.78	2.79		5.5	5.5	
						33.0		6.41			96.7		2.79			5.5		
16/12/05	08:00 - 08:16	13/Cloudy	Surface	1.0	19.8	33.2	33.3	6.39	6.42	6.30	96.5	96.9	3.00	2.96	2.85	4.0	3.9	3.8
						33.3		6.45			97.3		2.92			3.8		
			Middle	10.5	20.1	33.4	33.4	6.22	6.18		93.9	93.5	2.77	2.74		4.0	4.0	
						33.4		6.14			93.0		2.70			4.0		
			Bottom	20.0	20.3	33.7	33.7	5.89	5.93	5.93	88.9	89.4	2.81	2.86		3.5	3.5	
						33.7		5.96			89.9		2.91			3.5		

Mid-Flood Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : C1

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
19/12/05	08:15 - 08:28	12/Sunny	Surface	1.0	20.2	32.7	32.7	6.67	6.66	6.51	98.7	98.5	3.79	3.80	3.74	3.5	3.5	3.8
						32.7		6.64			98.2		3.80			3.5		
			Middle	10.0	19.9	32.9	32.9	6.38	6.37		94.4	94.2	3.54	3.54		3.8	3.8	
						32.9		6.35			93.9		3.53			3.8		
			Bottom	19.0	19.8	33.0	33.0	6.30	6.32	6.32	93.2	93.4	3.89	3.90		4.0	4.0	
						33.0		6.33			93.6		3.90			4.0		
21/12/05	11:12 - 11:28	15/Sunny	Surface	1.0	17.6	33.7	33.7	6.59	6.55	6.79	84.2	83.8	2.61	2.56	2.73	3.0	3.0	3.6
						33.7		6.50			83.4		2.51			3.0		
			Middle	10.5	17.8	34.0	34.0	7.06	7.03		90.2	89.8	2.82	2.77		3.5	3.5	
						34.0		7.00			89.4		2.72			3.5		
			Bottom	20.0	18.2	34.1	34.1	6.58	6.54	6.54	84.1	83.7	2.92	2.87		4.2	4.3	
						34.1		6.50			83.3		2.82			4.3		
23/12/05	11:15 - 11:28	12/Sunny	Surface	1.0	19.2	33.8	33.8	6.79	6.77	6.61	101.1	100.8	3.59	3.58	3.56	5.0	4.9	4.5
						33.8		6.75			100.5		3.56			4.8		
			Middle	10.1	18.9	34.1	34.1	6.46	6.44		96.2	95.9	3.47	3.48		4.3	4.3	
						34.1		6.42			95.6		3.49			4.3		
			Bottom	19.2	18.9	34.2	34.2	6.37	6.39	6.39	94.2	94.5	3.63	3.64		4.3	4.4	
						34.2		6.40			94.7		3.64			4.5		
28/12/05	15:30 - 15:44	15/Cloudy	Surface	1.0	17.0	33.5	33.5	6.31	6.26	6.20	89.0	88.5	2.55	2.50	2.50	3.0	3.0	3.1
						33.5		6.21			88.0		2.45			3.0		
			Middle	11.5	17.2	33.6	33.6	6.19	6.15		88.1	87.6	2.61	2.56		3.0	3.0	
						33.6		6.10			87.1		2.51			3.0		
			Bottom	22.0	17.1	33.7	33.7	6.07	6.04	6.04	85.6	85.3	2.50	2.45		3.2	3.2	
						33.7		6.00			85.0		2.40			3.2		
30/12/05	7:00 - 7:13	17/Cloudy	Surface	1.0	17.8	32.9	32.9	6.76	6.75	6.63	99.3	99.2	3.82	3.83	3.83	5.5	5.5	5.4
						32.9		6.74			99.0		3.84			5.5		
			Middle	10.1	17.6	33.4	33.4	6.50	6.52		95.5	95.7	3.76	3.77		5.3	5.3	
						33.4		6.53			95.9		3.78			5.2		
			Bottom	19.2	17.6	33.6	33.6	6.33	6.35	6.35	93.0	93.2	3.89	3.90		5.5	5.5	
						33.6		6.36			93.4		3.90			5.5		

Mid-Flood Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : M4

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
02/12/05	08:10 - 08:20	23/Sunny	Surface	1.0	22.8	32.3	32.4	6.85	6.84	6.74	101.3	101.1	3.43	3.42	3.15	5.5	5.5	5.4
						32.4		6.82			100.9		3.41			5.5		
			Middle	4.4	22.5	32.4	32.4	6.62	6.64		97.9	98.2	3.17	3.18		5.5	5.5	
						32.4		6.65			98.4		3.18			5.5		
			Bottom	7.8	22.4	32.4	32.4	6.64	6.66	6.66	98.2	98.5	2.86	2.85		5.3	5.3	
						32.4		6.67			98.7		2.84			5.2		
05/12/05	10:46 - 11:00	17/Cloudy	Surface	1.0	21.0	33.0	33.0	6.28	6.24	6.16	94.6	94.3	3.62	3.57	3.56	5.5	5.5	5.6
						33.0		6.20			94.0		3.52			5.5		
			Middle	3.7	21.7	33.4	33.4	6.11	6.08		92.0	91.5	3.39	3.35		5.5	5.5	
						33.4		6.04			91.0		3.30			5.5		
			Bottom	6.4	22.1	33.6	33.6	6.07	6.04	6.04	91.4	90.9	3.80	3.75		5.7	5.8	
						33.6		6.00			90.4		3.70			5.8		
07/12/05	11:35 - 11:45	11/Cloudy	Surface	1.0	19.4	33.3	33.5	6.58	6.60	6.62	88.6	88.8	3.84	3.84	3.70	3.5	3.5	3.8
						33.7		6.61			88.9		3.83			3.5		
			Middle	4.5	19.8	33.7	33.8	6.65	6.64		88.9	89.0	3.65	3.65		3.8	3.8	
						33.8		6.62			89.1		3.64			3.8		
			Bottom	8.0	19.5	33.2	33.2	6.72	6.68	6.68	89.8	89.5	3.60	3.61		4.0	4.0	
						33.1		6.64			89.1		3.62			4.0		
09/12/05	13:49 - 14:05	18/Sunny	Surface	1.0	18.5	32.4	32.4	6.16	6.13	6.22	95.4	94.9	2.31	2.28	2.60	4.0	4.0	4.1
						32.4		6.10			94.4		2.24			4.0		
			Middle	4.3	17.8	32.8	32.8	6.28	6.31		97.3	97.8	2.61	2.57		4.3	4.3	
						32.8		6.34			98.3		2.53			4.3		
			Bottom	7.6	17.8	32.7	32.7	6.20	6.17	6.17	96.1	95.6	3.00	2.95		4.0	4.0	
						32.6		6.14			95.1		2.90			4.0		
12/12/05	14:43 - 15:00	19/Cloudy	Surface	1.0	19.1	32.8	32.8	6.13	6.08	6.02	95.9	95.5	2.99	2.95	3.26	5.5	5.5	5.7
						32.8		6.03			95.0		2.90			5.5		
			Middle	4.1	19.0	33.1	33.2	6.00	5.96		94.0	93.6	3.10	3.07		5.5	5.5	
						33.2		5.92			93.2		3.03			5.5		
			Bottom	7.2	18.8	33.0	33.0	6.20	6.23	6.23	97.3	97.8	3.81	3.76		6.0	6.0	
						33.0		6.26			98.3		3.71			6.0		
14/12/05	15:43 - 15:53	13/Cloudy	Surface	1.0	20.3	32.8	32.8	6.70	6.72	6.68	101.8	102.0	2.96	2.97	2.98	5.7	5.7	5.7
						32.8		6.73			102.2		2.97			5.7		
			Middle	4.6	20.6	32.9	32.8	6.62	6.64		99.9	100.2	3.12	3.13		6.0	6.0	
						32.7		6.65			100.4		3.13			6.0		
			Bottom	8.2	20.5	33.0	33.0	6.57	6.56	6.56	99.2	99.0	2.84	2.85		5.5	5.5	
						33.0		6.54			98.7		2.85			5.5		
16/12/05	08:44 - 09:00	13/Cloudy	Surface	1.0	19.6	33.6	33.6	6.52	6.48	6.40	98.5	98.2	2.21	2.25	2.23	4.0	4.0	3.7
						33.6		6.43			97.8		2.28			4.0		
			Middle	4.2	19.9	33.5	33.5	6.36	6.33		96.0	95.5	2.40	2.37		3.5	3.5	
						33.5		6.30			95.0		2.34			3.5		
			Bottom	7.4	20.0	33.7	33.7	6.20	6.17	6.17	93.6	93.3	2.11	2.08		3.5	3.5	
						33.7		6.14			93.0		2.04			3.5		

Mid-Flood Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : M4

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
19/12/05	08:58 - 09:08	12/Sunny	Surface	1.0	20.3	32.7	32.7	6.74	6.73	6.57	99.7	99.5	3.07	3.08	2.95	4.0	4.0	3.6
						32.7		6.71			99.3		3.08			4.0		
			Middle	4.6	20.1	32.9	32.9	6.40	6.42		94.0	94.3	2.84	2.85		3.2	3.2	
						32.8		6.44			94.6		2.85			3.2		
			Bottom	8.2	19.0	32.9	33.0	6.33	6.35	6.35	93.0	93.2	2.92	2.93		3.5	3.5	
						33.0		6.36			93.4		2.93			3.5		
21/12/05	12:00 - 12:15	15/Sunny	Surface	1.0	17.5	33.6	33.6	6.77	6.74	6.93	86.5	86.1	3.01	2.96	2.83	3.5	3.5	3.3
						33.6		6.70			85.7		2.91			3.5		
			Middle	4.4	17.6	34.1	34.1	7.16	7.13		89.8	89.4	2.84	2.79		3.5	3.5	
						34.1		7.10			89.0		2.74			3.5		
			Bottom	7.8	17.7	33.6	33.6	6.89	6.85	6.85	86.2	85.7	2.79	2.75		3.0	3.0	
						33.6		6.80			85.2		2.70			3.0		
23/12/05	11:58 - 12:08	12/Sunny	Surface	1.0	19.3	33.7	33.7	6.84	6.83	6.67	101.9	101.7	3.12	3.12	2.98	4.0	4.0	3.8
						33.7		6.81			101.4		3.11			4.0		
			Middle	4.6	18.8	34.1	34.1	6.52	6.51		96.4	96.2	2.87	2.88		3.8	3.8	
						34.1		6.49			96.0		2.89			3.8		
			Bottom	8.2	18.8	34.1	34.1	6.46	6.45	6.45	95.8	95.5	2.94	2.93		3.5	3.5	
						34.1		6.43			95.2		2.92			3.5		
28/12/05	16:15 - 16:30	15/Cloudy	Surface	1.0	17.0	33.3	33.3	6.47	6.44	6.35	92.4	91.9	2.40	2.35	2.35	3.3	3.3	3.1
						33.3		6.40			91.4		2.30			3.2		
			Middle	4.0	17.1	33.4	33.4	6.31	6.26		89.9	89.5	2.39	2.43		3.0	3.0	
						33.4		6.21			89.0		2.46			3.0		
			Bottom	7.0	17.0	33.6	33.6	6.23	6.18	6.18	87.9	87.5	2.31	2.26		3.0	3.0	
						33.6		6.13			87.0		2.21			3.0		
30/12/05	7:43 - 7:53	17/Cloudy	Surface	1.0	17.9	32.9	32.9	6.89	6.87	6.75	101.2	100.9	3.43	3.44	3.17	5.5	5.5	5.3
						32.9		6.85			100.6		3.45			5.5		
			Middle	4.4	17.5	33.3	33.3	6.62	6.64		97.3	97.5	3.12	3.13		5.2	5.3	
						33.3		6.65			97.7		3.14			5.3		
			Bottom	7.8	17.6	33.5	33.6	6.48	6.47	6.47	94.6	94.4	2.96	2.95		5.0	5.0	
						33.6		6.45			94.1		2.94			5.0		

Mid-Ebb Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : C1

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
02/12/05	11:30 - 11:43	23/Sunny	Surface	1.0	23.4	32.4	32.4	6.86	6.85	6.68	101.5	101.4	3.74	3.75	3.50	6.0	6.0	5.8
						32.4		6.84			101.2		3.75			6.0		
			Middle	9.8	23.1	32.5	32.5	6.52	6.51		95.8	95.6	3.60	3.61		5.7	5.8	
						32.5		6.49			95.4		3.62			5.8		
			Bottom	18.6	22.8	32.5	32.5	6.49	6.48	6.48	95.4	95.2	3.15	3.15		5.5	5.5	
						32.5		6.46			94.9		3.14			5.5		
05/12/05	14:26 - 14:40	17/Cloudy	Surface	1.0	20.7	32.9	33.0	6.22	6.18	6.26	94.6	94.3	3.27	3.32	3.30	6.0	6.0	5.7
						33.0		6.14			94.0		3.36			6.0		
			Middle	10.0	22.0	33.3	33.3	6.39	6.35		97.2	96.7	3.16	3.13		5.7	5.7	
						33.3		6.30			96.2		3.10			5.7		
			Bottom	19.0	22.1	33.7	33.7	5.91	5.88	5.88	89.9	89.5	3.51	3.46		5.5	5.5	
						33.7		5.84			89.0		3.41			5.5		
07/12/05	17:00 - 17:13	11/Cloudy	Surface	1.0	20.3	33.8	33.8	6.49	6.48	6.40	88.2	88.1	3.43	3.44	3.46	4.5	4.5	4.4
						33.7		6.47			87.9		3.44			4.5		
			Middle	9.6	20.1	33.2	33.2	6.30	6.32		85.0	85.2	3.69	3.69		4.5	4.5	
						33.2		6.33			85.4		3.68			4.5		
			Bottom	18.2	19.7	33.6	33.6	6.42	6.41	6.41	85.5	85.9	3.25	3.26		4.2	4.3	
						33.5		6.39			86.2		3.27			4.3		
09/12/05	07:01 - 07:17	16/Snny	Surface	1.0	16.3	32.7	32.7	6.31	6.26	6.15	99.1	98.7	2.06	2.11	2.09	4.2	4.3	4.3
						32.7		6.21			98.3		2.16			4.3		
			Middle	9.8	16.5	33.1	33.1	6.08	6.04		95.4	95.0	1.90	1.95		4.0	4.0	
						33.1		6.00			94.6		1.99			4.0		
			Bottom	18.2	17.1	33.5	33.5	5.89	5.93	5.93	92.4	92.7	2.17	2.22		4.5	4.5	
						33.5		5.96			93.0		2.27			4.5		
12/12/05	08:40 - 08:54	19/Cloudy	Surface	1.0	18.9	32.1	32.1	6.30	6.26	6.16	97.6	97.3	3.11	3.06	2.95	6.0	6.0	5.7
						32.1		6.22			97.0		3.01			6.0		
			Middle	9.3	18.8	33.0	33.0	6.11	6.06		94.9	94.5	2.99	2.95		5.5	5.5	
						33.0		6.01			94.0		2.90			5.5		
			Bottom	17.6	18.6	33.4	33.4	5.79	5.82	5.82	90.2	90.6	2.89	2.85		5.7	5.7	
						33.4		5.85			91.0		2.80			5.7		
14/12/05	10:15 - 10:28	13/Cloudy	Surface	1.0	20.4	32.8	32.8	6.59	6.58	6.49	100.1	100.0	3.89	3.90	3.82	6.5	6.5	6.1
						32.8		6.57			99.8		3.90			6.5		
			Middle	9.8	20.6	32.9	32.9	6.40	6.39		97.2	97.1	3.57	3.58		6.0	6.0	
						32.9		6.38			96.9		3.58			6.0		
			Bottom	18.6	20.6	33.1	33.1	6.46	6.45	6.45	97.5	97.4	3.97	3.98		5.7	5.7	
						33.1		6.44			97.2		3.99			5.7		
16/12/05	11:50 - 12:00	13/Cloudy	Surface	1.0	19.5	33.0	33.0	6.25	6.21	6.17	96.6	96.3	2.91	2.86	3.43	4.2	4.3	5.0
						33.0		6.17			96.0		2.81			4.3		
			Middle	10.1	19.7	33.4	33.4	6.09	6.12		94.2	94.6	3.80	3.75		5.2	5.3	
						33.4		6.15			95.0		3.70			5.3		
			Bottom	19.2	20.1	33.1	33.1	5.96	5.93	5.93	92.2	91.7	3.72	3.67		5.5	5.5	
						33.1		5.90			91.2		3.62			5.5		

Mid-Ebb Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : C1

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
19/12/05	13:15 - 13:28	12/Sunny	Surface	1.0	20.4	32.8	32.8	6.45	6.47	6.36	95.4	95.7	3.27	3.28	3.03	4.5	4.5	4.3
						32.8		6.48			95.9		3.28			4.5		
			Middle	9.8	20.1	32.9	32.9	6.22	6.25		92.0	92.4	2.96	2.97		4.3	4.3	
						32.9		6.27			92.7		2.97			4.3		
			Bottom	18.6	19.9	33.0	33.0	6.17	6.18	6.18	90.6	90.8	2.85	2.84		4.0	4.0	
						33.0		6.19			90.9		2.83			4.0		
21/12/05	15:00 - 15:14	15/Sunny	Surface	1.0	18.0	33.6	33.6	6.92	6.88	6.97	88.4	88.0	2.45	2.47	2.26	3.0	3.0	3.3
						33.6		6.84			87.6		2.48			3.0		
			Middle	11.5	17.9	33.9	33.9	7.10	7.05		89.8	89.4	1.94	1.92		3.8	3.8	
						33.9		7.00			89.0		1.90			3.8		
			Bottom	22.0	18.2	33.7	33.7	6.61	6.57	6.57	84.3	83.9	2.41	2.40		3.2	3.2	
						33.7		6.53			83.5		2.38			3.2		
23/12/05	16:45 - 16:58	12/Sunny	Surface	1.0	19.8	33.8	33.8	6.62	6.61	6.44	98.6	98.4	3.67	3.67	3.33	4.2	4.3	4.2
						33.8		6.59			98.1		3.66			4.3		
			Middle	9.9	19.7	34.0	34.0	6.30	6.28		93.8	93.5	3.20	3.21		4.3	4.3	
						34.0		6.26			93.2		3.22			4.3		
			Bottom	18.8	19.5	34.2	34.2	6.35	6.34	6.34	94.6	94.4	3.11	3.12		4.0	4.0	
						34.2		6.32			94.1		3.13			4.0		
28/12/05	09:00 - 09:14	15/Cloudy	Surface	1.0	16.9	33.1	33.1	6.17	6.14	6.21	87.1	86.6	2.71	2.66	2.76	3.2	3.2	3.4
						33.1		6.10			86.1		2.61			3.2		
			Middle	11.0	17.1	33.4	33.4	6.31	6.28		89.4	88.9	2.92	2.87		3.5	3.5	
						33.4		6.24			88.4		2.82			3.5		
			Bottom	21.0	17.3	34.0	34.0	6.39	6.44	6.44	90.2	90.7	2.77	2.74		3.5	3.5	
						34.0		6.48			91.2		2.70			3.5		
30/12/05	10:45- 10:58	17/Cloudy	Surface	1.0	18.2	33.0	33.0	6.88	6.89	6.76	101.1	101.3	3.14	3.14	2.98	5.3	5.3	4.9
						33.0		6.90			101.4		3.13			5.3		
			Middle	9.8	18.0	33.5	33.5	6.64	6.63		97.6	97.4	2.88	2.88		5.0	5.0	
						33.5		6.61			97.1		2.87			5.0		
			Bottom	18.6	17.9	33.6	33.6	6.47	6.45	6.45	94.4	94.1	2.93	2.94		4.5	4.5	
						33.6		6.43			93.8		2.95			4.5		

Mid-Ebb Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Monitoring Station : M4

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
02/12/05	12:10 - 12:22	23/Sunny	Surface	1.0	23.4	32.4	32.4	6.94	6.96	6.78	102.7	103.0	2.89	2.89	2.44	5.5	5.5	5.0
						32.4		6.98			103.3		2.88			5.5		
			Middle	4.1	23.2	32.5	32.5	6.61	6.59		97.8	97.5	2.17	2.18		5.0	5.0	
						32.4		6.57			97.2		2.19			5.0		
			Bottom	7.2	23.0	32.5	32.5	6.66	6.64	6.64	97.9	97.6	2.24	2.25		4.5	4.5	
						32.5		6.62			97.3		2.25			4.5		
05/12/05	15:15 - 15:30	17/Cloudy	Surface	1.0	20.8	32.5	32.5	6.41	6.36	6.31	97.5	97.0	3.37	3.34	3.61	5.5	5.5	5.6
						32.5		6.31			96.5		3.30			5.5		
			Middle	4.2	21.0	33.1	33.1	6.30	6.26		95.8	95.4	3.82	3.87		5.5	5.5	
						33.1		6.22			95.0		3.92			5.5		
			Bottom	7.4	21.0	33.4	33.4	6.14	6.10	6.10	93.4	92.9	3.66	3.63		5.7	5.7	
						33.4		6.06			92.4		3.60			5.7		
07/12/05	17:43 - 17:55	11/Cloudy	Surface	1.0	20.3	33.3	33.4	6.76	6.75	6.63	91.9	91.7	3.27	3.27	3.27	3.8	3.8	4.1
						33.5		6.73			91.5		3.26			3.8		
			Middle	4.8	20.0	33.6	33.6	6.53	6.51		88.8	88.5	3.12	3.13		4.0	4.0	
						33.6		6.49			88.2		3.14			4.0		
			Bottom	8.6	19.4	33.3	33.3	6.62	6.65	6.65	89.3	89.7	3.43	3.43		4.5	4.5	
						33.2		6.67			90.0		3.42			4.5		
09/12/05	07:51- 08:08	16/Sunny	Surface	1.0	16.2	33.0	33.0	6.26	6.23	6.16	98.0	97.6	2.62	2.57	2.48	3.5	3.5	3.9
						33.0		6.20			97.2		2.52			3.5		
			Middle	4.0	16.3	32.7	32.7	6.11	6.08		95.2	94.7	2.36	2.33		4.0	4.0	
						32.7		6.05			94.2		2.30			4.0		
			Bottom	7.0	16.4	32.8	32.9	6.32	6.28	6.28	99.0	98.6	2.56	2.53		4.3	4.3	
						32.9		6.24			98.2		2.50			4.3		
12/12/05	09:43 - 10:06	19/Cloudy	Surface	1.0	18.7	33.0	33.0	6.41	6.36	6.30	99.9	99.5	3.27	3.24	3.45	5.7	5.9	6.0
						33.0		6.31			99.0		3.20			6.0		
			Middle	3.7	18.6	33.1	33.1	6.27	6.24		97.8	97.4	3.39	3.35		6.0	6.0	
						33.1		6.20			97.0		3.30			6.0		
			Bottom	6.4	18.8	33.0	33.1	6.14	6.10	6.10	96.0	95.6	3.81	3.76		6.0	6.0	
						33.1		6.06			95.2		3.71			6.0		
14/12/05	10:58 - 11:08	13/Cloudy	Surface	1.0	20.4	32.8	32.8	6.60	6.62	6.59	100.3	100.5	3.52	3.53	3.67	6.0	6.0	5.7
						32.8		6.63			100.7		3.54			6.0		
			Middle	4.2	20.5	32.8	32.8	6.57	6.56		99.8	99.6	3.67	3.68		5.5	5.5	
						32.8		6.54			99.4		3.69			5.5		
			Bottom	7.4	20.6	33.0	33.0	6.49	6.51	6.51	98.6	98.9	3.80	3.81		5.5	5.5	
						33.0		6.53			99.1		3.81			5.5		
16/12/05	11:00 - 11:16	13/Cloudy	Surface	1.0	19.4	33.3	33.3	6.33	6.28	6.21	97.9	97.5	3.51	3.46	3.72	5.0	5.0	5.2
						33.3		6.23			97.0		3.41			5.0		
			Middle	3.9	19.5	33.1	33.1	6.17	6.14		95.4	94.9	3.79	3.75		5.5	5.5	
						33.1		6.10			94.4		3.70			5.5		
			Bottom	6.8	19.8	33.4	33.4	6.36	6.40	6.40	98.3	98.8	4.01	3.96		5.2	5.2	
						33.4		6.44			99.3		3.91			5.2		

Mid-Ebb Tide

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

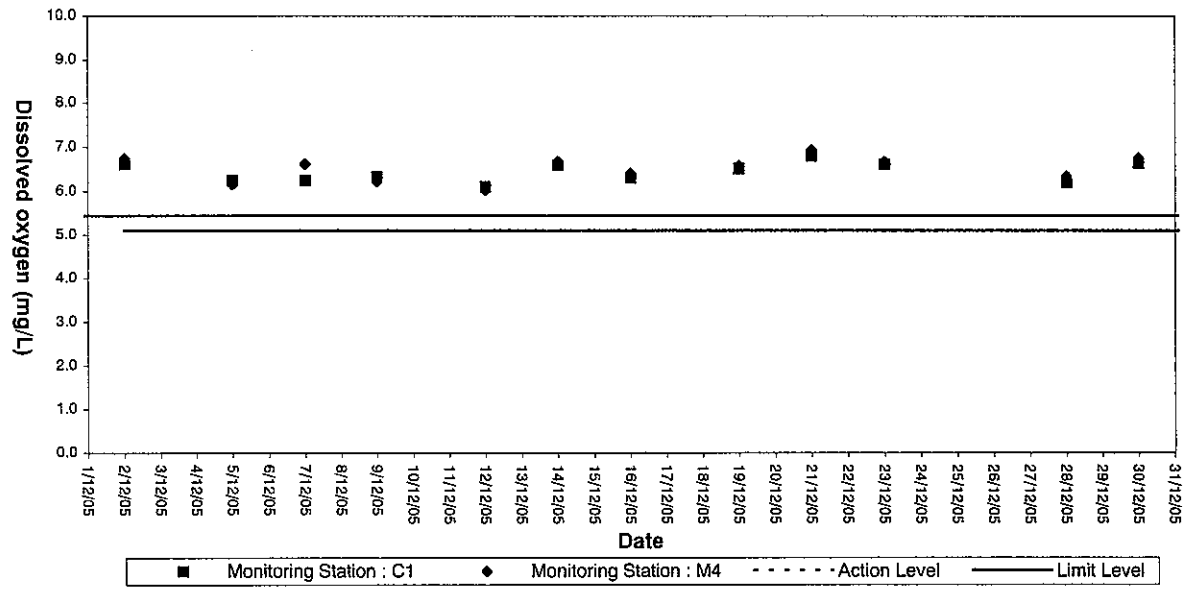
Monitoring Station : M4

Date	Sampling Duration	Ambient Temp (°C) / Weather Condition	Monitoring Depth (m)		Temp (°C)	Salinity (ppt)		Dissolved Oxygen (mg/L)			Dissolved Oxygen Saturation (%)		Turbidity (NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Depth-average	Value	Average	Value	Average	Depth-average	Value	Average	Depth-average
19/12/05	13:58 - 14:08	12/sunny	Surface	1.0	20.5	32.8	32.8	6.69	6.71	6.52	99.0	99.3	2.94	2.95	2.89	3.8	3.9	3.5
						32.8		6.73			99.6		2.96			4.0		
			Middle	4.2	20.1	32.9	32.9	6.35	6.33		93.9	93.6	2.81	2.82		3.5	3.5	
						32.8		6.31			93.3		2.82			3.5		
			Bottom	7.4	20.0	33.0	33.0	6.29	6.31	6.31	93.0	93.3	2.90	2.91		3.2	3.2	
						33.0		6.32			93.5		2.92			3.2		
21/12/05	15:42 - 15:59	15/Sunny	Surface	1.0	17.7	33.7	33.7	6.97	6.94	6.81	88.8	88.4	3.12	3.07	4.08	3.0	3.0	3.6
						33.7		6.90			88.0		3.01			3.0		
			Middle	4.7	17.7	33.4	33.4	6.65	6.68		85.1	85.6	3.45	3.42		3.2	3.2	
						33.4		6.71			86.0		3.39			3.2		
			Bottom	8.4	17.9	33.6	33.6	6.70	6.73	6.73	85.0	85.5	5.80	5.75		4.5	4.5	
						33.6		6.76			85.9		5.70			4.5		
23/12/05	17:28 - 17:38	12/sunny	Surface	1.0	19.9	33.8	33.8	6.69	6.68	6.48	99.6	99.4	2.89	2.88	2.75	3.5	3.5	3.6
						33.7		6.66			99.2		2.87			3.5		
			Middle	4.3	19.6	34.1	34.1	6.29	6.28		93.7	93.5	2.74	2.75		4.0	3.9	
						34.1		6.26			93.2		2.75			3.8		
			Bottom	7.6	19.6	34.2	34.2	6.43	6.42	6.42	95.1	94.9	2.62	2.62		3.5	3.5	
						34.2		6.40			94.7		2.61			3.5		
28/12/05	09:46 - 10:00	15/Cloudy	Surface	1.0	17.2	33.7	33.8	6.32	6.27	6.31	89.3	88.8	2.59	2.65	2.61	3.5	3.5	3.5
						33.8		6.22			88.3		2.70			3.5		
			Middle	4.3	17.1	33.6	33.6	6.40	6.35		90.4	89.9	2.79	2.75		3.5	3.4	
						33.6		6.30			89.4		2.70			3.2		
			Bottom	7.6	17.3	33.6	33.6	6.11	6.16	6.16	86.2	86.7	2.47	2.44		3.5	3.5	
						33.6		6.21			87.2		2.40			3.5		
30/12/05	11:28 - 11:38	17/Cloudy	Surface	1.0	18.4	33.0	33.0	6.97	6.96	6.74	103.1	102.9	2.93	2.94	2.79	5.0	5.0	4.6
						32.9		6.94			102.7		2.95			5.0		
			Middle	4.1	17.9	33.5	33.5	6.53	6.52		96.6	96.4	2.67	2.67		4.5	4.5	
						33.4		6.50			96.1		2.66			4.5		
			Bottom	7.2	17.9	33.6	33.6	6.39	6.38	6.38	93.9	93.7	2.75	2.76		4.3	4.3	
						33.6		6.36			93.4		2.77			4.2		

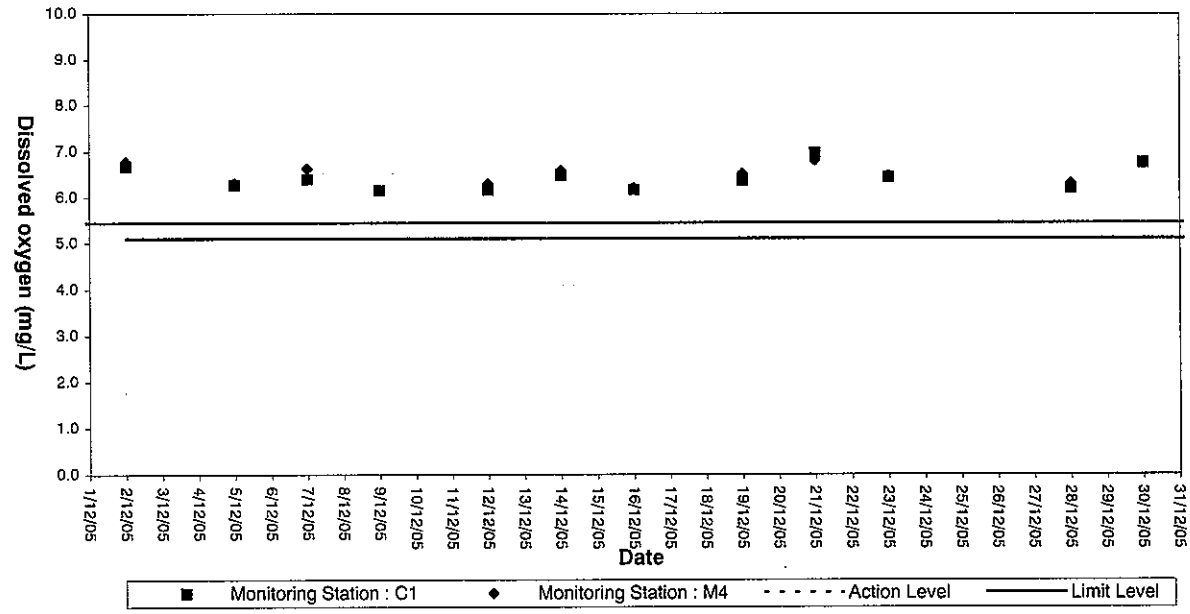
Appendix D3

Graphical Plots of Impact Marine Water Quality Monitoring Data

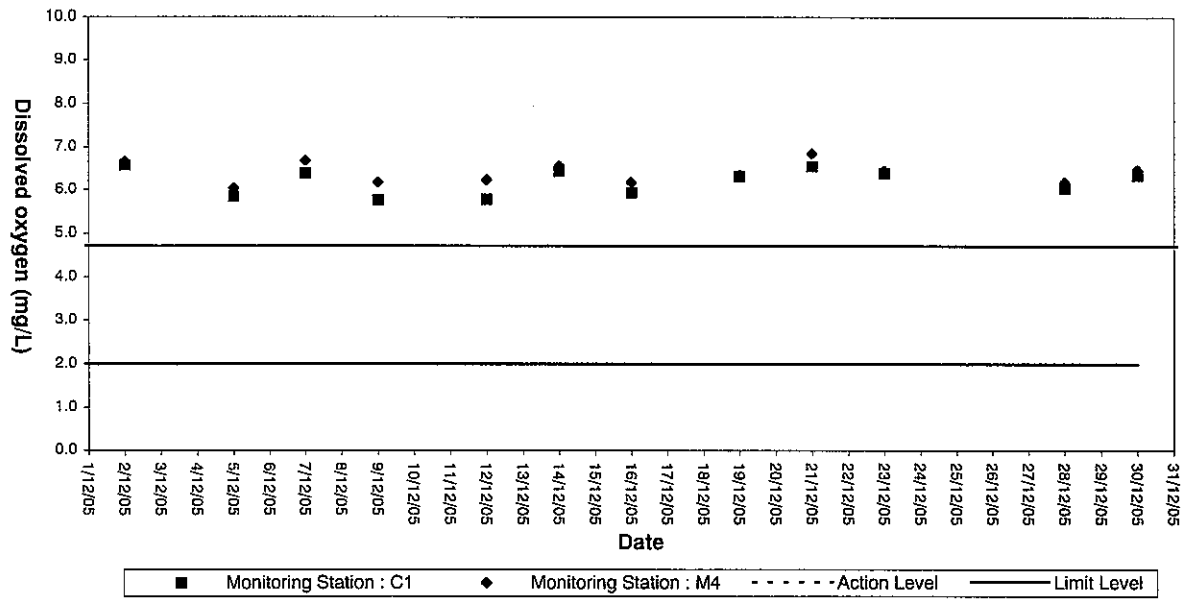
Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide



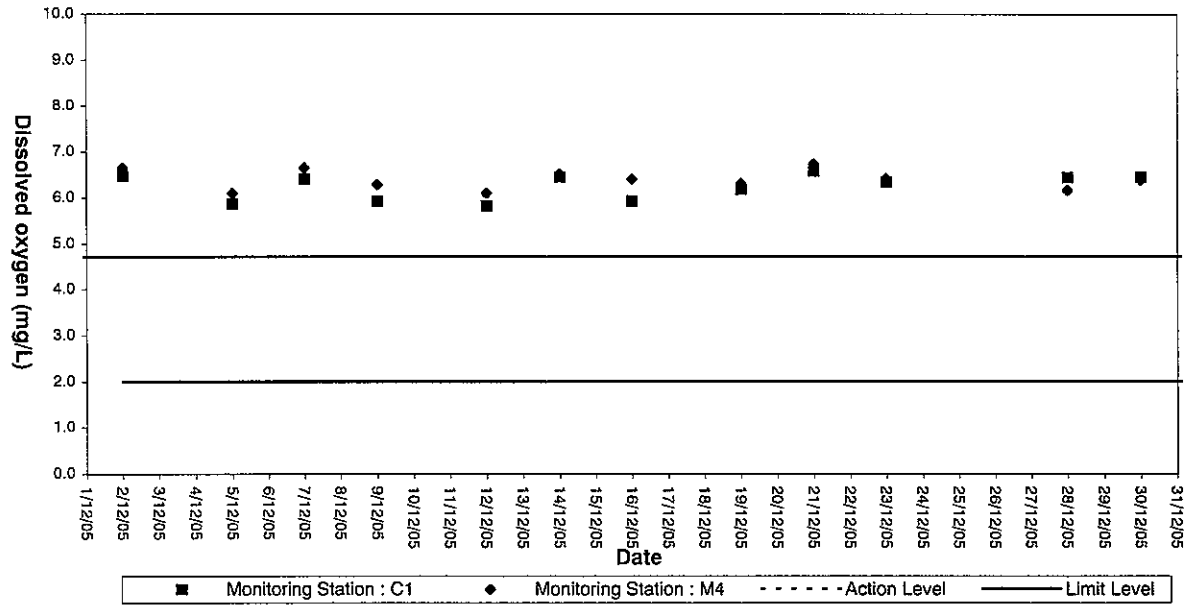
Dissolved Oxygen (Surfact & Middle) at Mid-Ebb Tide



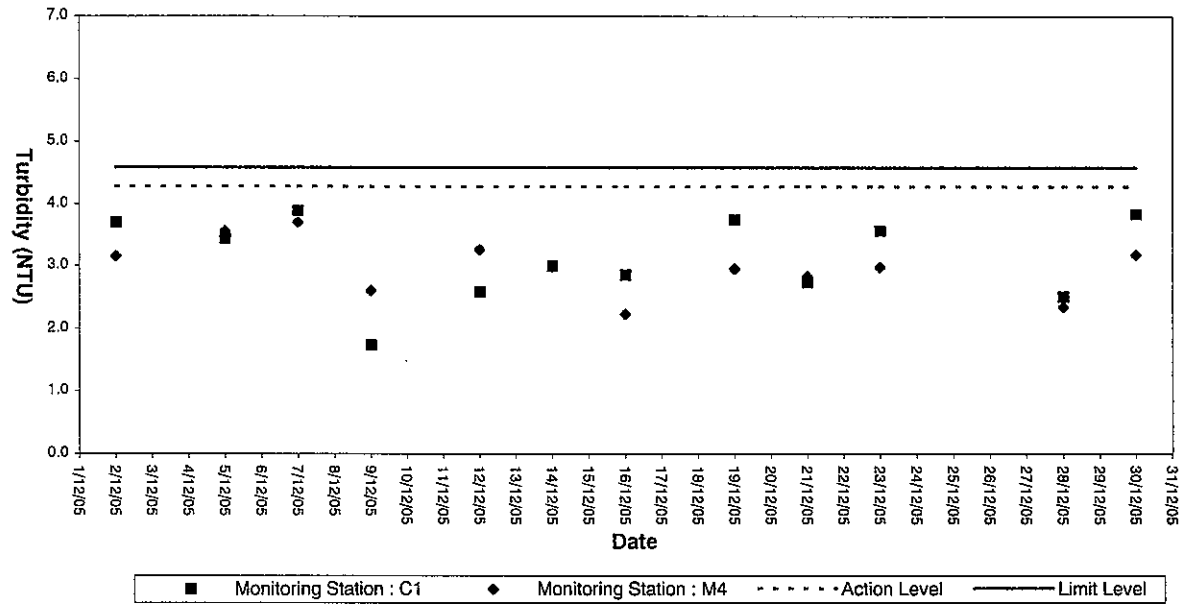
Dissolved Oxygen (Bottom) at Mid-Flood Tide



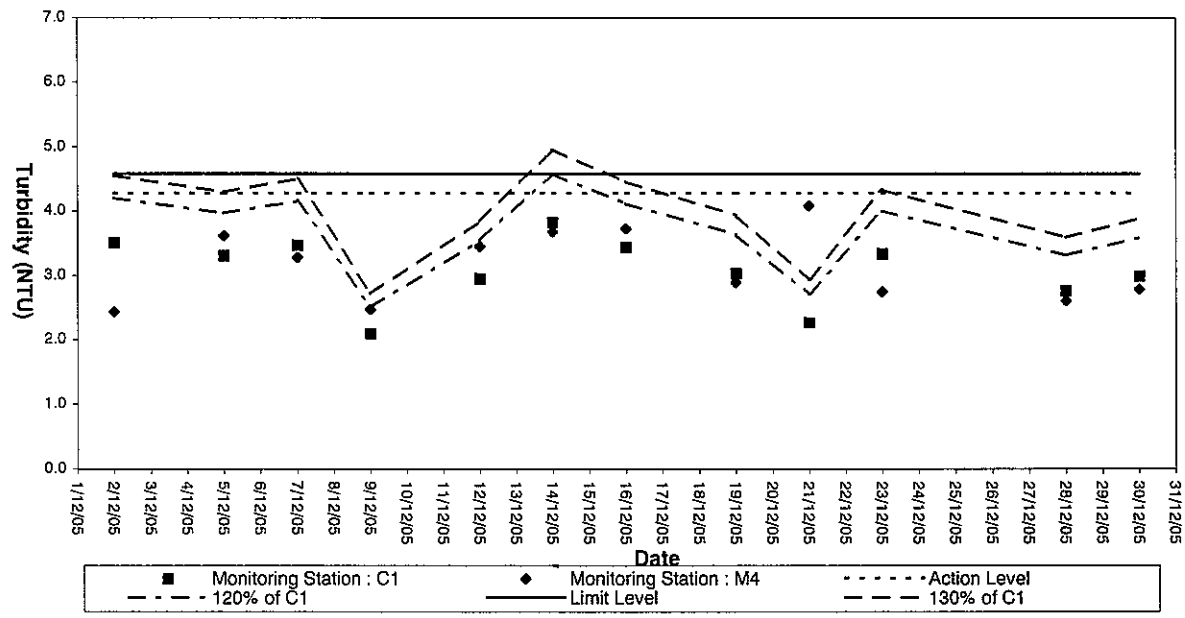
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



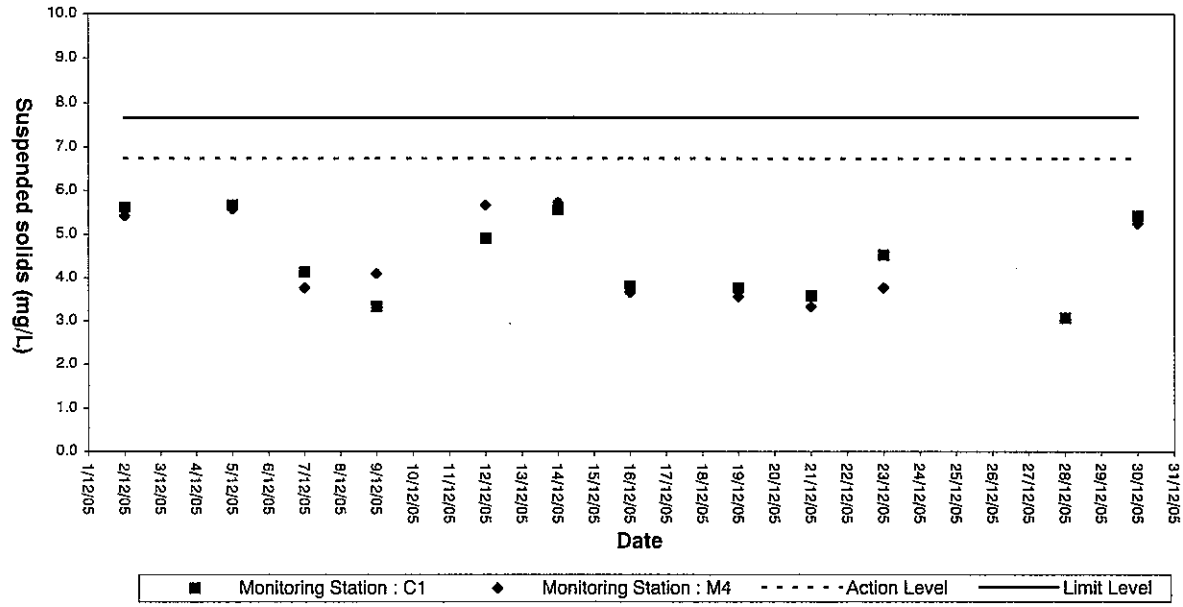
Turbidity (Depth-average) at Mid-Flood Tide



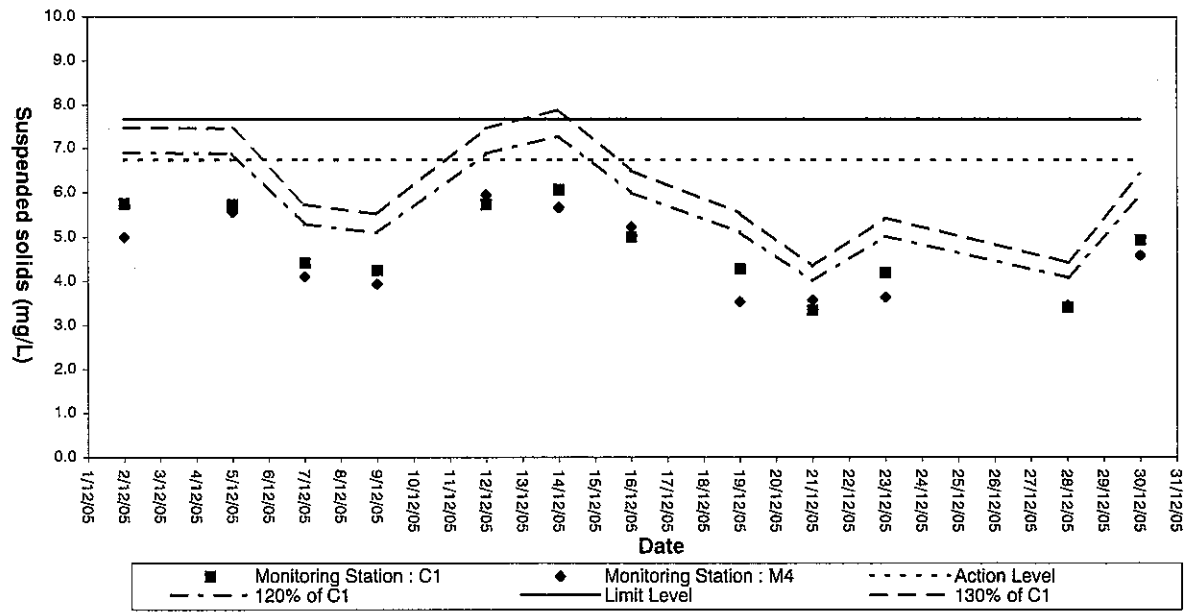
Turbidity(Depth-average) at Mid-Ebb Tide



Suspended solids (Depth-average) at Mid-Flood Tide



Suspended Solids (Depth-average) at Mid-Ebb Tide



Appendix E

Weather Condition

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/01/05	12:00 AM	20.3	20.4	20.2	1.3	3.6	E	30
12/01/05	12:30 AM	20.3	20.3	20.1	1.1	1.8	E	30
12/01/05	1:00 AM	20.2	20.6	20.1	1.9	2.4	E	30
12/01/05	1:30 AM	20.2	20.4	20.2	2.2	2.5	E	30
12/01/05	2:00 AM	20.1	20.4	20.0	3.4	4.7	NE	30
12/01/05	2:30 AM	20.0	20.2	19.9	3.9	5.2	N	30
12/01/05	3:00 AM	19.8	19.8	19.7	2.8	2.9	NE	30
12/01/05	3:30 AM	19.7	19.8	19.5	3.3	4.7	NE	30
12/01/05	4:00 AM	19.5	19.7	19.3	2.8	3.0	NE	30
12/01/05	4:30 AM	18.8	18.9	18.7	2.2	4.2	NE	30
12/01/05	5:00 AM	18.8	19.1	18.5	2.7	4.9	N	30
12/01/05	5:30 AM	18.7	18.8	18.5	2.5	3.7	NE	30
12/01/05	6:00 AM	18.7	18.8	18.5	1.8	2.8	N	30
12/01/05	6:30 AM	18.7	18.8	18.5	1.4	1.7	N	30
12/01/05	7:00 AM	18.8	19.1	18.6	3.2	5.3	NE	30
12/01/05	7:30 AM	18.8	18.9	18.7	2.8	4.3	NE	30
12/01/05	8:00 AM	19.2	19.4	19.1	1.3	2.8	NE	30
12/01/05	8:30 AM	20.0	20.3	19.9	1.7	3.4	NE	30
12/01/05	9:00 AM	20.6	20.9	20.4	3.1	4.3	E	30
12/01/05	9:30 AM	21.0	21.4	20.9	2.3	4.1	NE	30
12/01/05	10:00 AM	21.5	21.7	21.4	2.8	4.8	E	30
12/01/05	10:30 AM	22.4	22.5	22.2	2.4	3.1	E	30
12/01/05	11:00 AM	22.5	22.7	22.4	3.3	4.3	E	30
12/01/05	11:30 AM	22.5	22.6	22.3	3.4	4.8	NE	30
12/01/05	12:00 PM	22.8	23.0	22.6	3.6	5.2	E	30
12/01/05	12:30 PM	22.5	22.9	22.5	2.2	3.1	NE	30
12/01/05	1:00 PM	22.8	22.9	22.6	2.9	3.4	NE	30
12/01/05	1:30 PM	23.3	23.3	23.2	3.0	5.1	NE	30
12/01/05	2:00 PM	22.9	23.0	22.7	3.0	4.4	NE	30
12/01/05	2:30 PM	22.4	22.7	22.2	3.1	5.2	NE	30
12/01/05	3:00 PM	22.3	22.5	22.1	1.9	3.5	NE	30
12/01/05	3:30 PM	21.8	22.0	21.6	2.5	4.0	NE	30
12/01/05	4:00 PM	21.5	21.8	21.2	2.8	3.4	NE	30
12/01/05	4:30 PM	21.3	21.3	21.2	1.7	2.2	E	30
12/01/05	5:00 PM	21.1	21.5	21.1	3.1	4.2	NE	30
12/01/05	5:30 PM	21.0	21.3	21.0	1.4	1.8	NE	30
12/01/05	6:00 PM	20.5	20.7	20.3	1.4	2.9	N	30
12/01/05	6:30 PM	20.3	20.6	20.2	1.1	3.1	NE	30
12/01/05	7:00 PM	20.1	20.1	20.0	2.4	3.3	NE	30
12/01/05	7:30 PM	20.1	20.1	19.9	2.3	4.2	NE	30
12/01/05	8:00 PM	20.1	20.3	20.0	1.5	3.4	NEE	30
12/01/05	8:30 PM	20.2	20.4	20.0	1.7	2.5	N	30
12/01/05	9:00 PM	20.3	20.4	20.0	1.7	3.0	N	30
12/01/05	9:30 PM	20.3	20.5	20.0	1.8	2.2	NEN	30
12/01/05	10:00 PM	20.3	20.5	20.2	1.9	3.2	NEN	30
12/01/05	10:30 PM	20.5	20.6	20.4	3.1	4.6	NE	30
12/01/05	11:00 PM	20.5	20.8	20.4	2.8	4.7	N	30
12/01/05	11:30 PM	20.7	20.9	20.6	2.8	4.2	NE	30
12/02/05	12:00 AM	20.7	21.1	20.5	2.6	4.7	NE	30
12/02/05	12:30 AM	20.7	21.0	20.5	2.6	4.1	NE	30
12/02/05	1:00 AM	20.5	20.6	20.2	2.8	3.0	N	30
12/02/05	1:30 AM	20.5	20.7	20.3	2.1	3.7	NE	30
12/02/05	2:00 AM	20.3	20.4	20.1	2.4	2.6	NE	30
12/02/05	2:30 AM	20.2	20.2	20.1	2.4	2.7	N	30
12/02/05	3:00 AM	20.1	20.5	19.9	2.9	3.6	N	30
12/02/05	3:30 AM	20.1	20.1	19.9	1.7	2.0	N	30
12/02/05	4:00 AM	19.7	19.8	19.4	0.8	1.8	NW	30
12/02/05	4:30 AM	19.0	19.4	18.8	0.1	1.4	N	30
12/02/05	5:00 AM	19.0	19.1	18.7	0.1	0.1	N	30
12/02/05	5:30 AM	19.0	19.3	18.7	0.8	1.9	N	30
12/02/05	6:00 AM	18.8	19.2	18.6	0.1	1.6	NW	30
12/02/05	6:30 AM	18.4	18.8	18.2	0.3	1.1	NW	30
12/02/05	7:00 AM	18.4	18.8	18.3	1.3	3.5	NW	30
12/02/05	7:30 AM	19.0	19.2	18.9	0.3	2.5	NW	30
12/02/05	8:00 AM	20.0	20.1	20.0	1.0	3.0	N	30
12/02/05	8:30 AM	21.0	21.1	20.8	1.4	1.6	N	30
12/02/05	9:00 AM	21.3	21.4	21.2	1.7	3.7	N	30
12/02/05	9:30 AM	2.2	2.3	2.0	2.0	2.6	NEE	30
12/02/05	10:00 AM	23.0	23.1	22.8	2.8	3.3	NEE	30
12/02/05	10:30 AM	23.3	23.7	23.1	2.5	3.5	NE	30
12/02/05	11:00 AM	23.7	23.9	23.6	1.9	2.2	E	30
12/02/05	11:30 AM	24.4	24.7	24.2	2.4	3.4	E	30
12/02/05	12:00 PM	24.8	25.2	24.7	2.6	4.9	E	30
12/02/05	12:30 PM	24.4	24.6	24.4	2.8	4.8	NE	30
12/02/05	1:00 PM	25.2	25.4	24.9	2.1	4.2	E	30
12/02/05	1:30 PM	24.5	24.8	24.4	2.5	2.6	NEE	30
12/02/05	2:00 PM	24.3	24.5	24.3	2.5	3.6	NEE	30
12/02/05	2:30 PM	24.5	24.6	24.4	2.1	3.8	NE	30
12/02/05	3:00 PM	24.0	24.0	23.9	1.9	2.6	NEN	30
12/02/05	3:30 PM	23.4	23.6	23.4	2.2	2.6	N	30
12/02/05	4:00 PM	23.0	23.3	22.8	1.4	2.7	N	30
12/02/05	4:30 PM	22.2	22.3	22.2	3.1	4.0	N	30
12/02/05	5:00 PM	22.0	22.1	21.7	1.8	2.3	NE	30
12/02/05	5:30 PM	21.3	21.6	21.2	2.1	3.7	NE	30
12/02/05	6:00 PM	21.0	21.0	20.8	1.4	2.7	NE	30
12/02/05	6:30 PM	20.5	20.7	20.4	0.1	1.9	N	30
12/02/05	7:00 PM	20.2	20.6	19.9	0.1	1.1	N	30
12/02/05	7:30 PM	19.5	19.8	19.2	0.1	0.8	N	30
12/02/05	8:00 PM	20.0	20.1	19.9	0.7	2.0	N	30
12/02/05	8:30 PM	19.8	19.8	19.7	0.6	1.1	NW	30
12/02/05	9:00 PM	19.6	19.8	19.5	0.6	2.6	NE	30
12/02/05	9:30 PM	19.8	20.0	19.7	1.3	2.3	NE	30
12/02/05	10:00 PM	20.3	20.5	20.3	2.5	3.8	NE	30
12/02/05	10:30 PM	20.5	20.7	20.4	2.8	3.6	NE	30
12/02/05	11:00 PM	21.0	21.1	20.9	1.3	2.9	E	30
12/02/05	11:30 PM	21.0	21.0	21.0	2.1	3.8	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/03/05	12:00 AM	21.0	21.1	20.9	1.5	2.8	NE	30
12/03/05	12:30 AM	21.0	21.2	21.0	1.8	2.0	NE	30
12/03/05	1:00 AM	20.8	20.8	20.7	2.2	3.6	E	30
12/03/05	1:30 AM	21.0	21.2	20.8	2.2	3.4	NE	30
12/03/05	2:00 AM	21.0	21.2	20.9	2.4	4.7	NE	30
12/03/05	2:30 AM	21.0	21.3	21.0	2.8	4.0	E	30
12/03/05	3:00 AM	20.8	21.1	20.5	2.8	4.5	E	30
12/03/05	3:30 AM	20.6	20.8	20.4	2.9	4.8	E	30
12/03/05	4:00 AM	20.5	20.6	20.4	3.1	4.9	E	30
12/03/05	4:30 AM	20.5	20.8	20.2	2.5	4.4	NE	30
12/03/05	5:00 AM	20.5	20.5	20.3	2.4	3.1	E	30
12/03/05	5:30 AM	20.3	20.4	20.0	2.7	4.9	NE	30
12/03/05	6:00 AM	20.3	20.4	20.2	2.8	4.2	NE	30
12/03/05	6:30 AM	20.3	20.4	20.2	2.2	2.7	NE	30
12/03/05	7:00 AM	20.3	20.6	20.2	2.8	3.6	N	30
12/03/05	7:30 AM	20.5	20.5	20.3	2.6	2.8	NE	30
12/03/05	8:00 AM	20.8	20.9	20.6	1.8	4.0	N	30
12/03/05	8:30 AM	21.0	21.3	20.8	1.3	1.5	NE	30
12/03/05	9:00 AM	21.0	21.3	20.7	3.2	5.3	NEE	30
12/03/05	9:30 AM	21.0	21.1	20.8	2.8	3.2	NE	30
12/03/05	10:00 AM	21.6	21.9	21.4	2.2	3.3	N	30
12/03/05	10:30 AM	22.4	22.7	22.2	1.6	3.3	N	30
12/03/05	11:00 AM	23.0	23.3	22.8	1.5	2.8	N	30
12/03/05	11:30 AM	23.5	23.6	23.4	1.9	2.2	E	30
12/03/05	12:00 PM	24.0	24.1	24.0	2.2	3.1	E	30
12/03/05	12:30 PM	24.5	24.8	24.4	1.7	2.8	E	30
12/03/05	1:00 PM	25.0	25.4	24.8	2.4	2.9	E	30
12/03/05	1:30 PM	25.2	25.3	25.2	2.6	3.8	NE	30
12/03/05	2:00 PM	25.2	25.4	25.0	2.2	3.7	NE	30
12/03/05	2:30 PM	25.0	25.0	24.9	1.5	2.8	NE	30
12/03/05	3:00 PM	24.0	24.2	23.9	2.4	2.9	N	30
12/03/05	3:30 PM	23.5	23.7	23.2	1.0	1.5	N	30
12/03/05	4:00 PM	23.3	23.4	23.1	1.5	1.8	N	30
12/03/05	4:30 PM	23.1	23.5	22.9	1.3	2.5	N	30
12/03/05	5:00 PM	22.8	23.0	22.7	1.9	2.5	NE	30
12/03/05	5:30 PM	22.5	22.7	22.3	2.5	2.8	NE	30
12/03/05	6:00 PM	22.3	22.3	22.3	2.2	2.3	N	30
12/03/05	6:30 PM	22.0	22.0	21.8	1.8	1.9	N	30
12/03/05	7:00 PM	19.5	19.7	19.3	2.1	3.6	NE	30
12/03/05	7:30 PM	19.1	19.4	18.9	1.8	2.5	N	30
12/03/05	8:00 PM	18.7	19.0	18.6	2.3	4.0	N	30
12/03/05	8:30 PM	18.5	18.7	18.5	1.9	2.8	N	30
12/03/05	9:00 PM	18.3	18.5	18.1	2.2	4.0	N	30
12/03/05	9:30 PM	18.0	18.2	17.9	1.7	2.9	N	30
12/03/05	10:00 PM	17.6	18.0	17.5	1.2	2.7	N	30
12/03/05	10:30 PM	17.4	17.6	17.2	1.9	4.0	NE	30
12/03/05	11:00 PM	17.2	17.4	17.0	2.5	3.6	N	30
12/03/05	11:30 PM	17.0	17.4	16.8	2.2	2.8	NW	30
12/04/05	12:00 AM	16.7	17.0	16.6	1.9	2.5	N	30
12/04/05	12:30 AM	16.8	16.9	16.6	1.4	2.4	N	30
12/04/05	1:00 AM	16.5	16.8	16.5	2.2	2.6	N	30
12/04/05	1:30 AM	16.4	16.5	16.3	2.8	4.7	N	30
12/04/05	2:00 AM	16.2	16.5	16.1	3.0	3.6	NW	30
12/04/05	2:30 AM	16.1	16.3	16.0	2.0	3.6	NW	30
12/04/05	3:00 AM	15.9	16.2	15.9	1.2	3.4	N	30
12/04/05	3:30 AM	15.8	16.0	15.7	2.1	3.7	N	30
12/04/05	4:00 AM	15.9	16.3	15.6	1.7	3.8	N	30
12/04/05	4:30 AM	15.8	16.2	15.6	2.4	3.6	N	30
12/04/05	5:00 AM	15.8	16.2	15.8	2.1	4.1	N	30
12/04/05	5:30 AM	15.6	15.7	15.5	1.8	2.8	N	30
12/04/05	6:00 AM	16.3	16.3	16.0	1.4	1.5	NE	30
12/04/05	6:30 AM	16.8	16.9	16.5	1.2	3.0	NE	30
12/04/05	7:00 AM	17.2	17.4	17.0	1.9	2.4	NE	30
12/04/05	7:30 AM	17.7	18.1	17.4	2.4	3.2	N	30
12/04/05	8:00 AM	18.2	18.3	18.0	1.4	3.3	N	30
12/04/05	8:30 AM	18.5	18.9	18.5	1.9	4.0	N	30
12/04/05	9:00 AM	19.0	19.3	18.7	2.1	2.6	M	30
12/04/05	9:30 AM	19.5	19.7	19.3	1.8	3.1	N	30
12/04/05	10:00 AM	20.0	20.1	19.8	1.1	2.7	N	30
12/04/05	10:30 AM	20.5	20.7	20.3	1.8	3.6	N	30
12/04/05	11:00 AM	20.8	20.8	20.6	1.0	2.2	NW	30
12/04/05	11:30 AM	20.9	21.0	20.8	2.3	2.3	NW	30
12/04/05	12:00 PM	21.0	21.2	20.9	1.8	2.5	N	30
12/04/05	12:30 PM	21.2	21.2	21.1	1.5	3.7	N	30
12/04/05	1:00 PM	21.1	21.4	20.8	2.1	4.0	N	30
12/04/05	1:30 PM	20.8	20.8	20.7	1.7	1.9	N	30
12/04/05	2:00 PM	20.5	20.8	20.3	1.6	3.0	NE	30
12/04/05	2:30 PM	20.1	20.2	19.9	2.0	2.8	NW	30
12/04/05	3:00 PM	19.8	20.2	19.6	1.2	2.3	N	30
12/04/05	3:30 PM	19.7	20.0	19.7	1.5	2.5	NE	30
12/04/05	4:00 PM	19.6	19.9	19.6	1.0	2.4	N	30
12/04/05	4:30 PM	19.4	19.4	19.4	3.1	4.4	NW	30
12/04/05	5:00 PM	19.0	19.1	19.0	1.7	3.6	NW	30
12/04/05	5:30 PM	18.5	18.7	18.3	1.7	3.1	NW	30
12/04/05	6:00 PM	18.3	18.6	18.1	1.3	1.7	NW	30
12/04/05	6:30 PM	17.8	17.8	17.6	2.2	3.9	NW	30
12/04/05	7:00 PM	17.6	17.7	17.3	1.3	3.1	N	30
12/04/05	7:30 PM	17.4	17.7	17.4	1.9	2.8	N	30
12/04/05	8:00 PM	17.0	17.4	16.8	1.3	3.1	N	30
12/04/05	8:30 PM	16.8	17.0	16.5	1.1	2.7	N	30
12/04/05	9:00 PM	16.8	17.1	16.6	1.7	2.2	NE	30
12/04/05	9:30 PM	16.5	16.5	16.2	1.2	2.3	NE	30
12/04/05	10:00 PM	16.2	16.2	16.1	0.8	1.5	N	30
12/04/05	10:30 PM	15.9	15.9	15.9	1.1	1.8	N	30
12/04/05	11:00 PM	15.9	16.2	15.7	2.5	4.1	N	30
12/04/05	11:30 PM	15.8	16.1	15.5	1.7	2.9	NE	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/05/05	12:00 AM	15.6	15.8	15.3	1.3	3.4	N	30
12/05/05	12:30 AM	15.5	15.8	15.4	1.8	3.1	N	30
12/05/05	1:00 AM	15.2	15.6	15.2	2.8	4.5	NEE	30
12/05/05	1:30 AM	15.0	15.3	14.8	2.8	4.6	NE	30
12/05/05	2:00 AM	15.0	15.1	14.8	1.7	3.2	N	30
12/05/05	2:30 AM	15.0	15.1	14.7	3.5	4.7	NE	30
12/05/05	3:00 AM	15.0	15.3	14.8	4.5	6.5	NE	30
12/05/05	3:30 AM	15.0	15.4	14.8	2.8	4.5	NE	30
12/05/05	4:00 AM	14.9	15.0	14.8	2.5	4.0	N	30
12/05/05	4:30 AM	14.8	15.1	14.6	2.2	3.5	NE	30
12/05/05	5:00 AM	14.5	14.6	14.4	2.8	5.1	N	30
12/05/05	5:30 AM	14.5	14.8	14.5	2.9	3.0	N	30
12/05/05	6:00 AM	14.7	15.1	14.5	4.4	5.9	NE	30
12/05/05	6:30 AM	14.7	14.8	14.6	3.5	5.3	NE	30
12/05/05	7:00 AM	14.3	14.5	14.0	3.3	4.2	NE	30
12/05/05	7:30 AM	14.2	14.3	14.1	2.4	4.0	N	30
12/05/05	8:00 AM	14.2	14.3	14.1	2.4	3.9	N	30
12/05/05	8:30 AM	14.2	14.4	13.9	2.3	3.5	NE	30
12/05/05	9:00 AM	14.5	14.7	14.4	2.2	4.3	NE	30
12/05/05	9:30 AM	14.8	15.1	14.7	2.8	3.9	N	30
12/05/05	10:00 AM	14.8	14.9	14.7	2.9	3.6	N	30
12/05/05	10:30 AM	15.5	15.8	15.3	2.5	3.1	N	30
12/05/05	11:00 AM	15.8	16.1	15.7	3.3	4.6	NE	30
12/05/05	11:30 AM	15.8	16.1	15.5	2.5	4.1	NEE	30
12/05/05	12:00 PM	15.8	16.2	15.6	2.8	3.2	NE	30
12/05/05	12:30 PM	16.0	16.2	15.7	3.1	5.0	NE	30
12/05/05	1:00 PM	15.7	16.0	15.5	2.9	3.1	NE	30
12/05/05	1:30 PM	15.4	15.4	15.3	1.9	2.4	NE	30
12/05/05	2:00 PM	15.2	15.5	15.1	2.8	3.0	NE	30
12/05/05	2:30 PM	15.2	15.5	15.0	3.6	3.7	NEE	30
12/05/05	3:00 PM	15.3	15.5	15.0	3.6	5.2	NE	30
12/05/05	3:30 PM	15.3	15.6	15.0	2.9	4.4	NE	30
12/05/05	4:00 PM	15.0	15.3	15.0	2.9	3.8	N	30
12/05/05	4:30 PM	14.8	15.0	14.6	2.4	3.2	N	30
12/05/05	5:00 PM	14.4	14.7	14.1	2.9	5.2	NEN	30
12/05/05	5:30 PM	14.0	14.0	14.0	3.5	4.1	NEE	30
12/05/05	6:00 PM	13.8	14.1	13.6	3.6	4.0	NE	30
12/05/05	6:30 PM	13.5	13.7	13.4	3.6	5.0	N	30
12/05/05	7:00 PM	13.3	13.4	13.2	2.4	4.5	N	30
12/05/05	7:30 PM	13.0	13.3	12.7	3.2	3.3	NE	30
12/05/05	8:00 PM	12.8	13.2	12.7	2.8	3.3	NE	30
12/05/05	8:30 PM	12.4	12.6	12.2	2.4	2.8	NE	30
12/05/05	9:00 PM	12.3	12.5	12.0	2.1	2.7	N	30
12/05/05	9:30 PM	12.0	12.3	11.9	2.8	4.4	N	30
12/05/05	10:00 PM	11.9	11.9	11.8	2.4	3.6	NE	30
12/05/05	10:30 PM	11.8	12.0	11.5	2.9	4.7	NE	30
12/05/05	11:00 PM	11.7	11.7	11.7	1.5	2.4	NE	30
12/05/05	11:30 PM	11.4	11.5	11.2	1.9	2.5	NE	30
12/06/05	12:00 AM	11.5	11.7	11.4	1.9	3.4	N	30
12/06/05	12:30 AM	11.2	11.4	11.0	2.4	4.7	NE	30
12/06/05	1:00 AM	11.0	11.3	10.7	2.2	3.9	NEE	30
12/06/05	1:30 AM	10.9	11.0	10.7	2.8	3.5	NE	30
12/06/05	2:00 AM	10.9	11.2	10.8	3.1	3.2	NE	30
12/06/05	2:30 AM	10.8	11.1	10.8	3.2	4.0	NE	30
12/06/05	3:00 AM	10.7	10.7	10.6	3.2	4.2	NE	30
12/06/05	3:30 AM	10.4	10.5	10.1	3.9	5.2	NEE	30
12/06/05	4:00 AM	10.4	10.8	10.2	2.8	4.2	NE	30
12/06/05	4:30 AM	10.2	10.4	9.9	2.6	4.3	NE	30
12/06/05	5:00 AM	10.0	10.1	9.8	3.9	4.0	NE	30
12/06/05	5:30 AM	10.0	10.3	9.7	2.7	4.7	NE	30
12/06/05	6:00 AM	10.0	10.1	9.8	2.6	2.7	NE	30
12/06/05	6:30 AM	9.8	9.9	9.5	3.1	4.6	NE	30
12/06/05	7:00 AM	10.1	10.3	9.9	3.3	3.9	NE	30
12/06/05	7:30 AM	10.2	10.6	10.1	4.2	5.5	NE	30
12/06/05	8:00 AM	10.0	10.2	9.9	4.3	6.0	NE	30
12/06/05	8:30 AM	10.1	10.3	9.9	4.5	4.8	NE	30
12/06/05	9:00 AM	9.8	10.0	9.8	2.2	2.9	N	30
12/06/05	9:30 AM	10.3	10.5	10.0	2.3	3.6	NE	30
12/06/05	10:00 AM	10.8	10.8	10.7	2.7	3.9	NE	30
12/06/05	10:30 AM	11.2	11.3	10.9	3.9	4.9	NE	30
12/06/05	11:00 AM	11.8	11.9	11.6	2.7	3.7	NE	30
12/06/05	11:30 AM	12.0	12.1	11.7	1.4	3.2	N	30
12/06/05	12:00 PM	12.3	12.3	12.2	2.9	3.8	NEE	30
12/06/05	12:30 PM	12.7	13.1	12.7	3.1	5.3	NE	30
12/06/05	1:00 PM	12.8	13.1	12.6	3.9	4.9	NEE	30
12/06/05	1:30 PM	12.8	12.9	12.6	3.7	5.4	NEE	30
12/06/05	2:00 PM	13.0	13.1	13.0	3.6	5.2	NEE	30
12/06/05	2:30 PM	12.8	12.8	12.8	3.8	3.8	NE	30
12/06/05	3:00 PM	12.0	12.2	12.0	3.0	4.0	N	30
12/06/05	3:30 PM	11.8	12.0	11.7	2.0	3.1	NEE	30
12/06/05	4:00 PM	11.5	11.6	11.5	2.5	2.6	NW	30
12/06/05	4:30 PM	11.0	11.2	10.8	1.7	2.7	NW	30
12/06/05	5:00 PM	11.8	11.8	11.6	2.1	2.9	N	30
12/06/05	5:30 PM	11.6	11.9	11.5	2.0	2.3	N	30
12/06/05	6:00 PM	11.5	11.7	11.4	1.7	2.8	N	30
12/06/05	6:30 PM	11.4	11.6	11.2	0.8	1.6	N	30
12/06/05	7:00 PM	11.5	11.6	11.3	1.2	2.7	NW	30
12/06/05	7:30 PM	11.5	11.8	11.4	1.9	2.4	NW	30
12/06/05	8:00 PM	11.5	11.8	11.3	1.0	2.2	N	30
12/06/05	8:30 PM	11.4	11.6	11.4	1.8	1.9	N	30
12/06/05	9:00 PM	11.5	11.6	11.2	2.0	2.6	N	30
12/06/05	9:30 PM	11.4	11.7	11.2	2.5	2.8	NNE	30
12/06/05	10:00 PM	11.4	11.8	11.1	2.0	3.6	NE	30
12/06/05	10:30 PM	11.3	11.5	11.1	2.2	3.2	NE	30
12/06/05	11:00 PM	11.3	11.4	11.1	1.8	3.3	N	30
12/06/05	11:30 PM	11.2	11.4	11.2	1.7	3.6	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/07/05	12:00 AM	11.1	11.3	10.9	1.2	2.1	N	30
12/07/05	12:30 AM	11.1	11.5	11.1	1.9	2.6	N	30
12/07/05	1:00 AM	11.1	11.2	11.0	2.5	4.1	N	30
12/07/05	1:30 AM	11.2	11.4	11.0	2.2	4.4	N	30
12/07/05	2:00 AM	11.1	11.2	11.0	1.9	3.8	NE	30
12/07/05	2:30 AM	11.1	11.3	10.9	1.1	2.2	NE	30
12/07/05	3:00 AM	11.2	11.6	11.2	1.8	2.9	NE	30
12/07/05	3:30 AM	11.1	11.4	10.9	2.2	3.1	NE	30
12/07/05	4:00 AM	11.1	11.3	11.1	2.9	3.6	N	30
12/07/05	4:30 AM	11.0	11.4	10.8	1.2	2.5	NE	30
12/07/05	5:00 AM	11.0	11.2	10.7	0.8	2.8	N	30
12/07/05	5:30 AM	10.9	11.1	10.6	1.5	3.5	E	30
12/07/05	6:00 AM	11.1	11.4	11.1	1.9	2.8	NE	30
12/07/05	6:30 AM	11.7	12.0	11.4	1.2	1.6	N	30
12/07/05	7:00 AM	12.5	12.7	12.4	2.0	3.5	N	30
12/07/05	7:30 AM	13.2	13.4	13.0	2.3	3.9	N	30
12/07/05	8:00 AM	13.9	14.1	13.9	2.2	3.1	N	30
12/07/05	8:30 AM	14.3	14.5	14.1	1.0	2.4	N	30
12/07/05	9:00 AM	14.9	15.1	14.8	1.0	2.0	N	30
12/07/05	9:30 AM	15.0	15.1	14.8	1.2	2.4	N	30
12/07/05	10:00 AM	15.4	15.4	15.3	1.9	3.8	NE	30
12/07/05	10:30 AM	15.6	15.8	15.5	1.2	1.4	N	30
12/07/05	11:00 AM	15.7	16.0	15.5	2.2	2.7	NW	30
12/07/05	11:30 AM	15.6	15.9	15.4	1.2	2.5	NW	30
12/07/05	12:00 PM	15.7	15.7	15.7	1.9	2.9	NW	30
12/07/05	12:30 PM	15.8	16.1	15.7	2.2	2.7	N	30
12/07/05	1:00 PM	15.8	16.2	15.5	2.4	4.5	NE	30
12/07/05	1:30 PM	16.0	16.3	16.0	3.5	4.9	NEE	30
12/07/05	2:00 PM	16.2	16.4	15.9	2.2	2.9	NE	30
12/07/05	2:30 PM	16.3	16.5	16.1	2.5	3.5	NEE	30
12/07/05	3:00 PM	16.2	16.3	16.2	1.3	2.0	N	30
12/07/05	3:30 PM	16.2	16.5	16.0	2.1	3.7	NE	30
12/07/05	4:00 PM	16.0	16.1	15.9	2.5	4.3	NEE	30
12/07/05	4:30 PM	15.5	15.7	15.5	1.8	2.9	NW	30
12/07/05	5:00 PM	15.7	16.1	15.4	1.3	1.5	NW	30
12/07/05	5:30 PM	15.3	15.6	15.1	1.4	1.9	NEE	30
12/07/05	6:00 PM	15.0	15.3	14.7	1.9	2.6	NE	30
12/07/05	6:30 PM	15.0	15.1	14.9	1.5	2.0	NE	30
12/07/05	7:00 PM	15.0	15.2	14.8	1.9	3.9	NE	30
12/07/05	7:30 PM	14.8	15.2	14.6	1.8	3.3	NW	30
12/07/05	8:00 PM	15.0	15.2	14.7	0.8	0.9	NW	30
12/07/05	8:30 PM	15.0	15.1	14.9	1.8	2.7	NW	30
12/07/05	9:00 PM	15.2	15.5	15.1	0.8	2.9	NW	30
12/07/05	9:30 PM	15.2	15.2	15.2	1.2	3.0	NW	30
12/07/05	10:00 PM	15.3	15.7	15.2	0.6	2.8	N	30
12/07/05	10:30 PM	15.2	15.4	15.2	1.1	2.6	NE	30
12/07/05	11:00 PM	15.2	15.5	15.0	0.6	2.1	NW	30
12/07/05	11:30 PM	15.2	15.4	15.1	0.8	1.6	NW	30
12/08/05	12:00 AM	15.5	15.7	15.4	1.0	2.5	NE	30
12/08/05	12:30 AM	15.3	15.5	15.2	1.9	2.8	NW	30
12/08/05	1:00 AM	15.5	15.8	15.3	1.7	3.4	NW	30
12/08/05	1:30 AM	15.5	15.7	15.3	1.0	1.6	NWN	30
12/08/05	2:00 AM	15.6	15.8	15.4	1.0	1.7	NW	30
12/08/05	2:30 AM	15.4	15.7	15.2	0.8	2.2	N	30
12/08/05	3:00 AM	15.3	15.7	15.1	1.5	2.9	N	30
12/08/05	3:30 AM	15.0	15.2	14.9	1.8	3.5	N	30
12/08/05	4:00 AM	15.1	15.4	15.1	1.7	3.1	N	30
12/08/05	4:30 AM	15.2	15.4	15.0	1.1	1.6	NE	30
12/08/05	5:00 AM	15.0	15.3	14.8	1.5	1.9	NEN	30
12/08/05	5:30 AM	15.0	15.2	14.9	1.8	3.9	NE	30
12/08/05	6:00 AM	14.8	15.1	14.6	2.1	3.0	NE	30
12/08/05	6:30 AM	14.6	14.8	14.4	0.4	1.0	N	30
12/08/05	7:00 AM	14.6	14.7	14.5	1.5	3.3	N	30
12/08/05	7:30 AM	14.7	14.8	14.4	0.8	2.6	NE	30
12/08/05	8:00 AM	15.0	15.2	14.7	2.2	3.8	NEE	30
12/08/05	8:30 AM	15.5	15.9	15.4	1.9	2.2	NEE	30
12/08/05	9:00 AM	16.0	16.3	16.0	1.7	2.2	N	30
12/08/05	9:30 AM	16.6	16.8	16.3	2.9	5.1	NE	30
12/08/05	10:00 AM	17.4	17.5	17.2	2.1	2.7	NE	30
12/08/05	10:30 AM	19.0	19.4	18.9	2.2	3.5	NEE	30
12/08/05	11:00 AM	19.5	19.7	19.4	2.8	3.6	NEE	30
12/08/05	11:30 AM	20.0	20.0	20.0	2.9	3.9	NEN	30
12/08/05	12:00 PM	20.5	20.9	20.2	3.2	3.7	NE	30
12/08/05	12:30 PM	20.2	20.4	20.0	2.3	2.9	E	30
12/08/05	1:00 PM	20.1	20.4	19.9	3.1	5.4	E	30
12/08/05	1:30 PM	20.3	20.5	20.2	2.5	3.0	E	30
12/08/05	2:00 PM	20.0	20.2	19.8	2.9	3.6	NE	30
12/08/05	2:30 PM	19.8	20.1	19.6	2.4	3.9	NE	30
12/08/05	3:00 PM	19.6	19.9	19.3	1.9	3.3	NE	30
12/08/05	3:30 PM	19.4	19.8	19.1	2.3	2.8	NE	30
12/08/05	4:00 PM	19.0	19.1	18.8	2.8	5.0	N	30
12/08/05	4:30 PM	18.7	18.7	18.7	2.7	4.9	NE	30
12/08/05	5:00 PM	18.4	18.8	18.2	2.0	3.9	E	30
12/08/05	5:30 PM	18.3	18.3	18.2	1.7	3.9	NE	30
12/08/05	6:00 PM	18.2	18.4	18.0	1.6	3.5	NE	30
12/08/05	6:30 PM	18.2	18.3	17.9	2.0	2.9	NE	30
12/08/05	7:00 PM	18.1	18.5	17.9	1.9	2.3	NE	30
12/08/05	7:30 PM	18.1	18.2	17.9	2.3	3.0	N	30
12/08/05	8:00 PM	18.1	18.3	18.0	2.7	3.1	N	30
12/08/05	8:30 PM	18.1	18.4	18.0	2.2	3.9	N	30
12/08/05	9:00 PM	18.0	18.3	17.7	1.9	3.8	N	30
12/08/05	9:30 PM	18.0	18.3	17.8	1.3	1.9	N	30
12/08/05	10:00 PM	18.0	18.1	17.7	1.9	2.0	N	30
12/08/05	10:30 PM	17.9	18.0	17.7	1.2	1.9	NE	30
12/08/05	11:00 PM	17.7	17.8	17.4	1.6	3.6	N	30
12/08/05	11:30 PM	17.5	17.5	17.3	1.9	2.0	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/09/05	12:00 AM	17.4	17.7	17.2	2.1	2.7	N	30
12/09/05	12:30 AM	17.4	17.6	17.2	2.3	2.4	NNE	30
12/09/05	1:00 AM	17.3	17.7	17.1	2.7	3.8	NE	30
12/09/05	1:30 AM	17.2	17.3	16.9	2.5	3.2	NE	30
12/09/05	2:00 AM	17.1	17.4	17.0	2.4	2.4	N	30
12/09/05	2:30 AM	17.0	17.1	16.8	1.5	3.5	NE	30
12/09/05	3:00 AM	17.0	17.1	16.9	1.9	3.3	N	30
12/09/05	3:30 AM	16.9	17.1	16.6	2.4	3.1	NE	30
12/09/05	4:00 AM	16.9	17.3	16.8	1.8	3.7	N	30
12/09/05	4:30 AM	16.8	17.1	16.8	2.2	2.2	N	30
12/09/05	5:00 AM	16.7	17.0	16.6	1.7	4.0	N	30
12/09/05	5:30 AM	16.7	17.1	16.6	1.2	1.5	N	30
12/09/05	6:00 AM	16.9	17.1	16.8	1.7	2.0	N	30
12/09/05	6:30 AM	17.2	17.2	17.0	2.1	2.2	NE	30
12/09/05	7:00 AM	17.7	18.1	17.5	2.3	3.4	NE	30
12/09/05	7:30 AM	18.3	18.5	18.2	2.1	3.5	NE	30
12/09/05	8:00 AM	18.9	19.0	18.7	1.9	3.6	NE	30
12/09/05	8:30 AM	19.3	19.6	19.3	2.4	4.1	N	30
12/09/05	9:00 AM	19.7	19.8	19.7	1.7	3.1	N	30
12/09/05	9:30 AM	19.9	20.0	19.6	1.2	2.1	NE	30
12/09/05	10:00 AM	20.1	20.3	19.8	1.4	2.9	NE	30
12/09/05	10:30 AM	20.3	20.4	20.1	1.9	3.5	E	30
12/09/05	11:00 AM	20.6	21.0	20.6	2.5	3.2	NE	30
12/09/05	11:30 AM	20.8	20.9	20.7	2.4	2.5	SE	30
12/09/05	12:00 PM	20.8	20.9	20.6	2.5	2.8	NE	30
12/09/05	12:30 PM	22.0	22.2	21.9	1.4	2.1	NE	30
12/09/05	1:00 PM	22.1	22.2	21.9	2.2	3.3	NEE	30
12/09/05	1:30 PM	21.8	21.9	21.5	3.0	3.2	NE	30
12/09/05	2:00 PM	22.1	22.5	21.9	2.1	3.6	NEE	30
12/09/05	2:30 PM	22.1	22.2	22.1	1.9	4.1	NE	30
12/09/05	3:00 PM	22.6	22.9	22.4	1.7	2.4	NE	30
12/09/05	3:30 PM	21.5	21.5	21.4	1.9	2.8	NE	30
12/09/05	4:00 PM	20.5	20.9	20.5	2.2	4.0	N	30
12/09/05	4:30 PM	20.0	20.1	19.8	1.4	3.3	NE	30
12/09/05	5:00 PM	19.7	20.0	19.4	2.1	3.3	NE	30
12/09/05	5:30 PM	19.2	19.6	19.0	1.7	1.8	NE	30
12/09/05	6:00 PM	19.0	19.3	18.9	1.1	1.5	N	30
12/09/05	6:30 PM	18.9	19.2	18.9	1.1	1.1	NE	30
12/09/05	7:00 PM	18.9	19.1	18.7	1.4	1.4	N	30
12/09/05	7:30 PM	19.0	19.4	18.8	2.2	3.1	NE	30
12/09/05	8:00 PM	19.9	20.2	19.7	1.5	2.6	NE	30
12/09/05	8:30 PM	19.0	19.2	18.8	0.6	0.7	NE	30
12/09/05	9:00 PM	19.2	19.6	19.1	1.1	1.9	NE	30
12/09/05	9:30 PM	19.2	19.4	18.9	1.4	2.9	NE	30
12/09/05	10:00 PM	19.2	19.3	19.2	1.9	2.6	NEE	30
12/09/05	10:30 PM	19.3	19.4	19.1	0.6	0.6	E	30
12/09/05	11:00 PM	19.2	19.2	18.9	1.5	2.3	SE	30
12/09/05	11:30 PM	19.2	19.4	19.0	1.4	2.8	NE	30
12/10/05	12:00 AM	19.3	19.6	19.1	0.8	2.0	E	30
12/10/05	12:30 AM	19.5	19.6	19.5	1.7	2.3	N	30
12/10/05	1:00 AM	19.4	19.8	19.2	1.8	3.5	N	30
12/10/05	1:30 AM	19.4	19.7	19.3	1.8	2.9	NE	30
12/10/05	2:00 AM	19.3	19.7	19.2	2.4	4.1	NEN	30
12/10/05	2:30 AM	19.2	19.4	19.0	2.9	3.8	NE	30
12/10/05	3:00 AM	19.1	19.4	19.0	2.4	4.6	NE	30
12/10/05	3:30 AM	19.0	19.4	18.9	1.8	2.7	NE	30
12/10/05	4:00 AM	19.0	19.1	18.8	1.7	2.9	NE	30
12/10/05	4:30 AM	18.9	19.2	18.6	1.8	2.2	N	30
12/10/05	5:00 AM	18.8	18.8	18.5	1.8	4.0	NE	30
12/10/05	5:30 AM	18.8	18.9	18.7	1.1	2.6	NEN	30
12/10/05	6:00 AM	18.8	18.9	18.6	0.6	0.9	N	30
12/10/05	6:30 AM	18.7	18.9	18.5	1.0	1.5	NEN	30
12/10/05	7:00 AM	18.5	18.6	18.4	2.5	3.1	NE	30
12/10/05	7:30 AM	18.8	19.0	18.8	2.6	3.3	NE	30
12/10/05	8:00 AM	19.0	19.0	18.8	2.8	3.3	NE	30
12/10/05	8:30 AM	19.2	19.5	19.2	1.4	2.2	NE	30
12/10/05	9:00 AM	19.6	19.9	19.5	1.4	3.6	NEN	30
12/10/05	9:30 AM	19.7	19.9	19.5	1.7	3.6	NEE	30
12/10/05	10:00 AM	20.6	20.9	20.4	1.8	1.9	NEE	30
12/10/05	10:30 AM	21.0	21.3	20.9	1.7	2.4	NEN	30
12/10/05	11:00 AM	21.3	21.7	21.2	2.2	2.3	NE	30
12/10/05	11:30 AM	22.0	22.0	22.0	3.1	5.0	NE	30
12/10/05	12:00 PM	22.5	22.7	22.3	1.8	4.0	NE	30
12/10/05	12:30 PM	22.9	23.0	22.9	1.2	1.6	NE	30
12/10/05	1:00 PM	23.0	23.2	22.8	2.2	2.7	NE	30
12/10/05	1:30 PM	23.1	23.5	23.0	1.9	3.7	N	30
12/10/05	2:00 PM	23.0	23.1	22.8	0.8	1.5	N	30
12/10/05	2:30 PM	23.1	23.3	23.0	1.2	1.5	N	30
12/10/05	3:00 PM	23.1	23.2	22.9	1.9	3.2	N	30
12/10/05	3:30 PM	22.7	23.0	22.6	2.3	3.6	N	30
12/10/05	4:00 PM	22.4	22.7	22.1	2.1	3.5	NE	30
12/10/05	4:30 PM	22.2	22.3	22.1	1.9	2.7	NE	30
12/10/05	5:00 PM	21.7	21.7	21.7	1.2	2.0	N	30
12/10/05	5:30 PM	21.3	21.3	21.1	1.9	2.7	N	30
12/10/05	6:00 PM	21.0	21.3	21.0	2.2	3.7	N	30
12/10/05	6:30 PM	20.7	20.7	20.7	2.9	3.1	NE	30
12/10/05	7:00 PM	20.4	20.6	20.3	1.2	2.5	NE	30
12/10/05	7:30 PM	20.3	20.4	20.3	0.8	2.3	NE	30
12/10/05	8:00 PM	20.0	20.0	20.0	1.5	3.0	NE	30
12/10/05	8:30 PM	19.7	20.0	19.5	1.9	3.9	NEN	30
12/10/05	9:00 PM	19.4	19.5	19.2	2.8	4.3	NE	30
12/10/05	9:30 PM	19.2	19.5	19.2	3.1	4.8	NE	30
12/10/05	10:00 PM	18.9	19.1	18.7	2.5	3.6	E	30
12/10/05	10:30 PM	18.6	18.9	18.3	2.1	3.5	E	30
12/10/05	11:00 PM	18.2	18.2	18.0	1.7	2.8	NE	30
12/10/05	11:30 PM	17.9	18.1	17.9	2.4	3.0	NE	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/11/05	12:00 AM	17.6	17.9	17.4	1.7	2.2	E	30
12/11/05	12:30 AM	17.2	17.4	17.1	2.1	4.0	NE	30
12/11/05	1:00 AM	17.1	17.4	16.9	1.9	3.2	N	30
12/11/05	1:30 AM	16.8	16.9	16.7	1.3	3.2	N	30
12/11/05	2:00 AM	16.6	16.7	16.3	1.2	1.6	N	30
12/11/05	2:30 AM	16.4	16.4	16.2	1.9	3.0	N	30
12/11/05	3:00 AM	16.3	16.6	16.1	2.4	4.2	N	30
12/11/05	3:30 AM	16.3	16.4	16.1	2.9	3.6	N	30
12/11/05	4:00 AM	16.2	16.3	16.0	2.1	3.5	N	30
12/11/05	4:30 AM	16.1	16.3	16.0	3.2	4.3	NE	30
12/11/05	5:00 AM	16.0	16.3	15.7	2.8	5.0	N	30
12/11/05	5:30 AM	15.9	16.0	15.8	3.5	4.2	N	30
12/11/05	6:00 AM	15.8	16.1	15.6	2.9	4.8	N	30
12/11/05	6:30 AM	16.2	16.5	16.1	1.8	3.0	NW	30
12/11/05	7:00 AM	17.0	17.4	17.0	3.5	4.7	N	30
12/11/05	7:30 AM	17.8	18.2	17.5	2.9	3.0	N	30
12/11/05	8:00 AM	18.3	18.5	18.2	1.4	2.7	NE	30
12/11/05	8:30 AM	18.9	19.2	18.9	2.4	4.6	N	30
12/11/05	9:00 AM	19.2	19.5	19.0	2.9	3.3	N	30
12/11/05	9:30 AM	19.9	19.9	19.7	2.4	2.8	NE	30
12/11/05	10:00 AM	20.3	20.4	20.3	3.8	5.7	N	30
12/11/05	10:30 AM	20.6	20.7	20.5	4.6	5.0	NE	30
12/11/05	11:00 AM	21.0	21.3	20.8	4.7	6.9	NE	30
12/11/05	11:30 AM	21.6	21.7	21.5	4.0	5.6	NE	30
12/11/05	12:00 PM	22.0	22.0	21.8	4.6	5.6	NE	30
12/11/05	12:30 PM	21.5	21.7	21.5	4.7	5.7	NE	30
12/11/05	1:00 PM	22.3	22.6	22.3	4.6	6.7	NE	30
12/11/05	1:30 PM	22.5	22.6	22.4	3.3	5.4	NE	30
12/11/05	2:00 PM	22.8	22.8	22.7	3.6	4.9	NE	30
12/11/05	2:30 PM	22.8	23.1	22.7	2.7	3.9	N	30
12/11/05	3:00 PM	22.9	23.1	22.8	4.7	4.8	NE	30
12/11/05	3:30 PM	21.3	21.4	21.0	4.3	6.2	NE	30
12/11/05	4:00 PM	20.8	21.2	20.7	3.3	5.3	NE	30
12/11/05	4:30 PM	20.4	20.6	20.4	2.5	4.1	N	30
12/11/05	5:00 PM	20.0	20.3	19.7	4.6	5.7	NEE	30
12/11/05	5:30 PM	19.5	19.6	19.3	4.2	5.1	NEE	30
12/11/05	6:00 PM	19.0	19.3	18.8	3.5	4.3	NEE	30
12/11/05	6:30 PM	18.7	19.0	18.5	3.0	5.0	NE	30
12/11/05	7:00 PM	18.5	18.6	18.4	1.7	2.8	NEN	30
12/11/05	7:30 PM	18.0	18.2	17.7	2.5	2.7	NE	30
12/11/05	8:00 PM	17.7	18.1	17.7	1.8	3.6	N	30
12/11/05	8:30 PM	17.4	17.6	17.2	1.7	3.2	NW	30
12/11/05	9:00 PM	17.3	17.3	17.1	1.0	2.9	NW	30
12/11/05	9:30 PM	17.2	17.6	17.0	2.6	4.5	NW	30
12/11/05	10:00 PM	16.8	17.0	16.7	2.1	4.1	N	30
12/11/05	10:30 PM	16.5	16.5	16.3	1.5	1.6	N	30
12/11/05	11:00 PM	16.2	16.6	16.0	1.7	3.0	NW	30
12/11/05	11:30 PM	15.8	16.0	15.8	1.8	2.6	N	30
12/12/05	12:00 AM	15.7	15.9	15.7	2.0	3.2	N	30
12/12/05	12:30 AM	15.1	15.4	15.0	2.0	3.9	N	30
12/12/05	1:00 AM	14.8	15.1	14.5	1.8	3.5	N	30
12/12/05	1:30 AM	14.4	14.5	14.2	1.7	2.5	N	30
12/12/05	2:00 AM	14.2	14.6	13.9	2.6	3.4	N	30
12/12/05	2:30 AM	14.0	14.0	13.8	3.6	4.9	NEN	30
12/12/05	3:00 AM	14.0	14.0	13.8	3.4	4.8	N	30
12/12/05	3:30 AM	13.8	14.2	13.7	2.8	4.6	N	30
12/12/05	4:00 AM	13.7	13.9	13.6	2.9	4.1	N	30
12/12/05	4:30 AM	13.6	13.9	13.5	3.1	4.9	N	30
12/12/05	5:00 AM	13.5	13.5	13.2	4.2	4.8	NE	30
12/12/05	5:30 AM	13.3	13.4	13.2	3.6	5.2	NE	30
12/12/05	6:00 AM	13.5	13.6	13.3	2.7	4.8	NE	30
12/12/05	6:30 AM	13.5	13.7	13.4	2.8	4.4	NEE	30
12/12/05	7:00 AM	13.2	13.4	13.1	4.2	5.0	N	30
12/12/05	7:30 AM	13.3	13.3	13.1	3.5	5.5	NE	30
12/12/05	8:00 AM	13.5	13.6	13.4	2.6	2.7	N	30
12/12/05	8:30 AM	13.5	13.8	13.5	3.2	4.7	N	30
12/12/05	9:00 AM	13.8	13.9	13.7	4.0	6.2	NE	30
12/12/05	9:30 AM	14.3	14.4	14.3	3.2	3.6	NE	30
12/12/05	10:00 AM	14.6	14.9	14.3	2.6	4.9	NEE	30
12/12/05	10:30 AM	15.0	15.1	14.8	2.7	4.9	NE	30
12/12/05	11:00 AM	15.3	15.4	15.2	2.2	3.5	NEE	30
12/12/05	11:30 AM	15.6	15.7	15.4	2.2	2.9	NEE	30
12/12/05	12:00 PM	15.8	15.9	15.7	3.3	4.7	E	30
12/12/05	12:30 PM	16.0	16.0	15.9	2.8	3.4	NEE	30
12/12/05	1:00 PM	16.1	16.1	16.0	2.8	4.2	NE	30
12/12/05	1:30 PM	16.4	16.4	16.1	2.7	3.7	NE	30
12/12/05	2:00 PM	17.0	17.0	16.8	2.4	4.6	NE	30
12/12/05	2:30 PM	17.3	17.5	17.0	2.1	3.0	NEN	30
12/12/05	3:00 PM	17.5	17.9	17.5	2.5	3.9	NE	30
12/12/05	3:30 PM	17.3	17.6	17.1	1.8	2.4	NE	30
12/12/05	4:00 PM	17.0	17.3	16.9	1.9	2.3	NE	30
12/12/05	4:30 PM	16.5	16.8	16.3	2.4	2.9	N	30
12/12/05	5:00 PM	16.3	16.6	16.2	2.2	3.6	N	30
12/12/05	5:30 PM	16.2	16.5	15.9	2.4	3.6	NW	30
12/12/05	6:00 PM	16.2	16.6	16.1	1.7	2.6	N	30
12/12/05	6:30 PM	16.0	16.3	15.8	2.1	4.3	NE	30
12/12/05	7:00 PM	15.9	16.0	15.7	2.9	3.6	NE	30
12/12/05	7:30 PM	16.1	16.4	15.9	2.5	4.0	NEE	30
12/12/05	8:00 PM	16.0	16.4	15.9	3.0	3.9	NE	30
12/12/05	8:30 PM	15.9	16.2	15.9	3.2	4.3	NE	30
12/12/05	9:00 PM	15.6	16.0	15.6	2.2	2.8	N	30
12/12/05	9:30 PM	15.4	15.8	15.4	1.8	1.9	NE	30
12/12/05	10:00 PM	15.3	15.6	15.2	2.3	2.5	N	30
12/12/05	10:30 PM	15.0	15.1	14.9	1.9	3.3	NE	30
12/12/05	11:00 PM	14.7	15.1	14.5	1.7	2.6	NWN	30
12/12/05	11:30 PM	14.5	14.9	14.3	2.3	2.8	NWN	30

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Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/13/05	12:00 AM	14.3	14.6	14.3	1.5	2.2	N	30
12/13/05	12:30 AM	14.3	14.6	14.1	2.3	3.2	N	30
12/13/05	1:00 AM	14.2	14.5	14.1	2.0	3.9	N	30
12/13/05	1:30 AM	14.0	14.3	13.7	1.7	1.7	NE	30
12/13/05	2:00 AM	14.0	14.0	14.0	1.9	2.7	NE	30
12/13/05	2:30 AM	13.7	13.9	13.6	1.7	1.9	E	30
12/13/05	3:00 AM	13.6	13.9	13.3	2.1	3.3	E	30
12/13/05	3:30 AM	13.6	14.0	13.4	2.1	3.9	N	30
12/13/05	4:00 AM	13.4	13.7	13.2	2.3	3.6	N	30
12/13/05	4:30 AM	13.0	13.3	12.8	2.8	3.7	NE	30
12/13/05	5:00 AM	12.9	12.9	12.8	2.5	4.6	N	30
12/13/05	5:30 AM	12.7	13.0	12.6	3.3	5.6	NE	30
12/13/05	6:00 AM	12.5	12.6	12.5	2.4	3.4	NE	30
12/13/05	6:30 AM	12.3	12.5	12.3	2.6	2.6	NEN	30
12/13/05	7:00 AM	12.3	12.7	12.2	2.5	4.1	NEN	30
12/13/05	7:30 AM	12.3	12.4	12.1	2.8	3.0	NE	30
12/13/05	8:00 AM	12.6	12.7	12.4	2.2	3.0	NEN	30
12/13/05	8:30 AM	12.8	13.0	12.5	2.2	2.9	NEN	30
12/13/05	9:00 AM	12.8	12.9	12.7	2.2	3.7	N	30
12/13/05	9:30 AM	13.0	13.1	12.9	2.1	2.9	N	30
12/13/05	10:00 AM	13.7	14.0	13.7	2.3	3.1	N	30
12/13/05	10:30 AM	14.8	15.1	14.8	2.2	3.8	N	30
12/13/05	11:00 AM	15.6	15.9	15.3	1.8	3.5	N	30
12/13/05	11:30 AM	16.2	16.6	16.0	1.2	2.9	NE	30
12/13/05	12:00 PM	16.9	17.0	16.7	2.8	4.3	NE	30
12/13/05	12:30 PM	17.0	17.1	16.8	1.2	3.2	N	30
12/13/05	1:00 PM	17.2	17.3	17.1	1.4	2.0	N	30
12/13/05	1:30 PM	17.1	17.5	17.1	0.8	1.2	NE	30
12/13/05	2:00 PM	17.2	17.3	17.1	1.6	3.5	NE	30
12/13/05	2:30 PM	17.1	17.2	17.0	1.9	2.8	N	30
12/13/05	3:00 PM	17.0	17.0	16.8	2.2	2.8	N	30
12/13/05	3:30 PM	16.9	17.2	16.9	1.9	3.3	N	30
12/13/05	4:00 PM	16.8	17.1	16.7	3.1	4.4	NE	30
12/13/05	4:30 PM	16.6	16.6	16.4	2.4	2.7	NE	30
12/13/05	5:00 PM	16.3	16.7	16.2	2.1	3.9	NE	30
12/13/05	5:30 PM	16.2	16.5	16.2	2.4	4.0	NE	30
12/13/05	6:00 PM	16.0	16.0	16.0	2.2	2.4	N	30
12/13/05	6:30 PM	15.9	16.1	15.7	2.1	2.4	NEN	30
12/13/05	7:00 PM	15.8	16.2	15.8	2.3	2.9	NW	30
12/13/05	7:30 PM	15.7	15.7	15.5	1.3	2.9	N	30
12/13/05	8:00 PM	15.8	16.1	15.7	1.8	2.9	NW	30
12/13/05	8:30 PM	15.8	16.1	15.7	1.8	2.0	NW	30
12/13/05	9:00 PM	15.7	15.8	15.6	1.1	2.4	NW	30
12/13/05	9:30 PM	15.6	15.7	15.5	1.8	3.6	NW	30
12/13/05	10:00 PM	15.6	15.7	15.5	1.7	2.4	NWN	30
12/13/05	10:30 PM	15.6	15.9	15.4	1.4	2.0	NW	30
12/13/05	11:00 PM	15.5	15.7	15.3	1.5	3.6	N	30
12/13/05	11:30 PM	15.5	15.9	15.4	1.8	3.6	N	30
12/14/05	12:00 AM	15.3	15.7	15.0	2.3	4.2	N	30
12/14/05	12:30 AM	15.1	15.5	15.0	2.5	3.9	N	30
12/14/05	1:00 AM	14.9	15.1	14.8	1.7	3.2	N	30
12/14/05	1:30 AM	14.5	14.8	14.3	2.1	4.0	N	30
12/14/05	2:00 AM	14.3	14.4	14.2	2.5	2.8	N	30
12/14/05	2:30 AM	14.1	14.3	14.0	1.7	2.6	N	30
12/14/05	3:00 AM	13.7	14.0	13.7	2.7	4.5	N	30
12/14/05	3:30 AM	13.5	13.5	13.4	2.6	4.4	NE	30
12/14/05	4:00 AM	13.2	13.2	13.0	2.1	2.8	N	30
12/14/05	4:30 AM	13.0	13.0	13.0	2.8	4.5	NE	30
12/14/05	5:00 AM	12.9	12.9	12.7	2.6	4.2	NE	30
12/14/05	5:30 AM	12.8	13.0	12.7	2.8	3.3	NE	30
12/14/05	6:00 AM	12.8	13.0	12.6	2.6	2.8	N	30
12/14/05	6:30 AM	12.8	13.0	12.8	2.2	3.9	N	30
12/14/05	7:00 AM	12.6	12.8	12.3	2.5	2.8	N	30
12/14/05	7:30 AM	12.5	12.6	12.4	2.8	3.4	N	30
12/14/05	8:00 AM	12.5	12.5	12.4	2.5	4.2	N	30
12/14/05	8:30 AM	12.8	12.8	12.7	2.6	3.8	NE	30
12/14/05	9:00 AM	13.0	13.2	12.8	1.3	1.3	N	30
12/14/05	9:30 AM	13.1	13.3	12.9	2.8	5.0	N	30
12/14/05	10:00 AM	13.5	13.6	13.5	1.8	3.8	NE	30
12/14/05	10:30 AM	13.9	14.2	13.8	1.9	2.3	NE	30
12/14/05	11:00 AM	14.1	14.1	14.0	3.3	4.9	N	30
12/14/05	11:30 AM	14.8	15.2	14.7	3.3	3.8	NE	30
12/14/05	12:00 PM	15.0	15.3	14.9	2.5	3.4	NE	30
12/14/05	12:30 PM	15.4	15.7	15.2	2.2	2.5	N	30
12/14/05	1:00 PM	15.7	15.9	15.5	2.6	3.4	NE	30
12/14/05	1:30 PM	15.8	15.8	15.6	3.1	5.0	NE	30
12/14/05	2:00 PM	16.0	16.1	16.0	2.8	3.5	NE	30
12/14/05	2:30 PM	16.3	16.5	16.1	3.3	3.8	NE	30
12/14/05	3:00 PM	16.3	16.4	16.0	2.3	2.6	NE	30
12/14/05	3:30 PM	16.3	16.4	16.2	3.1	5.2	E	30
12/14/05	4:00 PM	16.2	16.4	16.1	3.8	4.8	NEE	30
12/14/05	4:30 PM	16.0	16.3	15.7	3.6	5.5	NE	30
12/14/05	5:00 PM	15.8	16.0	15.6	2.9	3.9	NEE	30
12/14/05	5:30 PM	15.4	15.7	15.2	3.8	5.6	NE	30
12/14/05	6:00 PM	15.2	15.4	15.0	3.3	4.6	N	30
12/14/05	6:30 PM	15.3	15.5	15.1	2.5	2.6	NE	30
12/14/05	7:00 PM	15.3	15.7	15.2	3.1	4.5	NE	30
12/14/05	7:30 PM	15.5	15.7	15.2	2.8	3.2	NE	30
12/14/05	8:00 PM	15.5	15.6	15.5	3.1	4.5	NE	30
12/14/05	8:30 PM	15.4	15.5	15.3	3.2	5.0	NEN	30
12/14/05	9:00 PM	15.3	15.3	15.2	3.2	4.4	N	30
12/14/05	9:30 PM	15.2	15.5	14.9	3.1	5.3	NE	30
12/14/05	10:00 PM	15.0	15.2	14.7	2.8	3.3	NE	30
12/14/05	10:30 PM	14.8	15.1	14.6	2.9	5.0	N	30
12/14/05	11:00 PM	14.5	14.8	14.3	3.1	4.2	N	30
12/14/05	11:30 PM	14.0	14.4	14.0	2.2	3.7	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/15/05	12:00 AM	13.8	14.1	13.6	2.2	4.3	NEN	30
12/15/05	12:30 AM	13.3	13.3	13.1	3.7	4.0	NEN	30
12/15/05	1:00 AM	13.0	13.1	12.8	2.9	4.4	NEN	30
12/15/05	1:30 AM	12.8	12.9	12.5	3.8	6.1	NE	30
12/15/05	2:00 AM	12.5	12.7	12.3	3.3	5.2	NEE	30
12/15/05	2:30 AM	12.3	12.6	12.1	2.9	4.1	NEE	30
12/15/05	3:00 AM	12.0	12.2	11.8	3.3	3.3	NE	30
12/15/05	3:30 AM	11.7	12.1	11.7	3.2	4.0	NE	30
12/15/05	4:00 AM	11.8	12.1	11.7	3.2	5.0	NE	30
12/15/05	4:30 AM	11.6	11.9	11.4	2.8	4.1	NE	30
12/15/05	5:00 AM	11.5	11.8	11.5	4.4	5.7	NE	30
12/15/05	5:30 AM	11.2	11.6	11.1	2.9	5.2	NE	30
12/15/05	6:00 AM	11.0	11.0	10.7	3.3	3.7	NEN	30
12/15/05	6:30 AM	11.0	11.3	10.9	3.3	3.9	NEN	30
12/15/05	7:00 AM	10.8	11.1	10.8	3.3	5.3	N	30
12/15/05	7:30 AM	10.7	11.0	10.7	4.4	6.2	N	30
12/15/05	8:00 AM	10.8	11.0	10.8	3.6	4.7	N	30
12/15/05	8:30 AM	11.0	11.3	10.7	3.2	3.2	NE	30
12/15/05	9:00 AM	11.6	11.7	11.5	3.1	3.4	NEN	30
12/15/05	9:30 AM	12.2	12.2	11.9	2.8	4.8	N	30
12/15/05	10:00 AM	14.0	14.3	13.9	3.1	4.5	NE	30
12/15/05	10:30 AM	14.5	14.8	14.5	3.3	4.2	NE	30
12/15/05	11:00 AM	15.0	15.3	14.7	3.9	5.1	NE	30
12/15/05	11:30 AM	15.5	15.7	15.4	3.7	5.4	NEN	30
12/15/05	12:00 PM	15.8	16.2	15.7	4.2	5.1	NE	30
12/15/05	12:30 PM	16.2	16.4	16.0	4.2	6.3	N	30
12/15/05	1:00 PM	16.8	17.1	16.5	3.3	3.8	NE	30
12/15/05	1:30 PM		0.2	-0.2	2.1	4.1	NE	30
12/15/05	2:00 PM	17.4	17.6	17.2	2.3	3.2	NE	30
12/15/05	2:30 PM	17.5	17.7	17.4	3.4	5.0	N	30
12/15/05	3:00 PM	17.4	17.8	17.3	1.9	2.1	N	30
12/15/05	3:30 PM	17.3	17.3	17.3	1.9	3.2	N	30
12/15/05	4:00 PM	17.2	17.6	17.1	2.8	3.2	N	30
12/15/05	4:30 PM	17.1	17.5	17.0	1.4	2.7	NE	30
12/15/05	5:00 PM	16.9	17.2	16.7	2.7	3.3	NE	30
12/15/05	5:30 PM	16.8	17.0	16.5	3.5	4.5	N	30
12/15/05	6:00 PM	16.6	16.9	16.5	1.9	3.3	N	30
12/15/05	6:30 PM	16.4	16.8	16.3	2.5	4.2	NE	30
12/15/05	7:00 PM	16.2	16.6	16.2	1.9	2.1	NE	30
12/15/05	7:30 PM	16.0	16.2	15.7	2.2	4.3	N	30
12/15/05	8:00 PM	15.7	15.7	15.6	2.9	5.2	NE	30
12/15/05	8:30 PM	15.6	15.8	15.4	2.1	2.1	E	30
12/15/05	9:00 PM	15.3	15.6	15.2	1.7	3.6	E	30
12/15/05	9:30 PM	15.1	15.4	15.0	1.4	3.0	E	30
12/15/05	10:00 PM	14.9	14.9	14.8	1.9	2.4	E	30
12/15/05	10:30 PM	14.7	15.1	14.5	2.6	4.2	NE	30
12/15/05	11:00 PM	14.6	14.6	14.4	2.4	3.6	NE	30
12/15/05	11:30 PM	14.4	14.5	14.2	2.1	3.9	NE	30
12/16/05	12:00 AM	14.2	14.3	14.2	1.9	3.2	NE	30
12/16/05	12:30 AM	13.9	14.1	13.8	2.9	4.4	N	30
12/16/05	1:00 AM	13.7	13.7	13.5	3.4	4.0	N	30
12/16/05	1:30 AM	13.4	13.5	13.2	2.7	2.7	N	30
12/16/05	2:00 AM	13.1	13.1	12.8	2.4	2.5	N	30
12/16/05	2:30 AM	12.9	13.1	12.9	3.9	4.7	N	30
12/16/05	3:00 AM	12.6	13.0	12.5	1.8	3.7	NE	30
12/16/05	3:30 AM	12.4	12.8	12.3	1.2	2.4	NE	30
12/16/05	4:00 AM	12.1	12.4	12.0	3.4	5.3	N	30
12/16/05	4:30 AM	11.8	12.1	11.7	2.8	2.8	E	30
12/16/05	5:00 AM	11.4	11.6	11.4	2.6	4.0	N	30
12/16/05	5:30 AM	10.9	11.2	10.9	2.1	3.7	N	30
12/16/05	6:00 AM	10.7	10.9	10.4	1.8	3.4	N	30
12/16/05	6:30 AM	11.0	11.1	10.9	3.5	5.3	N	30
12/16/05	7:00 AM	11.5	11.5	11.5	2.9	4.8	N	30
12/16/05	7:30 AM	12.1	12.2	11.9	1.7	2.0	NE	30
12/16/05	8:00 AM	12.6	12.7	12.5	2.2	3.3	NE	30
12/16/05	8:30 AM	12.9	12.9	12.8	1.1	1.6	N	30
12/16/05	9:00 AM	13.2	13.5	13.0	1.9	2.2	NE	30
12/16/05	9:30 AM	13.9	14.3	13.7	2.6	4.1	E	30
12/16/05	10:00 AM	14.6	15.0	14.3	3.1	4.9	E	30
12/16/05	10:30 AM	15.3	15.4	15.1	1.8	1.8	N	30
12/16/05	11:00 AM	16.0	16.1	15.8	2.2	2.9	N	30
12/16/05	11:30 AM	17.0	17.3	17.0	2.6	3.7	E	30
12/16/05	12:00 PM	17.0	17.1	16.8	3.5	4.0	NE	30
12/16/05	12:30 PM	17.3	17.5	17.3	3.8	3.9	E	30
12/16/05	1:00 PM	17.8	18.1	17.7	2.0	3.8	E	30
12/16/05	1:30 PM	18.2	18.3	18.0	1.8	3.0	E	30
12/16/05	2:00 PM	18.3	18.6	18.2	1.6	3.7	E	30
12/16/05	2:30 PM	18.1	18.4	18.1	2.7	3.4	E	30
12/16/05	3:00 PM	18.6	18.9	18.3	2.5	4.3	E	30
12/16/05	3:30 PM	17.5	17.8	17.5	2.4	4.2	E	30
12/16/05	4:00 PM	17.0	17.4	16.7	1.7	2.6	E	30
12/16/05	4:30 PM	16.8	16.9	16.7	1.3	1.7	SE	30
12/16/05	5:00 PM	16.6	16.7	16.6	0.8	1.3	SE	30
12/16/05	5:30 PM	16.0	16.2	15.7	1.3	1.7	SE	30
12/16/05	6:00 PM	15.6	15.7	15.5	2.2	2.6	N	30
12/16/05	6:30 PM	15.5	15.7	15.4	0.8	1.6	NE	30
12/16/05	7:00 PM	15.3	15.6	15.1	1.7	3.0	N	30
12/16/05	7:30 PM	15.6	15.8	15.5	1.7	4.0	N	30
12/16/05	8:00 PM	15.5	15.6	15.2	1.0	1.0	N	30
12/16/05	8:30 PM	15.6	15.8	15.5	2.4	4.6	N	30
12/16/05	9:00 PM	15.4	15.5	15.3	1.0	1.2	N	30
12/16/05	9:30 PM	15.4	15.5	15.3	1.7	2.5	N	30
12/16/05	10:00 PM	15.4	15.8	15.4	1.6	3.4	E	30
12/16/05	10:30 PM	15.5	15.6	15.2	1.7	2.8	NE	30
12/16/05	11:00 PM	15.8	16.1	15.7	2.0	3.3	NEN	30
12/16/05	11:30 PM	15.5	15.9	15.2	1.7	3.0	NE	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/17/05	12:00 AM	15.5	15.7	15.3	2.1	4.0	NE	30
12/17/05	12:30 AM	15.4	15.7	15.3	2.8	4.4	NE	30
12/17/05	1:00 AM	15.4	15.5	15.3	2.4	3.6	NE	30
12/17/05	1:30 AM	15.2	15.3	15.0	1.5	1.6	NE	30
12/17/05	2:00 AM	15.0	15.2	14.9	1.1	2.3	N	30
12/17/05	2:30 AM	15.0	15.3	14.9	2.9	3.4	NEE	30
12/17/05	3:00 AM	14.1	14.2	13.9	2.4	2.7	N	30
12/17/05	3:30 AM	13.8	13.9	13.8	1.3	1.9	N	30
12/17/05	4:00 AM	13.0	13.2	12.9	1.7	2.5	N	30
12/17/05	4:30 AM	12.4	12.8	12.3	2.9	3.0	NE	30
12/17/05	5:00 AM	12.4	12.5	12.4	4.0	5.5	NEE	30
12/17/05	5:30 AM	12.3	12.6	12.2	2.8	4.9	NE	30
12/17/05	6:00 AM	11.8	11.9	11.5	4.1	5.2	NE	30
12/17/05	6:30 AM	11.8	12.0	11.6	3.1	3.4	NE	30
12/17/05	7:00 AM	12.3	12.6	12.3	3.1	4.9	NE	30
12/17/05	7:30 AM	12.7	12.8	12.6	3.5	5.4	NE	30
12/17/05	8:00 AM	13.3	13.4	13.1	4.1	5.8	NEE	30
12/17/05	8:30 AM	14.1	14.3	13.9	3.0	4.7	NE	30
12/17/05	9:00 AM	15.0	15.3	14.9	3.8	4.2	NE	30
12/17/05	9:30 AM	15.8	16.0	15.6	4.0	5.8	NEE	30
12/17/05	10:00 AM	16.9	17.0	16.9	4.5	5.7	NE	30
12/17/05	10:30 AM	17.5	17.8	17.5	2.8	3.9	NE	30
12/17/05	11:00 AM	18.1	18.4	17.9	4.0	6.1	NE	30
12/17/05	11:30 AM	18.5	18.8	18.3	2.1	3.4	NE	30
12/17/05	12:00 PM	19.0	19.1	18.8	2.9	3.1	NE	30
12/17/05	12:30 PM	19.4	19.6	19.2	2.4	3.2	NE	30
12/17/05	1:00 PM	19.6	19.8	19.4	1.8	3.0	N	30
12/17/05	1:30 PM	19.8	20.0	19.5	3.1	5.4	N	30
12/17/05	2:00 PM	19.7	19.8	19.6	1.8	3.6	N	30
12/17/05	2:30 PM	19.6	19.9	19.4	2.5	4.2	N	30
12/17/05	3:00 PM	19.4	19.4	19.3	2.1	2.5	NE	30
12/17/05	3:30 PM	19.0	19.1	18.8	1.9	3.6	NE	30
12/17/05	4:00 PM	18.7	18.8	18.7	1.4	2.8	N	30
12/17/05	4:30 PM	18.5	18.9	18.3	1.9	4.1	N	30
12/17/05	5:00PM	18.3	18.4	18.3	2.5	3.4	N	30
12/17/05	5:30 PM	18.0	18.4	17.9	3.1	4.5	N	30
12/17/05	6:00PM	17.8	17.9	17.7	2.8	3.6	N	30
12/17/05	6:30 PM	17.5	17.5	17.2	2.4	3.4	NE	30
12/17/05	7:00PM	17.2	17.4	17.1	1.9	3.3	NE	30
12/17/05	7:30 PM	16.9	17.0	16.9	1.0	1.1	NE	30
12/17/05	8:00PM	16.4	16.7	16.3	1.4	1.8	N	30
12/17/05	8:30 PM	16.1	16.2	15.9	2.3	4.2	NE	30
12/17/05	9:00PM	15.7	15.8	15.6	2.9	3.7	N	30
12/17/05	9:30 PM	15.4	15.6	15.3	1.8	2.2	N	30
12/17/05	10:00PM	15.1	15.3	15.0	1.0	2.2	N	30
12/17/05	10:30 PM	14.9	15.2	14.8	1.0	1.0	N	30
12/17/05	11:00PM	14.3	14.7	14.1	1.9	1.9	N	30
12/17/05	11:30 PM	13.9	14.2	13.7	1.0	1.0	N	30
12/18/05	12:00AM	13.4	13.7	13.2	2.9	4.6	NE	30
12/18/05	12:30 AM	13.1	13.3	12.9	1.2	2.5	NE	30
12/18/05	1:00AM	12.8	12.9	12.8	3.2	3.8	N	30
12/18/05	1:30 AM	12.5	12.7	12.3	2.8	4.5	N	30
12/18/05	2:00AM	12.2	12.5	11.9	2.9	4.7	N	30
12/18/05	2:30 AM	11.9	11.9	11.6	2.0	4.3	N	30
12/18/05	3:00AM	11.6	11.7	11.5	1.5	2.0	N	30
12/18/05	3:30 AM	11.3	11.4	11.3	1.0	1.9	N	30
12/18/05	4:00AM	11.1	11.3	11.0	1.5	2.7	NE	30
12/18/05	4:30 AM	10.9	11.2	10.7	3.4	4.7	N	30
12/18/05	5:00AM	10.6	10.6	10.6	2.5	2.7	N	30
12/18/05	5:30 AM	10.3	10.7	10.2	1.9	2.8	E	30
12/18/05	6:00AM	10.0	10.1	10.0	1.8	2.4	E	30
12/18/05	6:30 AM	10.6	10.7	10.3	1.9	3.8	N	30
12/18/05	7:00AM	11.2	11.4	11.2	2.4	3.1	N	30
12/18/05	7:30 AM	11.8	12.0	11.7	1.2	1.8	NE	30
12/18/05	8:00AM	12.3	12.5	12.1	1.9	2.3	NE	30
12/18/05	8:30 AM	12.9	13.2	12.8	1.4	3.3	N	30
12/18/05	9:00AM	13.1	13.3	13.1	1.0	1.8	N	30
12/18/05	9:30 AM	13.4	13.5	13.2	0.8	1.5	N	30
12/18/05	10:00AM	13.9	13.9	13.7	2.0	2.7	NE	30
12/18/05	10:30 AM	14.1	14.2	14.1	3.4	4.9	NE	30
12/18/05	11:00AM	14.5	14.8	14.4	2.2	3.1	N	30
12/18/05	11:30 AM	15.0	15.1	14.8	2.8	3.8	E	30
12/18/05	12:00NN	15.6	15.9	15.5	3.3	3.5	E	30
12/18/05	12:30 PM	15.7	15.9	15.6	2.5	2.8	N	30
12/18/05	1:00 PM	15.8	16.0	15.8	3.2	3.9	E	30
12/18/05	1:30 PM	16.0	16.1	15.8	3.3	3.9	NE	30
12/18/05	2:00 PM	16.2	16.5	16.1	3.2	4.9	NEE	30
12/18/05	2:30 PM	16.5	16.6	16.5	2.5	4.4	NE	30
12/18/05	3:00 PM	16.7	17.1	16.7	2.6	2.9	NE	30
12/18/05	3:30 PM	15.6	15.9	15.5	1.9	3.4	E	30
12/18/05	4:00 PM	14.8	15.1	14.5	2.1	3.7	E	30
12/18/05	4:30 PM	14.0	14.3	13.7	1.4	3.4	SE	30
12/18/05	5:00 PM	13.7	14.0	13.5	1.4	1.7	SE	30
12/18/05	5:30 PM	12.5	12.8	12.3	0.4	0.6	SEE	30
12/18/05	6:00 PM	11.6	11.8	11.6	0.2	1.2	N	30
12/18/05	6:30 PM	11.2	11.3	11.1	0.1	0.2	N	30
12/18/05	7:00 PM	10.8	11.2	10.6	0.1	0.8	N	30
12/18/05	7:30 PM	10.8	11.2	10.7	0.3	1.6	N	30
12/18/05	8:00 PM	10.5	10.9	10.3	0.7	2.7	N	30
12/18/05	8:30 PM	10.8	11.0	10.6	0.5	1.3	NW	30
12/18/05	9:00 PM	10.6	10.9	10.4	0.7	1.4	NW	30
12/18/05	9:30 PM	11.0	11.3	10.9	0.5	1.6	NW	30
12/18/05	10:00 PM	11.0	11.3	10.9	0.8	1.5	NE	30
12/18/05	10:30 PM	11.2	11.3	11.1	0.3	0.7	SW	30
12/18/05	11:00 PM	11.7	11.8	11.6	1.0	2.9	NEN	30
12/18/05	11:30 PM	12.0	12.3	12.0	1.7	3.8	NEN	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/19/05	12:00 AM	13.0	13.3	12.7	2.5	3.0	N	30
12/19/05	12:30 AM	13.0	13.4	12.8	3.6	4.1	NE	30
12/19/05	1:00 AM	12.7	12.8	12.7	3.5	3.7	NEN	30
12/19/05	1:30 AM	12.5	12.6	12.5	2.8	3.5	NE	30
12/19/05	2:00 AM	12.3	12.4	12.3	3.9	4.9	NE	30
12/19/05	2:30 AM	11.6	11.7	11.6	1.7	3.5	N	30
12/19/05	3:00 AM	11.3	11.5	11.1	2.5	4.7	NE	30
12/19/05	3:30 AM	11.3	11.4	11.2	2.5	4.2	NEN	30
12/19/05	4:00 AM	11.0	11.1	10.8	1.7	4.0	N	30
12/19/05	4:30 AM	10.8	11.0	10.5	1.4	1.8	NE	30
12/19/05	5:00 AM	10.8	10.8	10.8	1.0	2.8	N	30
12/19/05	5:30 AM	10.1	10.4	10.1	1.0	3.2	NWN	30
12/19/05	6:00 AM	10.5	10.5	10.3	1.8	2.1	NW	30
12/19/05	6:30 AM	10.4	10.8	10.1	1.4	1.5	N	30
12/19/05	7:00 AM	10.3	10.4	10.0	1.8	2.2	N	30
12/19/05	7:30 AM	10.5	10.7	10.4	1.3	3.0	NE	30
12/19/05	8:00 AM	11.6	11.8	11.3	1.8	3.4	NEN	30
12/19/05	8:30 AM	12.7	13.0	12.5	2.6	3.9	NE	30
12/19/05	9:00 AM	13.5	13.9	13.4	3.1	3.3	NE	30
12/19/05	9:30 AM	14.0	14.2	14.0	2.0	2.7	NE	30
12/19/05	10:00 AM	15.5	15.6	15.2	1.8	3.2	NE	30
12/19/05	10:30 AM	16.0	16.3	15.9	2.8	3.8	NE	30
12/19/05	11:00 AM	16.2	16.3	16.1	3.3	3.6	NE	30
12/19/05	11:30 AM	16.8	17.1	16.7	2.6	3.5	NEE	30
12/19/05	12:00 PM	16.7	16.7	16.5	2.1	4.1	NE	30
12/19/05	12:30 PM	16.4	16.6	16.3	3.2	5.3	NE	30
12/19/05	1:00 PM	16.6	16.9	16.3	2.0	3.2	NE	30
12/19/05	1:30 PM	16.5	16.7	16.5	1.8	1.9	E	30
12/19/05	2:00 PM	16.4	16.7	16.4	0.8	0.9	E	30
12/19/05	2:30 PM	16.4	16.8	16.4	1.7	3.2	NE	30
12/19/05	3:00 PM	16.3	16.6	16.2	2.0	2.0	E	30
12/19/05	3:30 PM	16.3	16.6	16.2	1.7	3.3	SE	30
12/19/05	4:00 PM	16.1	16.2	16.1	1.0	3.0	NE	30
12/19/05	4:30 PM	15.7	15.8	15.6	0.8	1.9	N	30
12/19/05	5:00 PM	15.0	15.1	14.7	0.8	1.7	N	30
12/19/05	5:30 PM	14.0	14.3	14.0	0.1	0.2	N	30
12/19/05	6:00 PM	13.2	13.4	13.2	0.1	0.2	NWN	30
12/19/05	6:30 PM	12.7	12.8	12.5	0.2	0.5	W	30
12/19/05	7:00 PM	12.1	12.4	12.1	0.8	2.0	NW	30
12/19/05	7:30 PM	12.3	12.6	12.1	0.4	1.0	NW	30
12/19/05	8:00 PM	12.1	12.3	11.9	0.1	1.1	N	30
12/19/05	8:30 PM	12.0	12.2	11.9	0.0	1.1	N	30
12/19/05	9:00 PM	12.0	12.1	11.7	0.1	1.4	N	30
12/19/05	9:30 PM	12.2	12.3	11.9	0.1	1.3	W	30
12/19/05	10:00 PM	13.0	13.0	12.8	0.3	1.2	N	30
12/19/05	10:30 PM	13.7	14.0	13.6	0.3	2.1	NW	30
12/19/05	11:00 PM	14.0	14.2	14.0	0.6	0.7	NEN	30
12/19/05	11:30 PM	14.2	14.3	14.0	1.7	1.7	NE	30
12/20/05	12:00 AM	15.2	15.3	14.9	2.4	2.7	NE	30
12/20/05	12:30 AM	15.2	15.5	15.1	2.6	3.4	NE	30
12/20/05	1:00 AM	15.0	15.2	14.8	3.1	5.0	NE	30
12/20/05	1:30 AM	14.9	15.2	14.7	3.3	3.9	NE	30
12/20/05	2:00 AM	14.9	15.1	14.6	2.9	4.6	NE	30
12/20/05	2:30 AM	14.7	15.0	14.5	2.9	3.8	NE	30
12/20/05	3:00 AM	14.6	15.0	14.5	3.3	4.7	NEN	30
12/20/05	3:30 AM	14.8	14.8	14.5	4.0	4.0	NEN	30
12/20/05	4:00 AM	14.6	14.9	14.3	3.8	5.2	NE	30
12/20/05	4:30 AM	14.6	14.6	14.6	4.5	5.1	NEN	30
12/20/05	5:00 AM	14.3	14.4	14.1	3.8	4.4	NEN	30
12/20/05	5:30 AM	14.1	14.1	13.8	2.5	4.7	NE	30
12/20/05	6:00 AM	13.5	13.9	13.4	1.9	2.8	NE	30
12/20/05	6:30 AM	13.0	13.4	12.8	1.6	2.6	NE	30
12/20/05	7:00 AM	12.9	13.0	12.6	0.4	2.1	NW	30
12/20/05	7:30 AM	13.0	13.2	12.8	2.3	4.5	N	30
12/20/05	8:00 AM	14.0	14.2	13.7	1.0	1.7	E	30
12/20/05	8:30 AM	15.1	15.3	14.9	2.4	3.6	NE	30
12/20/05	9:00 AM	15.7	16.1	15.6	2.5	3.5	NE	30
12/20/05	9:30 AM	16.2	16.5	16.0	3.1	4.4	NE	30
12/20/05	10:00 AM	17.2	17.4	17.0	2.5	4.0	NE	30
12/20/05	10:30 AM	18.6	19.0	18.5	2.6	4.5	NE	30
12/20/05	11:00 AM	19.0	19.2	18.9	3.3	5.2	NE	30
12/20/05	11:30 AM	19.0	19.1	18.8	2.4	4.1	N	30
12/20/05	12:00 PM	20.0	20.1	20.0	2.5	3.4	NEE	30
12/20/05	12:30 PM	20.8	21.0	20.7	2.4	2.9	N	30
12/20/05	1:00 PM	20.8	21.0	20.7	2.1	2.9	E	30
12/20/05	1:30 PM	21.0	21.1	20.8	2.1	2.6	NEN	30
12/20/05	2:00 PM	21.2	21.3	21.0	2.4	2.9	NEE	30
12/20/05	2:30 PM	21.0	21.1	20.8	2.5	3.0	NEE	30
12/20/05	3:00 PM	21.0	21.3	20.8	1.9	2.2	NEN	30
12/20/05	3:30 PM	19.8	19.9	19.6	1.7	3.8	SES	30
12/20/05	4:00 PM	18.7	19.0	18.5	2.2	2.4	S	30
12/20/05	4:30 PM	18.0	18.0	17.9	2.5	4.6	S	30
12/20/05	5:00 PM	17.0	17.3	16.9	1.4	2.0	S	30
12/20/05	5:30 PM	15.8	15.9	15.7	1.3	3.4	SW	30
12/20/05	6:00 PM	15.1	15.2	14.8	1.0	2.2	W	30
12/20/05	6:30 PM	14.7	14.8	14.6	1.0	3.0	W	30
12/20/05	7:00 PM	14.1	14.4	14.1	0.3	1.3	N	30
12/20/05	7:30 PM	13.9	14.1	13.8	0.1	1.1	NW	30
12/20/05	8:00 PM	13.2	13.5	13.1	0.1	1.1	N	30
12/20/05	8:30 PM	13.1	13.5	13.0	0.3	1.8	N	30
12/20/05	9:00 PM	13.2	13.4	13.1	0.2	0.5	N	30
12/20/05	9:30 PM	13.1	13.3	12.8	0.3	0.8	SE	30
12/20/05	10:00 PM	13.1	13.2	12.9	0.6	2.6	NW	30
12/20/05	10:30 PM	13.1	13.5	13.0	0.4	2.1	E	30
12/20/05	11:00 PM	13.3	13.3	13.1	1.4	2.4	NE	30
12/20/05	11:30 PM	14.0	14.3	13.9	2.5	4.5	NE	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/21/05	12:00 AM	14.0	14.1	13.8	1.4	3.7	N	30
12/21/05	12:30 AM	14.8	15.0	14.7	1.4	2.0	NE	30
12/21/05	1:00 AM	15.0	15.2	14.8	3.8	4.1	NE	30
12/21/05	1:30 AM	15.0	15.2	14.7	2.8	4.0	N	30
12/21/05	2:00 AM	14.8	15.1	14.7	2.9	4.0	NE	30
12/21/05	2:30 AM	14.4	14.5	14.4	4.2	5.0	NE	30
12/21/05	3:00 AM	14.5	14.9	14.4	4.4	4.6	NE	30
12/21/05	3:30 AM	14.2	14.5	14.1	3.1	3.8	NEN	30
12/21/05	4:00 AM	14.0	14.2	13.8	4.2	5.9	NE	30
12/21/05	4:30 AM	13.9	14.1	13.7	4.4	5.2	NEN	30
12/21/05	5:00 AM	13.8	14.0	13.5	4.9	5.7	NE	30
12/21/05	5:30 AM	13.7	14.0	13.5	4.9	6.4	NEN	30
12/21/05	6:00 AM	13.5	13.7	13.5	3.8	5.8	NE	30
12/21/05	6:30 AM	13.0	13.0	12.8	5.0	6.7	NE	30
12/21/05	7:00 AM	13.0	13.2	12.9	4.9	5.3	NE	30
12/21/05	7:30 AM	13.1	13.3	12.9	4.7	6.4	NEN	30
12/21/05	8:00 AM	13.2	13.5	13.1	3.9	5.0	N	30
12/21/05	8:30 AM	13.8	13.9	13.7	5.0	6.9	NE	30
12/21/05	9:00 AM	14.0	14.3	13.7	4.3	6.5	NEN	30
12/21/05	9:30 AM	14.8	15.0	14.7	4.6	5.1	NEN	30
12/21/05	10:00 AM	15.1	15.1	14.9	4.3	6.2	N	30
12/21/05	10:30 AM	15.6	15.7	15.5	4.7	5.0	NE	30
12/21/05	11:00 AM	16.2	16.6	16.0	4.6	4.8	N	30
12/21/05	11:30 AM	16.9	17.1	16.7	4.5	5.6	NE	30
12/21/05	12:00 PM	17.0	17.2	17.0	4.5	4.6	NE	30
12/21/05	12:30 PM	17.7	18.0	17.7	4.3	4.4	NE	30
12/21/05	1:00 PM	18.0	18.3	17.8	4.7	5.7	NE	30
12/21/05	1:30 PM	17.2	17.4	16.9	4.3	6.2	NE	30
12/21/05	2:00 PM	17.7	17.9	17.5	4.2	4.3	NE	30
12/21/05	2:30 PM	17.5	17.7	17.3	3.8	3.9	NE	30
12/21/05	3:00 PM	17.4	17.6	17.4	4.2	6.5	N	30
12/21/05	3:30 PM	17.0	17.0	16.8	4.7	6.6	N	30
12/21/05	4:00 PM	16.8	17.1	16.6	4.5	4.7	NE	30
12/21/05	4:30 PM	16.3	16.6	16.2	4.9	7.2	NE	30
12/21/05	5:00 PM	16.1	16.2	16.0	3.2	4.5	N	30
12/21/05	5:30 PM	15.8	16.0	15.7	3.5	3.9	NE	30
12/21/05	6:00 PM	15.3	15.6	15.2	4.1	5.0	N	30
12/21/05	6:30 PM	15.1	15.1	14.9	4.8	4.9	N	30
12/21/05	7:00 PM	14.9	14.9	14.6	4.1	4.3	NE	30
12/21/05	7:30 PM	14.5	14.6	14.3	4.4	6.0	NEN	30
12/21/05	8:00 PM	14.0	14.1	14.0	5.0	5.4	NE	30
12/21/05	8:30 PM	13.5	13.7	13.4	4.6	5.4	N	30
12/21/05	9:00 PM	13.0	13.4	12.9	4.6	6.6	N	30
12/21/05	9:30 PM	12.7	12.8	12.5	4.7	5.3	N	30
12/21/05	10:00 PM	12.6	12.9	12.3	4.2	4.5	NE	30
12/21/05	10:30 PM	12.2	12.4	12.1	5.0	6.7	N	30
12/21/05	11:00 PM	12.0	12.3	11.9	4.9	6.4	N	30
12/21/05	11:30 PM	11.8	12.0	11.7	4.6	6.5	N	30
12/22/05	12:00 AM	11.7	12.0	11.4	4.9	6.0	N	30
12/22/05	12:30 AM	11.5	11.9	11.2	4.7	6.9	N	30
12/22/05	1:00 AM	11.1	11.3	11.0	5.0	5.9	NE	30
12/22/05	1:30 AM	11.0	11.3	10.9	4.4	5.7	NE	30
12/22/05	2:00 AM	11.0	11.2	10.9	4.3	5.1	NE	30
12/22/05	2:30 AM	10.8	11.1	10.6	3.9	5.1	NE	30
12/22/05	3:00 AM	10.8	11.0	10.7	5.0	6.7	NE	30
12/22/05	3:30 AM	10.6	10.7	10.4	4.7	5.8	NE	30
12/22/05	4:00 AM	10.6	11.0	10.4	4.4	6.4	NE	30
12/22/05	4:30 AM	10.4	10.8	10.3	4.1	5.6	NE	30
12/22/05	5:00 AM	10.2	10.5	10.1	5.0	6.0	NE	30
12/22/05	5:30 AM	9.9	10.2	9.6	4.3	4.6	NE	30
12/22/05	6:00 AM	9.7	9.9	9.4	4.3	5.4	NEE	30
12/22/05	6:30 AM	9.4	9.6	9.3	5.0	7.1	NEE	30
12/22/05	7:00 AM	9.2	9.3	9.1	5.0	7.2	NE	30
12/22/05	7:30 AM	9.5	9.6	9.2	4.9	6.3	NE	30
12/22/05	8:00 AM	9.8	9.9	9.6	5.0	7.0	NE	30
12/22/05	8:30 AM	10.2	10.5	10.1	4.8	5.2	NEN	30
12/22/05	9:00 AM	10.7	10.9	10.4	4.3	5.5	NE	30
12/22/05	9:30 AM	11.4	11.4	11.3	4.2	4.7	NE	30
12/22/05	10:00 AM	12.0	12.0	12.0	4.8	6.6	NE	30
12/22/05	10:30 AM	12.7	13.0	12.5	4.4	6.3	NE	30
12/22/05	11:00 AM	13.0	13.3	12.9	4.7	5.6	NE	30
12/22/05	11:30 AM	13.4	13.4	13.3	3.6	5.4	NE	30
12/22/05	12:00 PM	14.2	14.3	13.9	3.6	3.6	NE	30
12/22/05	12:30 PM	14.4	14.5	14.3	3.1	4.9	NE	30
12/22/05	1:00 PM	15.2	15.5	15.0	3.9	5.2	NE	30
12/22/05	1:30 PM	15.7	15.7	15.7	3.1	4.3	NE	30
12/22/05	2:00 PM	15.9	16.0	15.7	3.3	3.7	NEN	30
12/22/05	2:30 PM	16.0	16.1	15.8	2.5	2.7	NEN	30
12/22/05	3:00 PM	16.0	16.3	15.8	4.1	5.5	NE	30
12/22/05	3:30 PM	15.2	15.4	15.2	3.2	3.4	NEN	30
12/22/05	4:00 PM	15.0	15.4	15.0	2.8	2.9	NE	30
12/22/05	4:30 PM	14.2	14.4	14.2	1.7	3.3	NE	30
12/22/05	5:00 PM	13.8	14.1	13.7	2.1	4.3	NE	30
12/22/05	5:30 PM	13.5	13.8	13.4	1.9	2.9	NE	30
12/22/05	6:00 PM	13.1	13.4	13.0	2.7	3.8	N	30
12/22/05	6:30 PM	12.9	12.9	12.6	1.4	3.1	N	30
12/22/05	7:00 PM	12.6	12.8	12.6	0.2	0.7	N	30
12/22/05	7:30 PM	12.4	12.6	12.1	1.3	2.9	NE	30
12/22/05	8:00 PM	12.1	12.4	11.9	1.5	3.2	NE	30
12/22/05	8:30 PM	11.9	12.0	11.8	2.8	5.0	NE	30
12/22/05	9:00 PM	11.5	11.8	11.2	1.2	1.8	N	30
12/22/05	9:30 PM	11.1	11.2	11.1	0.8	1.5	N	30
12/22/05	10:00 PM	10.9	11.0	10.6	0.4	2.5	N	30
12/22/05	10:30 PM	10.5	10.6	10.4	1.2	1.8	NE	30
12/22/05	11:00 PM	9.9	10.2	9.8	0.4	1.3	N	30
12/22/05	11:30 PM	9.4	9.7	9.4	0.2	0.2	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/23/05	12:00 AM	9.7	10.1	9.6	0.1	0.5	N	30
12/23/05	12:30 AM	9.3	9.5	9.1	0.1	0.4	E	30
12/23/05	1:00 AM	9.5	9.8	9.5	1.0	2.1	E	30
12/23/05	1:30 AM	9.0	9.3	8.8	0.3	0.6	E	30
12/23/05	2:00 AM	8.8	8.9	8.5	0.5	0.9	E	30
12/23/05	2:30 AM	8.4	8.5	8.3	0.1	0.5	E	30
12/23/05	3:00 AM	8.2	8.4	7.9	0.2	1.7	N	30
12/23/05	3:30 AM	8.0	8.0	7.9	0.1	1.9	N	30
12/23/05	4:00 AM	7.7	7.9	7.7	0.3	1.4	N	30
12/23/05	4:30 AM	8.0	8.4	7.8	0.1	1.8	N	30
12/23/05	5:00 AM	8.7	9.1	8.6	0.7	1.5	N	30
12/23/05	5:30 AM	8.4	8.7	8.1	0.2	1.3	N	30
12/23/05	6:00 AM	8.3	8.6	8.0	0.6	2.1	E	30
12/23/05	6:30 AM	8.1	8.2	8.1	0.4	1.4	E	30
12/23/05	7:00 AM	8.3	8.3	8.3	0.2	0.8	N	30
12/23/05	7:30 AM	9.2	9.2	9.0	1.0	2.4	N	30
12/23/05	8:00 AM	10.5	10.7	10.4	1.7	1.9	NE	30
12/23/05	8:30 AM	12.1	12.4	12.1	3.3	3.5	NEE	30
12/23/05	9:00 AM	12.6	12.8	12.5	2.8	4.3	NE	30
12/23/05	9:30 AM	14.4	14.5	14.2	1.3	2.0	N	30
12/23/05	10:00 AM	15.2	15.6	15.1	3.2	3.5	NE	30
12/23/05	10:30 AM	16.3	16.4	16.1	2.9	5.1	NE	30
12/23/05	11:00 AM	16.6	16.8	16.4	3.6	5.2	NE	30
12/23/05	11:30 AM	17.1	17.3	17.0	3.2	3.4	NE	30
12/23/05	12:00 PM	17.2	17.3	17.1	3.1	4.7	NE	30
12/23/05	12:30 PM	17.7	17.9	17.5	2.7	4.6	E	30
12/23/05	1:00 PM	18.0	18.1	17.9	2.2	3.6	NE	30
12/23/05	1:30 PM	18.0	18.3	17.9	2.1	2.6	E	30
12/23/05	2:00 PM	18.0	18.3	17.8	2.6	3.4	NE	30
12/23/05	2:30 PM	18.8	18.9	18.8	2.1	2.1	NEE	30
12/23/05	3:00 PM	18.0	18.4	17.7	2.5	2.6	NEE	30
12/23/05	3:30 PM	17.2	17.3	17.0	1.7	2.9	SE	30
12/23/05	4:00 PM	16.7	16.8	16.6	1.7	3.8	NE	30
12/23/05	4:30 PM	16.0	16.3	15.9	1.4	3.5	N	30
12/23/05	5:00 PM	15.8	15.9	15.7	1.8	2.2	NEN	30
12/23/05	5:30 PM	15.0	15.2	14.9	1.1	2.8	NE	30
12/23/05	6:00 PM	14.0	14.0	13.9	1.8	2.9	N	30
12/23/05	6:30 PM	14.2	14.4	14.1	0.4	1.3	N	30
12/23/05	7:00 PM	13.9	13.9	13.6	0.2	1.9	N	30
12/23/05	7:30 PM	13.7	13.8	13.5	0.2	1.6	N	30
12/23/05	8:00 PM	13.8	13.8	13.7	0.2	0.6	E	30
12/23/05	8:30 PM	13.6	13.9	13.5	0.1	0.6	NW	30
12/23/05	9:00 PM	13.8	13.9	13.5	0.6	1.4	NEE	30
12/23/05	9:30 PM	13.8	14.1	13.6	0.0	1.9	N	30
12/23/05	10:00 PM	13.6	13.9	13.5	0.0	0.8	N	30
12/23/05	10:30 PM	13.4	13.5	13.2	0.0	2.2	N	30
12/23/05	11:00PM	13.4	13.8	13.2	1.6	3.8	NE	30
12/23/05	11:30PM	12.8	13.1	12.7	0.0	0.4	N	30
12/24/05	12:00 AM	12.6	12.8	12.6	0.4	1.6	N	30
12/24/05	12:30AM	12.8	13.1	12.7	1.3	2.4	N	30
12/24/05	1:00 AM	12.9	13.1	12.7	0.8	1.4	N	30
12/24/05	1:30 AM	13.0	13.3	12.7	1.3	2.4	N	30
12/24/05	2:00 AM	13.1	13.2	12.9	0.5	2.5	N	30
12/24/05	2:30 AM	13.0	13.3	12.8	0.5	1.6	NEN	30
12/24/05	3:00 AM	13.0	13.1	12.7	0.2	2.2	N	30
12/24/05	3:30 AM	12.8	12.9	12.7	0.2	2.1	N	30
12/24/05	4:00 AM	12.8	12.8	12.6	0.2	1.6	N	30
12/24/05	4:30 AM	12.8	13.2	12.5	0.2	1.0	N	30
12/24/05	5:00 AM	12.7	12.8	12.5	0.2	2.2	N	30
12/24/05	5:30 AM	12.4	12.6	12.2	0.5	1.7	NW	30
12/24/05	6:00 AM	12.5	12.7	12.3	0.2	1.5	N	30
12/24/05	6:30 AM	13.0	13.3	12.8	0.1	0.8	N	30
12/24/05	7:00 AM	13.2	13.4	13.0	0.2	0.8	N	30
12/24/05	7:30 AM	13.6	13.9	13.4	0.0	1.4	N	30
12/24/05	8:00 AM	14.0	14.3	13.9	0.0	0.2	N	30
12/24/05	8:30 AM	15.5	15.8	15.4	0.0	1.1	N	30
12/24/05	9:00 AM	16.4	16.5	16.1	0.0	0.3	N	30
12/24/05	9:30 AM	17.8	18.1	17.6	0.5	2.1	SEE	30
12/24/05	10:00 AM	18.5	18.6	18.4	1.4	2.4	E	30
12/24/05	10:30 AM	19.8	20.0	19.6	1.7	2.2	E	30
12/24/05	11:00 AM	20.1	20.3	20.0	1.3	2.8	NE	30
12/24/05	11:30 AM	20.3	20.3	20.1	1.7	1.9	NE	30
12/24/05	12:00 PM	20.6	20.7	20.5	1.2	2.6	NE	30
12/24/05	12:30 PM	20.9	20.9	20.8	0.8	2.4	NE	30
12/24/05	1:00 PM	21.1	21.4	21.0	0.6	1.3	NE	30
12/24/05	1:30 PM	21.3	21.3	21.0	0.7	2.0	N	30
12/24/05	2:00 PM	21.2	21.2	21.2	0.0	0.9	N	30
12/24/05	2:30 PM	21.1	21.4	21.0	0.2	2.0	N	30
12/24/05	3:00 PM	20.9	21.2	20.7	0.2	1.5	NE	30
12/24/05	3:30 PM	20.8	20.8	20.5	0.5	1.3	NE	30
12/24/05	4:00 PM	20.7	21.1	20.6	0.9	1.8	NE	30
12/24/05	4:30 PM	20.4	20.7	20.2	1.3	2.8	N	30
12/24/05	5:00 PM	20.1	20.2	20.1	0.4	2.7	N	30
12/24/05	5:30 PM	19.9	20.3	19.9	0.6	1.2	N	30
12/24/05	6:00 PM	19.6	19.8	19.5	0.9	3.2	N	30
12/24/05	6:30 PM	19.3	19.6	19.2	0.2	0.8	NE	30
12/24/05	7:00 PM	19.1	19.5	18.9	0.1	0.7	NE	30
12/24/05	7:30 PM	18.7	19.1	18.5	0.0	2.3	-	30
12/24/05	8:00 PM	18.6	18.9	18.4	0.0	0.9	-	30
12/24/05	8:30 PM	18.4	18.8	18.2	0.0	0.2	-	30
12/24/05	9:00 PM	18.2	18.3	18.0	0.0	1.6	-	30
12/24/05	9:30 PM	18.0	18.2	17.9	0.0	0.5	-	30
12/24/05	10:00 PM	17.8	18.0	17.8	1.3	2.6	N	30
12/24/05	10:30 PM	17.6	17.9	17.3	0.9	1.0	N	30
12/24/05	11:00 PM	17.6	17.7	17.6	0.3	1.2	N	30
12/24/05	11:30 PM	17.4	17.6	17.2	0.1	1.1	NE	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/25/05	12:00 AM	17.2	17.4	17.2	0.3	2.4	N	30
12/25/05	12:30 AM	17.1	17.1	17.0	0.5	1.0	N	30
12/25/05	1:00 AM	16.9	16.9	16.9	0.1	1.6	NE	30
12/25/05	1:30 AM	16.8	16.9	16.8	0.6	0.7	NE	30
12/25/05	2:00 AM	16.6	16.6	16.6	0.2	1.7	N	30
12/25/05	2:30 AM	16.5	16.6	16.3	1.1	2.3	N	30
12/25/05	3:00 AM	16.5	16.6	16.4	0.8	1.8	N	30
12/25/05	3:30 AM	16.4	16.5	16.1	1.0	1.3	N	30
12/25/05	4:00 AM	16.4	16.6	16.2	0.5	0.6	N	30
12/25/05	4:30 AM	16.3	16.3	16.3	0.2	0.6	N	30
12/25/05	5:00 AM	16.3	16.6	16.3	0.9	2.9	NE	30
12/25/05	5:30 AM	16.2	16.2	16.1	0.5	1.6	NE	30
12/25/05	6:00 AM	16.2	16.5	16.0	0.1	1.0	NE	30
12/25/05	6:30 AM	16.4	16.5	16.4	0.2	0.9	N	30
12/25/05	7:00 AM	16.8	16.8	16.5	0.3	0.6	N	30
12/25/05	7:30 AM	17.1	17.3	17.0	0.1	1.8	N	30
12/25/05	8:00 AM	17.6	18.0	17.5	0.4	1.7	N	30
12/25/05	8:30 AM	18.2	18.2	18.2	0.3	1.9	N	30
12/25/05	9:00 AM	18.7	18.9	18.4	0.5	1.6	N	30
12/25/05	9:30 AM	19.1	19.4	19.0	0.0	0.2	-	30
12/25/05	10:00 AM	19.4	19.6	19.2	0.0	0.4	-	30
12/25/05	10:30 AM	20.1	20.3	20.0	0.1	1.2	NE	30
12/25/05	11:00 AM	21.5	21.7	21.3	0.0	1.9	-	30
12/25/05	11:30 AM	21.7	22.1	21.6	0.0	1.7	-	30
12/25/05	12:00 PM	21.9	22.3	21.8	0.0	1.2	-	30
12/25/05	12:30 PM	22.0	22.2	21.9	0.3	1.8	NE	30
12/25/05	1:00 PM	21.7	21.8	21.6	0.1	1.7	NE	30
12/25/05	1:30 PM	21.5	21.6	21.4	0.2	0.4	NE	30
12/25/05	2:00 PM	21.6	21.6	21.6	0.0	1.2	-	30
12/25/05	2:30 PM	21.1	21.2	20.9	0.0	0.9	-	30
12/25/05	3:00 PM	20.7	20.8	20.6	0.0	0.3	-	30
12/25/05	3:30 PM	20.5	20.8	20.3	0.2	0.8	N	30
12/25/05	4:00 PM	20.2	20.5	20.1	0.0	1.8	-	30
12/25/05	4:30 PM	20.0	20.0	19.8	0.0	1.9	-	30
12/25/05	5:00 PM	19.7	19.7	19.5	0.3	2.2	N	30
12/25/05	5:30 PM	19.5	19.6	19.3	0.5	1.3	NE	30
12/25/05	6:00 PM	19.3	19.6	19.3	0.7	2.8	NE	30
12/25/05	6:30 PM	19.1	19.3	18.9	0.2	0.7	NE	30
12/25/05	7:00 PM	18.9	19.2	18.8	0.9	3.1	N	30
12/25/05	7:30 PM	18.8	19.0	18.6	0.2	1.3	N	30
12/25/05	8:00 PM	18.4	18.4	18.2	0.6	2.6	N	30
12/25/05	8:30 PM	18.2	18.4	18.2	0.4	0.6	NE	30
12/25/05	9:00 PM	17.9	18.1	17.6	0.9	2.2	NE	30
12/25/05	9:30 PM	17.5	17.7	17.3	1.1	2.9	N	30
12/25/05	10:00 PM	17.4	17.8	17.1	1.3	2.7	E	30
12/25/05	10:30 PM	17.2	17.3	17.2	0.8	1.9	N	30
12/25/05	11:00 PM	17.1	17.3	16.9	0.9	1.2	N	30
12/25/05	11:30 PM	16.9	17.2	16.6	0.2	2.3	N	30
12/26/05	12:00 AM	16.8	16.9	16.8	0.5	1.6	NE	30
12/26/05	12:30 AM	16.4	16.6	16.4	0.2	2.4	NE	30
12/26/05	1:00 AM	16.1	16.3	15.8	1.1	3.2	NE	30
12/26/05	1:30 AM	15.9	15.9	15.8	0.3	2.3	N	30
12/26/05	2:00 AM	15.6	16.0	15.6	0.8	2.3	N	30
12/26/05	2:30 AM	15.3	15.6	15.1	1.6	3.9	N	30
12/26/05	3:00 AM	15.1	15.4	15.0	1.9	2.9	NE	30
12/26/05	3:30 AM	15.0	15.4	14.7	1.8	3.5	NE	30
12/26/05	4:00 AM	15.0	15.1	14.9	2.0	4.0	N	30
12/26/05	4:30 AM	14.9	15.2	14.6	1.8	2.4	E	30
12/26/05	5:00 AM	14.8	15.2	14.6	0.9	1.1	N	30
12/26/05	5:30 AM	14.8	15.1	14.8	1.2	1.7	N	30
12/26/05	6:00 AM	15.5	15.8	15.4	1.9	2.0	N	30
12/26/05	6:30 AM	16.1	16.4	16.0	2.1	3.1	N	30
12/26/05	7:00 AM	16.9	17.1	16.8	1.7	3.5	N	30
12/26/05	7:30 AM	17.5	17.6	17.2	1.2	1.9	N	30
12/26/05	8:00 AM	18.4	18.7	18.4	1.0	2.0	NE	30
12/26/05	8:30 AM	19.3	19.3	19.1	0.8	1.1	NE	30
12/26/05	9:00 AM	20.0	20.4	19.8	1.8	3.4	N	30
12/26/05	9:30 AM	20.3	20.7	20.1	1.2	2.6	N	30
12/26/05	10:00 AM	20.6	20.9	20.5	0.5	0.9	N	30
12/26/05	10:30 AM	21.2	21.6	21.1	0.9	2.6	NE	30
12/26/05	11:00 AM	21.5	21.6	21.3	1.2	1.7	NE	30
12/26/05	11:30 AM	21.8	21.9	21.6	1.9	2.9	N	30
12/26/05	12:00 PM	22.2	22.5	21.9	1.0	2.4	E	30
12/26/05	12:30 PM	22.6	22.7	22.4	2.5	3.2	N	30
12/26/05	1:00 PM	22.4	22.6	22.2	1.8	3.1	N	30
12/26/05	1:30 PM	21.9	22.2	21.6	2.0	3.1	N	30
12/26/05	2:00 PM	21.6	21.6	21.5	1.4	2.7	N	30
12/26/05	2:30 PM	21.4	21.5	21.3	2.1	4.2	NE	30
12/26/05	3:00 PM	21.2	21.4	21.1	1.3	2.1	NE	30
12/26/05	3:30 PM	21.0	21.1	20.9	0.8	1.4	N	30
12/26/05	4:00 PM	20.7	21.0	20.5	1.9	3.5	NE	30
12/26/05	4:30 PM	20.4	20.7	20.3	1.3	2.0	NE	30
12/26/05	5:00 PM	20.1	20.1	19.9	1.0	2.0	N	30
12/26/05	5:30 PM	19.9	20.2	19.9	1.0	3.1	N	30
12/26/05	6:00 PM	19.7	19.7	19.6	0.8	2.3	N	30
12/26/05	6:30 PM	19.5	19.8	19.4	0.4	2.3	N	30
12/26/05	7:00 PM	19.2	19.4	19.1	1.2	3.4	NE	30
12/26/05	7:30 PM	19.0	19.3	18.9	0.2	2.3	NE	30
12/26/05	8:00 PM	18.7	18.8	18.4	0.8	0.9	N	30
12/26/05	8:30 PM	18.5	18.7	18.4	3.0	4.8	E	30
12/26/05	9:00 PM	18.3	18.5	18.2	1.9	3.0	E	30
12/26/05	9:30 PM	18.0	18.2	17.7	2.5	4.3	E	30
12/26/05	10:00 PM	17.7	17.9	17.4	2.8	4.7	N	30
12/26/05	10:30 PM	17.5	17.8	17.3	2.0	2.8	NE	30
12/26/05	11:00 PM	17.3	17.6	17.3	1.1	3.3	NE	30
12/26/05	11:30 PM	17.2	17.3	17.2	1.5	3.5	NE	30
12/27/05	12:00 AM							

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Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s)		Wind Direction	Period
					Average	Hi		
12/27/05	12:30 AM	17.0	17.1	16.8	1.6	2.1	E	30
12/27/05	1:00 AM	16.9	17.0	16.7	0.1	1.3	E	30
12/27/05	1:30 AM	16.8	17.1	16.8	1.3	3.4	E	30
12/27/05	2:00 AM	16.7	17.0	16.4	1.8	2.5	NE	30
12/27/05	2:30 AM	16.6	16.8	16.4	2.5	3.5	N	30
12/27/05	3:00 AM	16.5	16.8	16.2	2.1	3.0	E	30
12/27/05	3:30 AM	16.5	16.7	16.3	2.9	3.9	E	30
12/27/05	4:00 AM	16.6	16.9	16.3	1.8	3.5	NE	30
12/27/05	4:30 AM	16.5	16.6	16.5	1.3	1.8	E	30
12/27/05	5:00 AM	16.4	16.6	16.2	2.1	3.3	E	30
12/27/05	5:30 AM	16.3	16.6	16.0	2.9	3.8	E	30
12/27/05	6:00 AM	16.7	16.9	16.6	1.5	3.7	E	30
12/27/05	6:30 AM	17.1	17.4	17.0	1.9	2.7	NE	30
12/27/05	7:00 AM	17.4	17.7	17.3	3.2	5.1	N	30
12/27/05	7:30 AM	17.9	18.1	17.7	2.1	3.1	NE	30
12/27/05	8:00 AM	18.4	18.7	18.2	1.8	3.7	NE	30
12/27/05	8:30 AM	18.9	19.1	18.8	1.4	2.6	NE	30
12/27/05	9:00 AM	19.2	19.2	19.1	2.5	4.1	NE	30
12/27/05	9:30 AM	19.6	19.7	19.3	1.7	3.7	N	30
12/27/05	10:00 AM	19.8	20.0	19.5	2.5	4.8	N	30
12/27/05	10:30 AM	20.0	20.0	19.9	1.4	2.8	NE	30
12/27/05	11:00 AM	20.1	20.4	19.9	2.1	2.7	E	30
12/27/05	11:30 AM	20.2	20.3	20.0	1.9	3.5	E	30
12/27/05	12:00 PM	20.1	20.2	19.8	2.9	5.0	E	30
12/27/05	12:30 PM	20.2	20.5	20.0	3.1	4.5	NE	30
12/27/05	1:00 PM	20.3	20.6	20.2	1.7	2.7	NE	30
12/27/05	1:30 PM	20.1	20.4	19.9	1.9	4.1	N	30
12/27/05	2:00 PM	20.0	20.1	19.8	0.8	1.8	NE	30
12/27/05	2:30 PM	19.8	20.0	19.6	1.8	2.2	NE	30
12/27/05	3:00 PM	19.0	19.4	18.7	2.5	3.8	N	30
12/27/05	3:30 PM	18.8	19.1	18.5	1.7	2.9	E	30
12/27/05	4:00 PM	18.6	18.7	18.5	2.8	4.8	E	30
12/27/05	4:30 PM	18.4	18.6	18.2	2.4	3.6	E	30
12/27/05	5:00 PM	18.2	18.5	18.1	1.8	3.5	E	30
12/27/05	5:30 PM	18.0	18.3	17.9	2.8	5.0	E	30
12/27/05	6:00 PM	17.7	17.9	17.5	1.4	3.6	NE	30
12/27/05	6:30 PM	17.6	17.6	17.6	1.9	2.8	NE	30
12/27/05	7:00 PM	17.4	17.5	17.4	2.1	3.9	NE	30
12/27/05	7:30 PM	17.3	17.6	17.2	2.9	4.4	N	30
12/27/05	8:00 PM	17.2	17.5	16.9	1.9	2.6	NE	30
12/27/05	8:30 PM	17.1	17.2	17.0	1.8	3.2	NE	30
12/27/05	9:00 PM	17.0	17.2	16.8	2.2	3.5	E	30
12/27/05	9:30 PM	17.0	17.2	16.9	3.1	3.9	E	30
12/27/05	10:00 PM	17.0	17.1	16.9	3.5	5.4	NE	30
12/27/05	10:30 PM	17.0	17.2	16.8	2.7	4.6	E	30
12/27/05	11:00 PM	17.0	17.2	16.7	2.4	3.7	E	30
12/27/05	11:30 PM	16.9	17.3	16.8	1.8	3.8	E	30
12/28/05	12:00 AM	16.8	17.0	16.7	2.1	2.9	E	30
12/28/05	12:30 AM	16.6	16.7	16.4	1.9	3.4	NE	30
12/28/05	1:00 AM	16.6	16.9	16.4	1.1	1.8	NE	30
12/28/05	1:30 AM	16.4	16.7	16.2	1.9	2.6	N	30
12/28/05	2:00 AM	16.4	16.4	16.2	2.5	3.1	N	30
12/28/05	2:30 AM	16.3	16.6	16.2	1.1	1.5	N	30
12/28/05	3:00 AM	16.3	16.6	16.3	3.1	5.1	NE	30
12/28/05	3:30 AM	16.2	16.3	15.9	0.8	2.0	E	30
12/28/05	4:00 AM	16.2	16.6	15.9	2.1	3.4	E	30
12/28/05	4:30 AM	16.2	16.2	16.0	2.6	4.6	E	30
12/28/05	5:00 AM	16.2	16.5	15.9	3.4	3.8	NE	30
12/28/05	5:30 AM	16.1	16.2	16.1	1.5	3.3	NE	30
12/28/05	6:00 AM	16.2	16.6	15.9	2.1	2.3	NE	30
12/28/05	6:30 AM	16.2	16.3	16.1	1.5	3.2	NE	30
12/28/05	7:00 AM	16.2	16.4	16.0	1.4	3.2	NE	30
12/28/05	7:30 AM	16.0	16.3	16.0	2.5	2.6	N	30
12/28/05	8:00 AM	16.1	16.4	16.1	1.8	2.2	N	30
12/28/05	8:30 AM	16.1	16.1	15.9	2.7	4.8	N	30
12/28/05	9:00 AM	16.0	16.2	15.8	2.5	4.6	N	30
12/28/05	9:30 AM	16.0	16.0	15.8	1.5	2.9	NE	30
12/28/05	10:00 AM	15.9	16.2	15.7	2.1	3.8	NE	30
12/28/05	10:30 AM	15.8	15.9	15.7	1.9	2.5	E	30
12/28/05	11:00 AM	16.0	16.1	15.9	1.7	1.9	E	30
12/28/05	11:30 AM	16.6	16.6	16.4	2.2	3.3	E	30
12/28/05	12:00 PM	16.8	17.0	16.7	2.9	3.1	E	30
12/28/05	12:30 PM	17.0	17.1	16.7	1.8	3.8	E	30
12/28/05	1:00 PM	17.0	17.3	17.0	2.4	3.4	E	30
12/28/05	1:30 PM	17.0	17.0	17.0	1.9	2.8	E	30
12/28/05	2:00 PM	16.9	17.1	16.7	2.2	3.6	E	30
12/28/05	2:30 PM	16.8	17.1	16.7	1.7	3.0	E	30
12/28/05	3:00 PM	16.9	17.0	16.8	1.8	4.1	E	30
12/28/05	3:30 PM	16.7	16.9	16.5	2.1	2.6	NE	30
12/28/05	4:00 PM	16.5	16.5	16.5	2.2	4.0	E	30
12/28/05	4:30 PM	16.4	16.8	16.2	2.7	3.9	N	30
12/28/05	5:00 PM	16.3	16.5	16.2	3.2	4.6	E	30
12/28/05	5:30 PM	16.3	16.3	16.2	2.4	3.1	E	30
12/28/05	6:00 PM	16.3	16.6	16.1	1.9	3.5	E	30
12/28/05	6:30 PM	16.2	16.6	16.2	1.5	2.1	E	30
12/28/05	7:00 PM	16.2	16.6	16.0	1.9	3.1	NE	30
12/28/05	7:30 PM	16.2	16.4	15.9	2.5	3.6	E	30
12/28/05	8:00 PM	16.1	16.4	16.0	2.1	2.5	NE	30
12/28/05	8:30 PM	16.1	16.2	15.9	1.8	2.4	NE	30
12/28/05	9:00 PM	16.1	16.3	15.9	2.1	3.0	NE	30
12/28/05	9:30 PM	16.2	16.5	16.0	1.8	2.2	E	30
12/28/05	10:00 PM	16.0	16.2	15.8	1.1	1.5	E	30
12/28/05	10:30 PM	16.1	16.3	15.9	1.8	4.0	E	30
12/28/05	11:00 PM	16.0	16.0	15.8	1.4	3.3	E	30
12/28/05	11:30 PM	15.9	16.2	15.9	1.9	3.7	NE	30
12/29/05	12:00 AM	15.9	16.0	15.6	2.8	4.8	E	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/29/05	12:30 AM	15.8	15.9	15.7	3.1	4.6	E	30
12/29/05	1:00 AM	15.8	16.0	15.7	2.8	4.2	E	30
12/29/05	1:30 AM	15.7	15.7	15.5	1.8	3.9	E	30
12/29/05	2:00 AM	15.7	15.9	15.6	0.8	2.7	E	30
12/29/05	2:30 AM	15.6	15.8	15.6	1.2	3.3	NE	30
12/29/05	3:00 AM	15.5	15.5	15.3	2.9	4.2	E	30
12/29/05	3:30 AM	15.4	15.5	15.2	2.1	4.1	NE	30
12/29/05	4:00 AM	15.4	15.6	15.1	3.2	3.3	E	30
12/29/05	4:30 AM	15.3	15.4	15.2	1.2	1.8	E	30
12/29/05	5:00 AM	15.3	15.5	15.2	1.8	2.6	NE	30
12/29/05	5:30 AM	15.2	15.6	15.1	1.0	2.2	E	30
12/29/05	6:00 AM	15.4	15.7	15.2	2.2	2.3	E	30
12/29/05	6:30 AM	15.8	15.9	15.6	2.8	3.2	E	30
12/29/05	7:00 AM	16.2	16.2	16.2	1.4	2.3	E	30
12/29/05	7:30 AM	16.7	16.8	16.5	2.8	3.5	E	30
12/29/05	8:00 AM	17.2	17.4	17.1	0.7	2.1	NE	30
12/29/05	8:30 AM	17.9	18.1	17.8	1.2	2.2	E	30
12/29/05	9:00 AM	18.3	18.4	18.3	1.8	2.2	NE	30
12/29/05	9:30 AM	19.0	19.3	19.0	2.8	3.3	E	30
12/29/05	10:00 AM	19.7	19.8	19.6	1.2	3.4	NE	30
12/29/05	10:30 AM	20.2	20.3	20.1	1.9	4.1	E	30
12/29/05	11:00 AM	20.8	21.0	20.7	2.8	4.1	E	30
12/29/05	11:30 AM	21.1	21.2	21.0	1.1	2.3	E	30
12/29/05	12:00 PM	21.7	22.0	21.5	1.2	3.4	E	30
12/29/05	12:30 PM	22.3	22.7	22.2	2.9	3.6	E	30
12/29/05	1:00 PM	22.6	22.8	22.5	1.3	2.1	E	30
12/29/05	1:30 PM	22.5	22.8	22.4	2.2	3.3	NE	30
12/29/05	2:00 PM	22.4	22.7	22.2	2.9	4.6	NE	30
12/29/05	2:30 PM	22.2	22.5	21.9	1.2	3.1	NE	30
12/29/05	3:00 PM	21.9	22.2	21.7	1.1	1.7	NE	30
12/29/05	3:30 PM	21.7	21.8	21.6	1.2	1.6	NE	30
12/29/05	4:00 PM	21.4	21.6	21.2	2.9	4.8	NE	30
12/29/05	4:30 PM	21.1	21.1	20.9	2.4	3.0	E	30
12/29/05	5:00 PM	20.9	21.2	20.6	1.5	3.5	E	30
12/29/05	5:30 PM	20.7	20.8	20.5	1.9	3.5	E	30
12/29/05	6:00 PM	20.5	20.8	20.5	2.7	3.3	E	30
12/29/05	6:30 PM	20.3	20.4	20.2	2.1	3.6	NE	30
12/29/05	7:00 PM	20.1	20.4	20.0	2.9	4.9	E	30
12/29/05	7:30 PM	19.7	20.1	19.6	1.4	3.6	E	30
12/29/05	8:00 PM	19.4	19.6	19.4	1.8	3.9	E	30
12/29/05	8:30 PM	19.1	19.1	18.8	2.1	2.1	E	30
12/29/05	9:00 PM	18.7	18.9	18.5	2.8	4.6	E	30
12/29/05	9:30 PM	18.4	18.7	18.2	2.4	2.6	E	30
12/29/05	10:00 PM	18.1	18.5	17.9	1.7	3.1	NE	30
12/29/05	10:30 PM	17.7	17.9	17.6	2.1	3.7	NE	30
12/29/05	11:00 PM	17.3	17.5	17.2	1.9	3.4	NE	30
12/29/05	11:30 PM	16.9	17.0	16.8	1.1	2.8	E	30
12/30/05	12:00 AM	16.7	16.9	16.5	3.4	5.1	E	30
12/30/05	12:30 AM	16.4	16.6	16.3	1.2	1.8	N	30
12/30/05	1:00 AM	16.2	16.6	16.1	2.0	3.7	N	30
12/30/05	1:30 AM	16.1	16.5	16.1	2.8	3.7	NE	30
12/30/05	2:00 AM	16.1	16.1	16.1	1.1	1.9	NE	30
12/30/05	2:30 AM	16.0	16.2	16.0	1.8	2.1	E	30
12/30/05	3:00 AM	15.9	16.3	15.7	1.4	1.7	N	30
12/30/05	3:30 AM	15.9	16.1	15.7	1.9	4.0	N	30
12/30/05	4:00 AM	16.0	16.3	15.8	1.2	3.5	N	30
12/30/05	4:30 AM	15.9	16.1	15.7	1.8	3.5	N	30
12/30/05	5:00 AM	15.8	16.0	15.6	1.9	3.5	N	30
12/30/05	5:30 AM	15.7	15.7	15.6	2.2	3.8	N	30
12/30/05	6:00 AM	16.1	16.4	15.9	0.2	1.3	NE	30
12/30/05	6:30 AM	16.4	16.5	16.2	0.8	2.0	NE	30
12/30/05	7:00 AM	16.9	16.9	16.9	0.5	2.2	NE	30
12/30/05	7:30 AM	17.4	17.6	17.3	0.8	2.3	NE	30
12/30/05	8:00 AM	17.7	17.9	17.6	0.4	1.8	N	30
12/30/05	8:30 AM	17.9	18.3	17.8	0.9	1.2	NE	30
12/30/05	9:00 AM	18.1	18.3	17.9	1.2	3.3	NE	30
12/30/05	9:30 AM	18.3	18.4	18.2	1.9	2.3	N	30
12/30/05	10:00 AM	18.4	18.7	18.3	1.0	3.0	N	30
12/30/05	10:30 AM	18.5	18.5	18.2	0.5	1.1	NE	30
12/30/05	11:00 AM	18.6	18.9	18.4	0.8	2.1	NE	30
12/30/05	11:30 AM	18.8	18.9	18.6	0.2	1.9	NE	30
12/30/05	12:00 PM	19.0	19.3	18.9	0.2	1.7	NE	30
12/30/05	12:30 PM	19.1	19.5	18.9	0.8	2.0	NE	30
12/30/05	1:00 PM	19.3	19.6	19.2	0.9	2.8	NE	30
12/30/05	1:30 PM	19.4	19.5	19.3	0.4	0.7	NE	30
12/30/05	2:00 PM	19.5	19.6	19.4	0.8	1.2	NE	30
12/30/05	2:30 PM	19.3	19.7	19.2	1.2	3.4	N	30
12/30/05	3:00 PM	19.2	19.5	19.1	1.1	2.2	N	30
12/30/05	3:30 PM	19.0	19.3	19.0	0.8	2.2	N	30
12/30/05	4:00 PM	18.7	19.0	18.7	1.8	4.1	E	30
12/30/05	4:30 PM	18.5	18.5	18.2	0.4	2.4	E	30
12/30/05	5:00 PM	18.3	18.4	18.1	0.2	1.4	N	30
12/30/05	5:30 PM	18.1	18.3	17.9	0.9	2.2	N	30
12/30/05	6:00 PM	18.1	18.4	18.1	1.3	2.0	N	30
12/30/05	6:30 PM	18.0	18.2	18.0	1.7	2.1	N	30
12/30/05	7:00 PM	17.9	18.0	17.7	1.2	1.6	NE	30
12/30/05	7:30 PM	17.9	18.2	17.8	0.4	1.6	E	30
12/30/05	8:00 PM	17.8	18.1	17.6	0.9	1.9	NE	30
12/30/05	8:30 PM	17.7	18.0	17.7	0.2	1.5	N	30
12/30/05	9:00 PM	17.7	17.8	17.5	0.9	2.7	N	30
12/30/05	9:30 PM	17.6	18.0	17.4	2.8	4.1	N	30
12/30/05	10:00 PM	17.5	17.9	17.4	1.3	3.5	N	30
12/30/05	10:30 PM	17.5	17.8	17.3	0.8	2.4	NE	30
12/30/05	11:00 PM	17.4	17.4	17.2	0.4	0.9	N	30
12/30/05	11:30 PM	17.3	17.4	17.0	0.9	1.9	N	30
12/31/05	12:00 AM	17.3	17.5	17.1	1.2	3.3	N	30

Weather information in November 2005

Date (MDY)	Time	Average Temp	Hi Temp	Low Temp	Wind Speed (m/s) Average	Wind Speed (m/s) Hi	Wind Direction	Period
12/31/05	12:30 AM	17.2	17.3	17.2	1.9	3.6	NE	30
12/31/05	1:00 AM	17.2	17.4	16.9	0.7	0.9	NE	30
12/31/05	1:30 AM	17.2	17.5	17.0	0.4	2.4	NE	30
12/31/05	2:00 AM	17.3	17.5	17.2	0.9	1.6	NE	30
12/31/05	2:30 AM	17.1	17.4	17.0	1.2	3.5	N	30
12/31/05	3:00 AM	17.1	17.3	16.9	1.8	3.3	N	30
12/31/05	3:30 AM	17.2	17.5	17.0	1.0	3.1	N	30
12/31/05	4:00 AM	17.1	17.2	16.8	0.8	0.9	N	30
12/31/05	4:30 AM	17.1	17.2	16.8	0.3	0.6	N	30
12/31/05	5:00 AM	17.0	17.4	16.8	0.5	1.5	N	30
12/31/05	5:30 AM	17.0	17.2	16.8	0.9	1.7	N	30
12/31/05	6:00 AM	17.7	17.7	17.6	1.3	2.8	NE	30
12/31/05	6:30 AM	18.2	18.6	18.0	1.4	1.5	NE	30
12/31/05	7:00 AM	18.9	18.9	18.6	2.8	4.0	N	30
12/31/05	7:30 AM	19.3	19.6	19.1	1.2	2.6	N	30
12/31/05	8:00 AM	19.9	20.2	19.8	0.7	1.8	E	30
12/31/05	8:30 AM	20.3	20.6	20.1	0.6	2.1	NE	30
12/31/05	9:00 AM	20.7	20.9	20.5	1.5	1.7	NE	30
12/31/05	9:30 AM	21.3	21.5	21.3	0.4	0.7	NE	30
12/31/05	10:00 AM	22.1	22.1	22.0	1.9	4.1	NE	30
12/31/05	10:30 AM	22.7	22.9	22.4	2.5	3.7	NE	30
12/31/05	11:00 AM	23.5	23.6	23.4	1.7	3.8	NE	30
12/31/05	11:30 AM	24.1	24.1	23.8	1.6	3.1	N	30
12/31/05	12:00 PM	24.9	25.0	24.7	2.2	4.3	N	30
12/31/05	12:30 PM	25.2	25.4	25.0	2.3	3.7	N	30
12/31/05	1:00 PM	25.4	25.7	25.1	1.8	2.5	N	30
12/31/05	1:30 PM	25.2	25.4	25.2	0.8	3.0	N	30
12/31/05	2:00 PM	25.1	25.4	24.8	0.9	2.7	N	30
12/31/05	2:30 PM	24.8	24.9	24.7	0.4	1.2	N	30
12/31/05	3:00 PM	24.6	24.9	24.4	0.2	0.9	NE	30
12/31/05	3:30 PM	24.3	24.3	24.0	0.7	2.0	NE	30
12/31/05	4:00 PM	24.2	24.5	23.9	0.9	2.1	NE	30
12/31/05	4:30 PM	23.9	24.0	23.8	1.1	2.0	NE	30
12/31/05	5:00 PM	23.5	23.7	23.5	0.5	1.0	NE	30
12/31/05	5:30 PM	23.1	23.2	23.1	0.8	2.1	NE	30
12/31/05	6:00 PM	22.9	23.1	22.7	1.6	2.4	NE	30
12/31/05	6:30 PM	22.6	22.9	22.6	1.1	1.6	N	30
12/31/05	7:00 PM	22.4	22.6	22.4	1.9	2.7	N	30
12/31/05	7:30 PM	22.1	22.4	21.9	1.0	2.2	NE	30
12/31/05	8:00 PM	21.8	22.0	21.5	0.7	2.3	NE	30
12/31/05	8:30 PM	21.6	21.6	21.3	0.4	1.9	NE	30
12/31/05	9:00 PM	21.3	21.4	21.1	0.8	3.0	NE	30
12/31/05	9:30 PM	21.1	21.1	20.9	1.3	2.6	NE	30
12/31/05	10:00 PM	20.8	21.0	20.6	1.9	2.3	N	30
12/31/05	10:30 PM	20.5	20.7	20.3	1.2	3.5	N	30
12/31/05	11:00 PM	20.3	20.6	20.1	0.7	1.6	N	30
12/31/05	11:30 PM	19.9	20.2	19.7	0.8	2.4	N	30

Appendix F

Event-Action Plans

EVENT/ACTION PLAN FOR AIR QUALITY EXCEEDANCE

EVENT	ACTION			
	ET Leader	IC(E)	ER	Contractor
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Inform ER, IC(E) and Contractor 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily	1. Check monitoring data submitted by the ET 2. Check contractor's working method	1. Notify Contractor	1. Rectify any unacceptable practise 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Inform IC(E) and Contractor 3. Repeat measurements to confirm finding 4. Increase monitoring frequency to daily 5. Discuss with IC(E) and Contractor on remedial actions 6. If exceedance continues, arrange meeting with IC(E) and ER. 7. If exceedance stops, cease additional monitoring	1. Check monitoring data submitted by the ET Leader 2. Check the Contractor's working method 3. Discuss with ET and Contractor on possible remedial measures 4. Advise the ER on the effectiveness of the proposed remedial measures 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify the Contractor 3. Ensure remedial measures properly implemented	1. Submit proposals for remedial actions to IC(E) within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Inform ER, Contractor and EPD 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Assess the effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results	1. Check monitoring data submitted by the ET Leader 2. Check Contractor's working method 3. Discuss with ET and Contractor on possible remedial measures 4. Advise the ER on the effectiveness of the proposed remedial measures 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify the Contractor 3. Ensure remedial measures properly implemented	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate.

EVENT	EVENT/ACTION PLAN FOR AIR QUALITY EXCEEDANCE			
	ACTION			
	ET Leader	IC(E)	ER	Contractor
2. Exceedance for two or more consecutive samples	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Notify IC(E), ER, EPD and Contractor 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Carry out analysis of contractor's working procedures to determine possible mitigation to be implemented 6. Arrange meeting with IC(E) and ER to discuss the remedial actions to be taken 7. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results 8. If exceedance stops, cease additional monitoring	1. Discuss amongst ER, ET and Contractor on the potential remedial actions 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly 3. Supervise the implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. In consultation with the IC(E), agree with the Contractor on the remedial measures to be implemented 4. Ensure remedial measures are properly implemented 5. If exceedances continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedances 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated

EVENT/ACTION PLAN FOR NOISE EXCEEDANCE

EVENT	ACTION			
	ET Leader	IC(E)	ER	Contractor
Action Level	1. Notify the IC(E) and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IC(E) and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness	1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IC(E). 2. Implement noise mitigation proposals.
Limit Level	1. Notify the IC(E), the ER, the EPD and the Contractor. 2. Identify source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform the IC(E), the ER and the EPD the causes & actions taken for the exceedances. 7. Assess effectiveness of Contractor's remedial actions and keep the IC(E), the EPD and the ER informed of the results 8. If exceedance due to the construction works stops, cease additional monitoring	1. Discuss amongst the ER, the ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedances continue, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedances is abated.	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedances is abated.

Event	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE			
	ACTION			
	ET Leader	Contractor	ER	IEC
Action level being exceeded by one sampling day	1. Identify source(s) of impact; 2. Repeat in-situ measurement to confirm findings; 3. Notify Contractor in writing within 24 hours of identification of the exceedance 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Carry out investigation 6. Report the results of investigation to the Contractor within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction works 7. Discuss mitigation measures with Contractor if exceedance is due to the construction works within 4 working days 8. Repeat measurement on next day of exceedance if exceedance is due to the construction works	1. Notify the ER and IEC in writing within 24 hours of identification of exceedance 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Submit investigation report to IEC and ER within 3 working days of the identification of an exceedance 5. Consider changes of working method if exceedance is due to the construction works 6. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER if exceedance is due to the construction works within 4 working days of identification of an exceedance 7. Implement the agreed mitigation measures within reasonable time scale	1. Notify EPD and other relevant governmental agencies in writing within 24 hours of the identification of the exceedance 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Require contractor to propose remedial measures for the analysed problem if related to the construction works 4. Ensure remedial measures are properly implemented 5. Assess the effectiveness of the mitigation measure	1. Check monitoring data submitted by ET 2. Confirm ET assessment if exceedance is due / not due to the works 3. Discuss with ET, ER and Contractor on the mitigation measures 4. Review contractor's mitigation measures whenever necessary to ensure their effectiveness and advise the ER accordingly 5. Supervise the implementation of mitigation measures

Event	EVENT AND ACTION PLAN FOR WATER QUALITY			
	ACTION			
	ET Leader	Contractor	ER	IEC
Action level being exceeded by more than one consecutive sampling days	1. Identify source(s) of impact; 2. Repeat in-situ measurement to confirm findings 3. Notify Contractor in writing within 24 hours of identification 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Carry out investigation 6. Report the results of investigation to the Contractor within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction works 7. Discuss mitigation measures with IEC and Contractor within 4 working of identification of an exceedance 8. Ensure mitigation measures are implemented; 9. Prepare to increase the monitoring frequency to daily; 10. Repeat measurement on next day of exceedance.	1. Notify IEC and ER in writing within 24 hours of identification of exceedance 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Submit the results of the investigation to IEC and ER within 3 working days of the identification of an exceedance 6. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 4 working days of identification of an exceedance 7. Implement the agreed mitigation measures within reasonable time scale	1. Notify EPD and other relevant governmental agencies in writing within 24 hours of the identification of the exceedance 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Require contractor to propose remedial measures for the analysed problem if related to the construction works 4. Ensure remedial measures are properly implemented 5. Assess the effectiveness of the mitigation measure	1. Check monitoring data submitted by ET 2. Confirm ET assessment if exceedance is due / not due to the works 3. Discuss with ET, ER and Contractor on the mitigation measures. 4. Review contractor's mitigation measures whenever necessary to ensure their effectiveness and advise the ER accordingly 5. Assess the effectiveness of the implemented mitigation measures.

Event	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE			
	ACTION			
	ET Leader	Contractor	ER	IEC
Limit level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Notify Contractor in writing within 24 hours of identification of the exceedance 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Carry out investigation 6. Report the results of investigation to the Contractor within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction works 7. Discuss mitigation measures with IEC, ER and Contractor within 4 working of identification of an exceedance 8. Ensure mitigation measures are implemented; 9. Increase the monitoring frequency to daily until no exceedance of Limit Level.	1. Notify IEC and ER in writing; within 24 hours of the identification of the exceedance 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Submit the results of the investigation to IEC and ER within 3 working days of the identification of an exceedance 6. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 4 working days of the identification of an exceedance 7. Implement the agreed mitigation measures within reasonable time scale	1. Notify EPD and other relevant governmental agencies in writing within 24 hours of identification of exceedance 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Request Contractor to critically review the working methods; 4. Ensure remedial measures are properly implemented 5. Assess the effectiveness of the implemented mitigation measures.	1. Check monitoring data submitted by ET 2. Confirm ET assessment if exceedance is due / not due to the works 3. Discuss with ET, ER and Contractor on the mitigation measures. 4. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly. 5. Assess the effectiveness of the implemented mitigation measures

Event	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE			
	ACTION			
	ET Leader	Contractor	ER	IEC
Limit Level being exceeded by more than one consecutive sampling days	1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Notify Contractor in writing within 24 hours of identification of the exceedance 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Carry out investigation 6. Report the results of investigation to the Contractor within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction works 7. Discuss mitigation measures with IEC, ER and Contractor; 8. Ensure mitigation measures are implemented; 9. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days.	1. Notify ER and IEC in writing within 24 hours of the identification of the exceedance and 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 8. Submit the results of the investigation to IEC and ER within 3 working days of the identification of an exceedance 5. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 4 working days; 6. Implement the agreed mitigation measures within reasonable time scale 7. As directed by the Engineer, to slow down or to stop all or part of the marine work or construction actives.	1. Notify EPD and other relevant governmental agencies in writing within 24 hours of identification of exceedance 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Request Contractor to critically review the working methods; 6. Ensure remedial measures are properly implemented 4. Assess the effectiveness of the implemented mitigation measures; 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit Level.	1. Check monitoring data submitted by ET 2. Confirm ET assessment if exceedance is due / not due to the works 3. Discuss with ER, ET and Contractor on the mitigation measures. 4. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly. 5. Assess the effectiveness of the implemented mitigation measures.

Appendix G

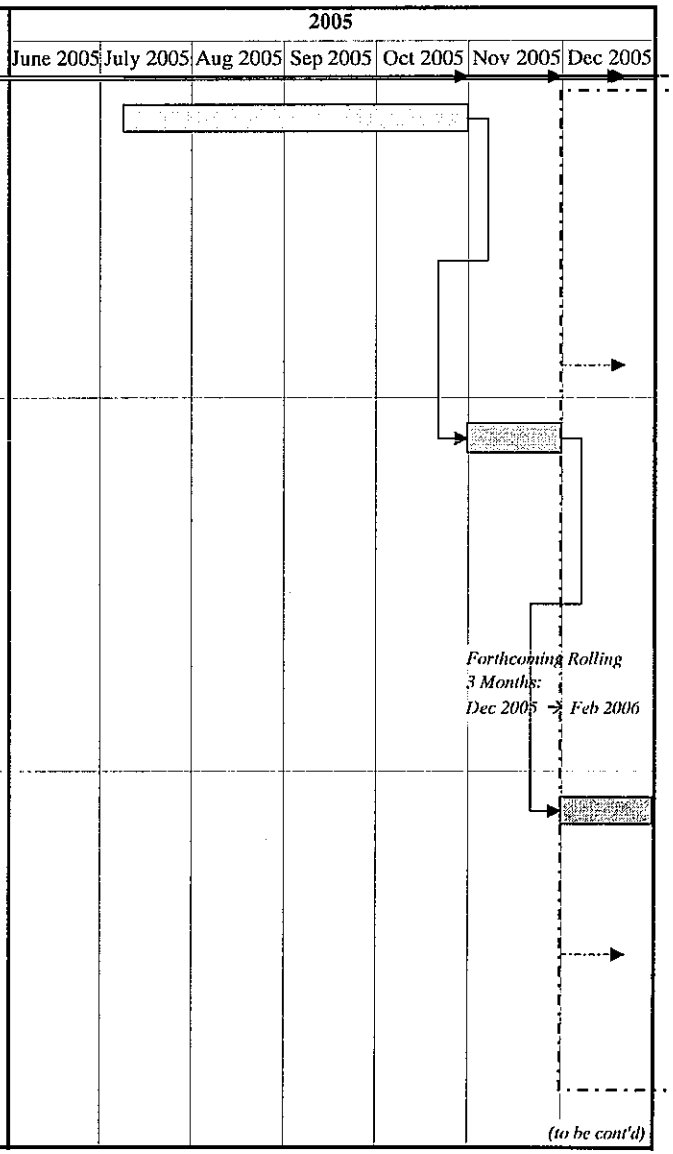
Construction Programme

3-Month Rolling Programme of Works (Rev. 5)

Date: *1 December 2005 (Thursday)*

Forthcoming Rolling 3 Months : Dec 2005 ⇨ Feb 2006

Section of Works / Major Variation Orders	Description	Earliest Start Date	*Latest Start Date*	Finish Date	Duration
Section D1	Taking over, operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	8 July 2005	*8 July 2005*	31 Oct 2005	116 days
Section D2	Operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] - *Section Subject to Excision* [The Engineer has instructed to proceed with the works of Section D2, as per his letter ref. *(39) in FM CN/CV/2005/05/M15/010 dated 30 September 2005*] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	1 Nov 2005	*1 Nov 2005*	30 Nov 2005	30 days
Section D3	Operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] - *Section Subject to Excision* [The Engineer has instructed to proceed with the works of Section D3, as per his letter ref. *(49) in FM CN/CV/2005/05/M15/010 dated 1 November 2005*] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	1 Dec 2005	*1 Dec 2005*	31 Dec 2005	31 days



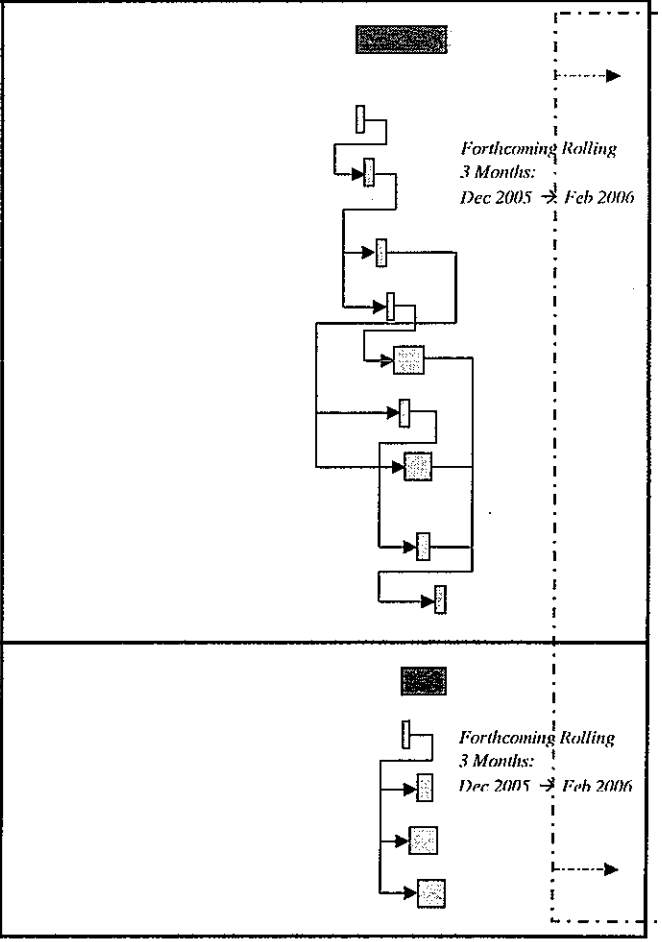
CEDD Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Wo

3-Month Rolling Programme of Works (Rev. 5)

Date: *1 December 2005 (Thursday)*

Forthcoming Rolling 3 Months : Dec 2005 ⇨ Feb 2006

Section of Works / Major Variation Orders	Description	Earliest Start Date	*Latest Start Date*	Finish Date	Duration
Variation Order No. 1	Provision of Combined Reception and Exit Office at the Associated Facilities at Portion D4	26 Sep 2005	*26 Sep 2005*	26 Oct 2005	31 days
	V.O. 1_a Setting Out, Site Clearance and General Preparation Works	*26 Sep 2005*	*26 Sep 2005*	*28 Sep 2005*	*3 days*
	V.O. 1_b Construction of Blinding Layers for Footings of Weighbridges and the Combined Reception and Exit Office	*29 Sep 2005*	*29 Sep 2005*	*2 Oct 2005*	*4 days*
	V.O. 1_c Construction of Footings of Weighbridges	*3 Oct 2005*	*3 Oct 2005*	*6 Oct 2005*	*4 days*
	V.O. 1_d Construction of Footings of Combined Reception and Exit Office	*6 Oct 2005*	*6 Oct 2005*	*7 Oct 2005*	*2 days*
	V.O. 1_e Installation of Containers, Staircase, Concrete Barriers and Collision Bollards	*8 Oct 2005*	*8 Oct 2005*	*17 Oct 2005*	*10 days*
	V.O. 1_f Installation of Weighbridges	*10 Oct 2005*	*10 Oct 2005*	*12 Oct 2005*	*3 days*
	V.O. 1_g Installation of Hardware Equipment, Furniture and Set Up of Temporary Electricity Supply	*11 Oct 2005*	*11 Oct 2005*	*20 Oct 2005*	*10 days*
	V.O. 1_h Installation of Application Softwares	*15 Oct 2005*	*15 Oct 2005*	*20 Oct 2005*	*6 days*
	V.O. 1_i Testing and Commissioning	*24 Oct 2005*	*24 Oct 2005*	*26 Oct 2005*	*3 days*
Variation Order No. 4	Setup of Tipping Bay and Preliminary Sorting Device	13 Oct 2005	*13 Oct 2005*	25 Oct 2005	13 days
	V.O. 4_a Setting Out, Site Clearance and General Preparation Works	*13 Oct 2005*	*13 Oct 2005*	*13 Oct 2005*	*1 day*
	V.O. 4_b General Formation of Associcated Access Road to the Tipping Bay	*17 Oct 2005*	*17 Oct 2005*	*20 Oct 2005*	*4 days*
	V.O. 4_c Installation of Concrete Blocks and Wheel Stop	*14 Oct 2005*	*14 Oct 2005*	*22 Oct 2005*	*9 days*
	V.O. 4_d Construction of Tipping Bay Platform	*17 Oct 2005*	*17 Oct 2005*	*25 Oct 2005*	*9 days*



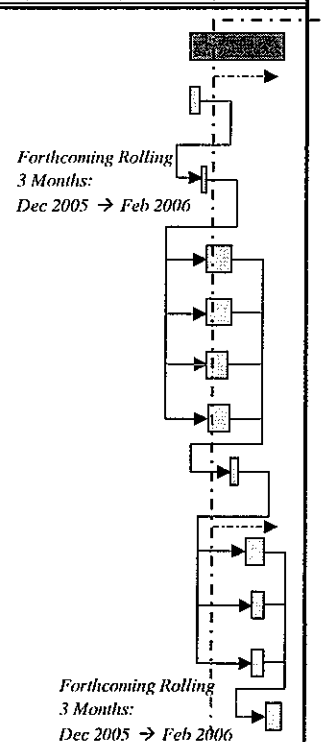
CEDD Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Wo

3-Month Rolling Programme of Works (Rev. 5)

Date: *1 December 2005 (Thursday)*

Forthcoming Rolling 3 Months : Dec 2005 ⇨ Feb 2006

Section of Works / Major Variation Orders	Description	Earliest Start Date	*Latest Start Date*	Finish Date	Duration
Variation Order No. 11	Reconstruction of the Site Office for the Engineer at QBBP	22 Nov 2005	*22 Nov 2005*	24 Dec 2005	33 days
	V.O. 11_a Site Clearance at the New Container Office Area and Diversion of Existing Utilities	*22 Nov 2005*	*22 Nov 2005*	*26 Nov 2005*	*5 days*
	V.O. 11_b Allocation and Set Up of Six New Office Containers (L1, U1, L2, U2, L3 and U3)	*27 Nov 2005*	*27 Nov 2005*	*27 Nov 2005*	*1 day*
	V.O. 11_c Laying of Ducts for Lightings and Communication Cables	*28 Nov 2005*	*28 Nov 2005*	*7 Dec 2005*	*10 days*
	V.O. 11_d Installation of Air Conditioners	*28 Nov 2005*	*28 Nov 2005*	*7 Dec 2005*	*10 days*
	V.O. 11_e Erection of Shelters, Barriers, Staircases and Canopys	*28 Nov 2005*	*28 Nov 2005*	*5 Dec 2005*	*8 days*
	V.O. 11_f Concreting of Walkway	*30 Nov 2005*	*30 Nov 2005*	*7 Dec 2005*	*8 days*
	V.O. 11_g Relocation of Furnitures and Office Equipments from the Existing Engineer's Site Offices to the Newly Set Up Engineer's Site Offices	*8 Dec 2005*	*8 Dec 2005*	*10 Dec 2005*	*3 days*
	V.O. 11_h Demolition of the Existing Engineer's Site Offices and Carpark	*12 Dec 2005*	*12 Dec 2005*	*18 Dec 2005*	*7 days*
	V.O. 11_i Replacement of the Existing Surveillance Office Container	*15 Dec 2005*	*15 Dec 2005*	*18 Dec 2005*	*4 days*
	V.O. 11_j Relocation, Setup and Re-connection of the Toilet Container	*15 Dec 2005*	*15 Dec 2005*	*18 Dec 2005*	*4 days*
	V.O. 11_k Construction of a New Sand Trap and Associated Drainage	*19 Dec 2005*	*19 Dec 2005*	*24 Dec 2005*	*6 days*



Remarks :- *(1) Works to be carried out in the forthcoming month (1 Dec 2005 ~ 31 Dec 2005) :*

Section B3 of the Works: Operation and maintenance of the Public Filling Barging Point (PFBP) at Quarry Bay [Portion B of the Site]
Section C3 of the Works: Operation and maintenance of the Public Fill Reception Facility (PFRF) at Mui Wo [Portion C of the Site]
Section D3 of the Works: Operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site]

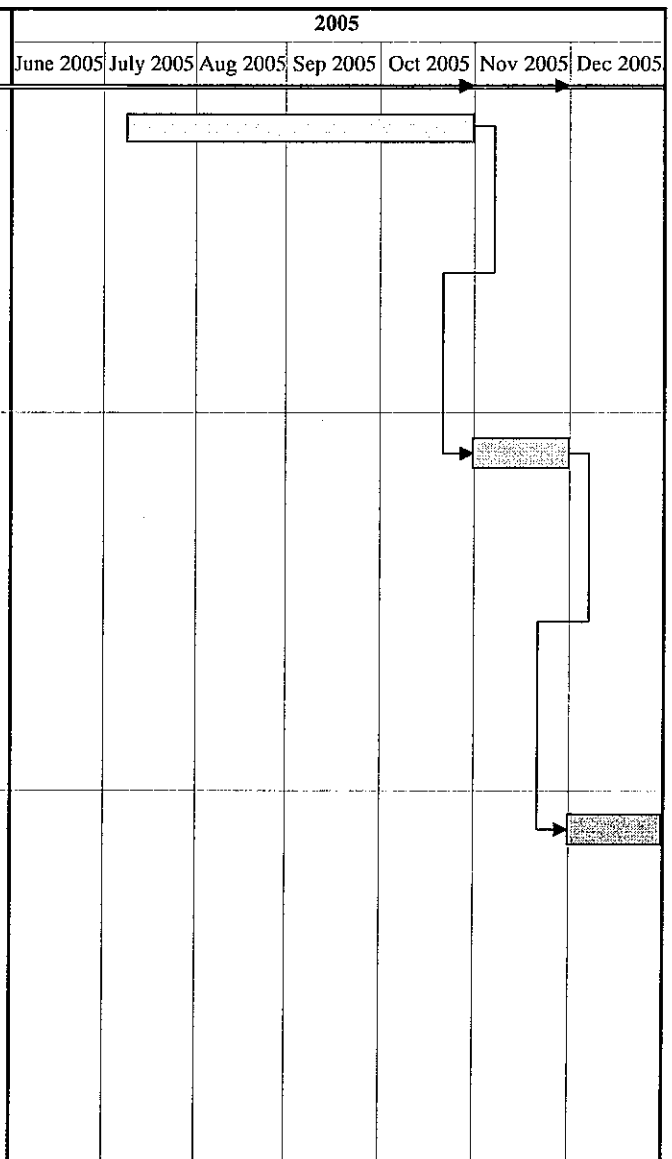
(2) Remainder of the Works after the forthcoming month (i.e., days after 31 Dec 2005) :

NIL

Master Programme of Works (Rev. 4)

Date: *8 December 2005 (Thursday)*

Section of Works	Description	Earliest Start Date	*Latest Start Date*	Finish Date	Duration
Section D1	Taking over, operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	8 July 2005	*8 July 2005*	31 Oct 2005	116 days
Section D2	Operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] - *Section Subject to Excision* [The Engineer has instructed to proceed with the works of Section D2, as per his letter ref. *(39) in FM CN/CV/2005/05/M15/010 dated 30 September 2005*] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	1 Nov 2005	*1 Nov 2005*	30 Nov 2005	30 days
Section D3	Operation and maintenance of the Fill Bank at Tseung Kwan O Area 137 [Portion D of the Site] - *Section Subject to Excision* [The Engineer has instructed to proceed with the works of Section D3, as per his letter ref. *(49) in FM CN/CV/2005/05/M15/010 dated 1 November 2005*] *{ Main Works: - (i) Handling of Public Fill delivered by Public Dump Trucks through Land Access into the Fill Bank at Tseung Kwan O Area 137;* *(ii) Handling of Public Fill delivered by Barges at the Barge Handling Area (BHA);* *(iii) Sorting of Oversized Materials from the Public Fill supplied to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project; &* *(iv) Supply of Public Fill to the Sorting Plant of the Penny's Bay Reclamation Stage 2 Project. }*	1 Dec 2005	*1 Dec 2005*	31 Dec 2005	31 days



Appendix H

IEC's Site Audit Records

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Date of Site Audit:	01.12.2005	Time of Site Audit:	10:30 AM
Site Auditor:	Antony Wong	Phase of Works:	Operational
Checked by:	Ben Ridley		

Checklist	Yes	No	Remarks
Operational Phase			
Fugitive Dust Emission			
Have dust control/mitigation measures been implemented to ensure full protection of the nearby ASRs?	x		
Are all installed air pollution control systems and measures operated and/or implemented in accordance with their design merits?	x		
A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading/unloading and similar activities should be allowed.	x		
Truck speed limit shall be limited to within 10km per hour.	x		
Is the designated site main haul route (paved)?	x		
Are water lorries and/or road sweepers used in dust suppression? Frequency of watering at least four times per day (as per PS Clause 1.76)? The frequency shall be increased when the weather is dry, when the truckloads are high, and for haul roads located within 100m from the northern boundary of the site.	x		
All dusty fill material shall be sprayed with water or a dust suppression chemical prior to loading, unloading or transfer so as to maintain the fill material wet, except for situations where the moisture content of the dusty material is a matter of concern.	x		
Frequent watering (at least three times per day) of the worksites with active dusty operations. The frequency shall be increased when the weather is dry.	x		
Vehicle washing facilities including high pressure water jet installed at the existing exit shall be maintained and operated by designated staff to ensure that these dust control measures are being used.	x		
Before leaving the fill bank, every vehicle shall be washed to remove any dusty materials from its body and wheels.	x		
Trucks carrying dusty load entered to the site shall be sprayed with water once the impervious sheeting covering the load is removed.	x		
Have the temporary slope surfaces, especially those facing to the north of the site, been covered (tarpaulin sheeting or other impermeable sheeting), or sprayed (with water or a dust suppression chemical) or protected by other methods approved by CEDD?			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
Final slope surfaces, especially those facing to the north of the site, shall be treated by compaction, followed by hydroseeding, vegetation plating or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CEDD.			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
C&DMSF: When belt conveyor systems are in use for transfer of fill material, the conveyors shall be enclosed on top and 2 sides. Every transfer point between any two conveyors shall be enclosed.			N/A
C&DMSF: Is the belt scraper installed at the head pulley of every belt conveyor effective in dislodging fine particles that may adhere to the belt surface, and to reduce carrying back of fine particles on the return belt?			N/A
C&DMSF: The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the materials landing point is maintained at no more than 1m.			N/A
Note: Public fill at the stockpiling area should be handled to avoid segregation, deterioration, erosion or instability of the material, especially for the stockpiling surface facing to the north of the site.			
Fixed Noise Impact			
Have the approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) been adopted?	x		
Note: The noise standards specified in the Technical Memorandum for the Assessment of Noise From Places Other Than Domestic Premises, Public Places or Construction Sites shall be met.			

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist	Yes	No	Remarks
Water Quality			
The existing/realigned intercepting channels and the sand/silt removal facilities should be used and maintained.	x		
Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bag barriers shall be used to assist the diversion of polluted stormwater to the silt removal facilities.	x		
Has a buffer distance of at least 100m been maintained between the boundary of the public fill stockpiling area and the sea front?	x		
C&DMSF: A buffer distance of at least 20m should be maintained between the boundary of the C&DMSF and the seafront.			N/A
C&DMSF: Is the stormwater interception system in the C&DMSF effective?			N/A
Are materials properly covered when there is any chance for the materials to be washed away?	x		
Temporary slope surfaces shall be covered as far as practicable with tarpaulin sheets or other impermeable sheeting or protected by other methods approved by CED especially when a rainstorm is imminent or forecast.			Hydroseeded slopes in Portions A, B, G, H and I
Final slope surfaces shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CED to prevent the washing away of stockpiled material.			Hydroseeded slopes in Portions A, B, G, H and I
Existing and newly constructed catchpits, sand and silt removal facilities and intercepting channels should be maintained, and the deposited silt and grit should be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	x		
A wheel washing bay should be provided at the site exit and wash-water should have sand and silt settled out or removed before being discharged into storm drains.	x		
Is the section of construction road between the wheel washing bay the public road paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains?	x		
Sewage from toilets should be discharged into a foul sewer, or chemical toilets should be provided.	x		
Should the use of chemical toilets be necessary, these should be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	x		
Are the grease traps in the canteen kitchens put into use and effective ?			N/A
If no communal sewer can be provided, has the sewage generated from the workforce at the site offices been diverted to septic tanks and regularly removed by using vacuum tankers.	x		Discharged to DP4 as per discharge licence.
The drainage system provided at car parking areas should be installed with oil interceptors in addition to sand/silt removal facilities. Has regular cleaning of the system been carried out?	x		
Has disturbance to seabed sediments and undue turbidity from vessel movement or propeller wash been minimized?	x		
Barges should not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents should be properly collected and treated before disposal.	x		
Is foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging point? Are these due to work activities?		x	
Have silt curtains been provided at the outward side of the basin near the barging point throughout the operational phase when there is public fill intake by barges (after Dec 2003)?	x		See observation 2

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist	Yes	No	Remarks
Has a waste collection vessel been deployed to remove floating debris on the sea near the fill bank for proper disposal?	x		
Note: Effluent discharged from the site shall meet the relevant discharge limits specified in the Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.			
Landfill Gas Hazard			
Are gas detection equipment and appropriate breathing apparatus available and used when workers entering confined spaces or trenches deeper than 2 metres?	x		
A Safety Officer/Supervisor should be present on site throughout the operational stage.	x		
Has the Safety Officer/Supervisor been provided with intrinsically safe portable instrument(s), appropriately calibrated and capable of measuring the gases in the ranges as recommended in the EIA Report?	x		
Has a LFG monitoring programme been formulated by the Safety Officer/Supervisor or by a qualified person?	x		
Has periodic/routine monitoring been conducted during ground-works, in all excavations, and works in confined spaces, if any?	x		
Landscape and Visual			
Does the design of the fill bank and platform heights adopted allow the fill bank to fit into the general topography of the surrounding land? Straight edged slopes should be avoided.	x		
The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	x		
Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green/brown) once completed.	x		
The barging point and the C&DMSF at the fill bank shall not be in operation from 7:00pm to 8:00am daily to avoid potential visual impact from glare.	x		To 11pm as per latest EP.
Other Environmental Factors			
C&D waste sorted from mixed C&D material at the C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	x		
Environmental Monitoring and Audit			
Is a log book maintained by the ET?	x		
At the time of site audit, was any monitoring underway?	x		
If yes, what parameters are being monitored and were the correct procedures adopted?			1-hour TSP. $L_{eq\ (30\ min)}$
Have any mitigation measures been implemented as a result of exceedance of Action-Limit Levels? If so, do they appear to be effective?			N/A

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Observations (FB)

Issue	Action
1) There were several containers containing lubricating oil stored in the Chemical Waste Shed and without appropriate labeling, and some of them were uncapped. Some 20L and 200L containers were not placed in drip tray.	The Contractor was reminded to properly cap and label all the chemical / oil containers, and place all the chemical wastes into drip trays inside the Shed.
2) Silt curtains outside the barging point was damaged.	The Contractor should fix the silt curtains asap.
3) Some rubbish was found in the water filling station.	The Contractor was reminded to keep site tideness.
4) A new air compressor without Noise Emission Label (NEL) (not in-use) was found at DP3 near the wheel washing facilities.	The Contractor was reminded to fit a NEL issued by EPD on the air compressor before it was in use.
5) Two uncovered stockpiles of sand were found adjacent to the U-channel at DP3 near the wheel washing facilities.	The Contractor was requested to cover the stockpiles and move the stockpiles at least 1m apart from the channel.

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Date of Site Audit:	13.12.2005	Time of Site Audit:	10:30 AM
Site Auditor:	Antony Wong	Phase of Works:	Operational
Checked by:	Ben Ridley		

Checklist (FB)	Yes	No	Remarks
Operational Phase			
Fugitive Dust Emission			
Have dust control/mitigation measures been implemented to ensure full protection of the nearby ASRs?	x		
Are all installed air pollution control systems and measures operated and/or implemented in accordance with their design merits?	x		
A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading/unloading and similar activities should be allowed.	x		
Truck speed limit shall be limited to within 10km per hour.	x		
Is the designated site main haul route (paved)?	x		
Are water lorries and/or road sweepers used in dust suppression? Frequency of watering at least four times per day (as per PS Clause 1.76)? The frequency shall be increased when the weather is dry, when the truckloads are high, and for haul roads located within 100m from the northern boundary of the site.	x		
All dusty fill material shall be sprayed with water or a dust suppression chemical prior to loading, unloading or transfer so as to maintain the fill material wet, except for situations where the moisture content of the dusty material is a matter of concern.	x		
Frequent watering (at least three times per day) of the worksites with active dusty operations. The frequency shall be increased when the weather is dry.	x		
Vehicle washing facilities including high pressure water jet installed at the exiting exit shall be maintained and operated by designated staff to ensure that these dust control measures are being used.	x		
Before leaving the fill bank, every vehicle shall be washed to remove any dusty materials from its body and wheels.	x		
Trucks carrying dusty load entered to the site shall be sprayed with water once the impervious sheeting covering the load is removed.	x		
Have the temporary slope surfaces, especially those facing to the north of the site, been covered (tarpaulin sheeting or other impermeable sheeting), or sprayed (with water or a dust suppression chemical) or protected by other methods approved by CEDD?			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
Final slope surfaces, especially those facing to the north of the site, shall be treated by compaction, followed by hydroseeding, vegetation plating or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CEDD.			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
C&DMSF: When belt conveyor systems are in use for transfer of fill material, the conveyors shall be enclosed on top and 2 sides. Every transfer point between any two conveyors shall be enclosed.			N/A
C&DMSF: Is the belt scraper installed at the head pulley of every belt conveyor effective in dislodging fine particles that may adhere to the belt surface, and to reduce carrying back of fine particles on the return belt?			N/A
C&DMSF: The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the materials landing point is maintained at no more than 1m.			N/A
Note: Public fill at the stockpiling area should be handled to avoid segregation, deterioration, erosion or instability of the material, especially for the stockpiling surface facing to the north of the site.			
Fixed Noise Impact			
Have the approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) been adopted?	x		
Note: The noise standards specified in the Technical Memorandum for the Assesement of Noise From Places Other Than Domestic Premises, Public Places or Construction Sites shall be met.			

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist (FB)	Yes	No	Remarks
Water Quality			
The existing/realigned intercepting channels and the sand/silt removal facilities should be used and maintained.	x		
Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bag barriers shall be used to assist the diversion of polluted stormwater to the silt removal facilities.	x		
Has a buffer distance of at least 100m been maintained between the boundary of the public fill stockpiling area and the sea front?	x		
C&DMSF: A buffer distance of at least 20m should be maintained between the boundary of the C&DMSF and the seafront.			N/A
C&DMSF: Is the stormwater interception system in the C&DMSF effective?			N/A
Are materials properly covered when there is any chance for the materials to be washed away?	x		
Temporary slope surfaces shall be covered as far as practicable with tarpaulin sheets or other impermeable sheeting or protected by other methods approved by CED especially when a rainstorm is imminent or forecast.			Hydroseeded slopes in Portions A, B, G, H and I
Final slope surfaces shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CED to prevent the washing away of stockpiled material.			Hydroseeded slopes in Portions A, B, G, H and I
Existing and newly constructed catchpits, sand and silt removal facilities and intercepting channels should be maintained, and the deposited silt and grit should be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	x		
A wheel washing bay should be provided at the site exit and wash-water should have sand and silt settled out or removed before being discharged into storm drains.	x		
Is the section of construction road between the wheel washing bay the public road paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains?	x		
Sewage from toilets should be discharged into a foul sewer, or chemical toilets should be provided.	x		
Should the use of chemical toilets be necessary, these should be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	x		
Are the grease traps in the canteen kitchens put into use and effective ?			N/A
If no communal sewer can be provided, has the sewage generated from the workforce at the site offices been diverted to septic tanks and regularly removed by using vacuum tankers.	x		Discharged to DP4 as per discharge licence.
The drainage system provided at car parking areas should be installed with oil interceptors in addition to sand/silt removal facilities. Has regular cleaning of the system been carried out?	x		
Has disturbance to seabed sediments and undue turbidity from vessel movement or propeller wash been minimized?	x		
Barges should not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents should be properly collected and treated before disposal.	x		
Is foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging point? Are these due to work activities?		x	
Have silt curtains been provided at the outward side of the basin near the barging point throughout the operational phase when there is public fill intake by barges (after Dec 2003)?	x		See observation 3

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist (FB)	Yes	No	Remarks
Has a waste collection vessel been deployed to remove floating debris on the sea near the fill bank for proper disposal?	x		
Note: Effluent discharged from the site shall meet the relevant discharge limits specified in the Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.			
Landfill Gas Hazard			
Are gas detection equipment and appropriate breathing apparatus available and used when workers entering confined spaces or trenches deeper than 2 metres?	x		
A Safety Officer/Supervisor should be present on site throughout the operational stage.	x		
Has the Safety Officer/Supervisor been provided with intrinsically safe portable instrument(s), appropriately calibrated and capable of measuring the gases in the ranges as recommended in the EIA Report?	x		
Has a LFG monitoring programme been formulated by the Safety Officer/Supervisor or by a qualified person?	x		
Has periodic/routine monitoring been conducted during ground-works, in all excavations, and works in confined spaces, if any?	x		
Landscape and Visual			
Does the design of the fill bank and platform heights adopted allow the fill bank to fit into the general topography of the surrounding land? Straight edged slopes should be avoided.	x		
The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	x		
Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green/brown) once completed.	x		
The barging point and the C&DMSF at the fill bank shall not be in operation from 7:00pm to 8:00am daily to avoid potential visual impact from glare.	x		To 11pm as per latest EP.
Other Environmental Factors			
C&D waste sorted from mixed C&D material at the C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	x		
Environmental Monitoring and Audit			
Is a log book maintained by the ET?	x		
At the time of site audit, was any monitoring underway?	x		
If yes, what parameters are being monitored and were the correct procedures adopted?			1-hour TSP
Have any mitigation measures been implemented as a result of exceedance of Action-Limit Levels? If so, do they appear to be effective?			N/A

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Observations (FB)

Issue	Action
1) There were many uncapped and unlabelled waste lubricating oil containers stored in the Chemical Waste Shed. One of the existing drip trays was found to be filled with waste oil. A number of containers were still stored without any drip trays.	The Contractor was reminded to properly cap and label all the chemical / oil containers, and place all the chemical wastes into drip trays inside the Shed. Also, the spilled waste oil in the drip tray should be collected into an empty drum for disposal.
2) A patch of ground at the maintenance workshop was found contaminated with lubricating oil due to maintenance work.	The Contractor should clean up the contaminated ground ASAP. Also, the Contractor was reminded to provide impermeable sheet on the ground before conducting maintenance works.
3) Further to the last site inspection conducted on 1 Dec 2005, silt curtains outside the barging point were still damaged.	The Contractor should fix or replace the silt curtains ASAP.
4) C&D material stockpile was too close to the waterfront of the Barge Handling Area (BHA). Some C&D material was observed to have fallen into the marine water.	A worker was observed to be clearing the mentioned C&D material. The Contractor was reminded to keep the stockpiles behind the concrete walkway and any spilled material (onto the walkway) should be cleaned regularly.
5) The haul road section connecting to the C&DMSF weighbridge to the C&DMSF western access road was found to be dry and fugitive dust was generated when trucks passed through.	Under the existing contract, the Contractor is required to provide adequate watering for the mentioned haul road section.
6) A 16L container of lubricating oil was placed on the ground at DP3 near the wheel washing facilities.	The Contractor should provide drip tray for temporarily storage of any chemicals.
7) Two uncovered stockpiles of sand were found adjacent to the U-channel at DP3 near the wheel washing facilities. A worker was placing woodblocks between the U-channel and the stockpile.	The stockpiles should be covered by impervious sheeting to prevent fugitive dust emission.
8) An unlabelled 200L drum was observed in a drip tray by the excavation works for the waste-checking platform close to the site offices. A second container (18L) was also observed placed on the ground just outside the site office door.	The contractor should label both the containers and place the 18L container into a drip tray.

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Date of Site Audit:	20.12.2005	Time of Site Audit:	11:45 AM
Site Auditor:	Antony Wong	Phase of Works:	Operational
Checked by:	Ben Ridley		

Checklist (FB)	Yes	No	Remarks
Operational Phase			
Fugitive Dust Emission			
Have dust control/mitigation measures been implemented to ensure full protection of the nearby ASRs?	x		
Are all installed air pollution control systems and measures operated and/or implemented in accordance with their design merits?	x		
A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading/unloading and similar activities should be allowed.	x		
Truck speed limit shall be limited to within 10km per hour.	x		
Is the designated site main haul route (paved)?	x		
Are water lorries and/or road sweepers used in dust suppression? Frequency of watering at least four times per day (as per PS Clause 1.76)? The frequency shall be increased when the weather is dry, when the truckloads are high, and for haul roads located within 100m from the northern boundary of the site.	x		
All dusty fill material shall be sprayed with water or a dust suppression chemical prior to loading, unloading or transfer so as to maintain the fill material wet, except for situations where the moisture content of the dusty material is a matter of concern.	x		
Frequent watering (at least three times per day) of the worksites with active dusty operations. The frequency shall be increased when the weather is dry.	x		
Vehicle washing facilities including high pressure water jet installed at the existing exit shall be maintained and operated by designated staff to ensure that these dust control measures are being used.	x		
Before leaving the fill bank, every vehicle shall be washed to remove any dusty materials from its body and wheels.	x		
Trucks carrying dusty load entered to the site shall be sprayed with water once the impervious sheeting covering the load is removed.	x		
Have the temporary slope surfaces, especially those facing to the north of the site, been covered (tarpaulin sheeting or other impermeable sheeting), or sprayed (with water or a dust suppression chemical) or protected by other methods approved by CEDD?			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
Final slope surfaces, especially those facing to the north of the site, shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CEDD.			Finished Slopes in Portions A,B,G,H and I have been hydroseeded.
C&DMSF: When belt conveyor systems are in use for transfer of fill material, the conveyors shall be enclosed on top and 2 sides. Every transfer point between any two conveyors shall be enclosed.			N/A
C&DMSF: Is the belt scraper installed at the head pulley of every belt conveyor effective in dislodging fine particles that may adhere to the belt surface, and to reduce carrying back of fine particles on the return belt?			N/A
C&DMSF: The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the materials landing point is maintained at no more than 1m.			N/A
Note: Public fill at the stockpiling area should be handled to avoid segregation, deterioration, erosion or instability of the material, especially for the stockpiling surface facing to the north of the site.			
Fixed Noise Impact			
Have the approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) been adopted?	x		
Note: The noise standards specified in the Technical Memorandum for the Assessment of Noise From Places Other Than Domestic Premises, Public Places or Construction Sites shall be met.			

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist (FB)	Yes	No	Remarks
Water Quality			
The existing/realigned intercepting channels and the sand/silt removal facilities should be used and maintained.	x		
Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bag barriers shall be used to assist the diversion of polluted stormwater to the silt removal facilities.	x		
Has a buffer distance of at least 100m been maintained between the boundary of the public fill stockpiling area and the sea front?	x		
C&DMSF: A buffer distance of at least 20m should be maintained between the boundary of the C&DMSF and the seafront.			N/A
C&DMSF: Is the stormwater interception system in the C&DMSF effective?			N/A
Are materials properly covered when there is any chance for the materials to be washed away?	x		
Temporary slope surfaces shall be covered as far as practicable with tarpaulin sheets or other impermeable sheeting or protected by other methods approved by CED especially when a rainstorm is imminent or forecast.			Hydroseeded slopes in Portions A, B, G, H and I
Final slope surfaces shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabiliser approved by CED to prevent the washing away of stockpiled material.			Hydroseeded slopes in Portions A, B, G, H and I
Existing and newly constructed catchpits, sand and silt removal facilities and intercepting channels should be maintained, and the deposited silt and grit should be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	x		
A wheel washing bay should be provided at the site exit and wash-water should have sand and silt settled out or removed before being discharged into storm drains.	x		
Is the section of construction road between the wheel washing bay the public road paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains?	x		
Sewage from toilets should be discharged into a foul sewer, or chemical toilets should be provided.	x		
Should the use of chemical toilets be necessary, these should be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	x		
Are the grease traps in the canteen kitchens put into use and effective ?			N/A
If no communal sewer can be provided, has the sewage generated from the workforce at the site offices been diverted to septic tanks and regularly removed by using vacuum tankers.	x		Discharged to DP4 as per discharge licence.
The drainage system provided at car parking areas should be installed with oil interceptors in addition to sand/silt removal facilities. Has regular cleaning of the system been carried out?	x		
Has disturbance to seabed sediments and undue turbidity from vessel movement or propeller wash been minimized?	x		
Barges should not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents should be properly collected and treated before disposal.	x		
Is foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging point? Are these due to work activities?		x	
Have silt curtains been provided at the outward side of the basin near the barging point throughout the operational phase when there is public fill intake by barges (after Dec 2003)?	x		

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Checklist (FB)	Yes	No	Remarks
Has a waste collection vessel been deployed to remove floating debris on the sea near the fill bank for proper disposal?	x		
Note: Effluent discharged from the site shall meet the relevant discharge limits specified in the Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.			
Landfill Gas Hazard			
Are gas detection equipment and appropriate breathing apparatus available and used when workers entering confined spaces or trenches deeper than 2 metres?	x		
A Safety Officer/Supervisor should be present on site throughout the operational stage.	x		
Has the Safety Officer/Supervisor been provided with intrinsically safe portable instrument(s), appropriately calibrated and capable of measuring the gases in the ranges as recommended in the EIA Report?	x		
Has a LFG monitoring programme been formulated by the Safety Officer/Supervisor or by a qualified person?	x		
Has periodic/routine monitoring been conducted during ground-works, in all excavations, and works in confined spaces, if any?	x		
Landscape and Visual			
Does the design of the fill bank and platform heights adopted allow the fill bank to fit into the general topography of the surrounding land? Straight edged slopes should be avoided.	x		
The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	x		
Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green/brown) once completed.	x		
The barging point and the C&DMSF at the fill bank shall not be in operation from 7:00pm to 8:00am daily to avoid potential visual impact from glare.	x		To 11pm as per latest EP.
Other Environmental Factors			
C&D waste sorted from mixed C&D material at the C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	x		
Environmental Monitoring and Audit			
Is a log book maintained by the ET?	x		
At the time of site audit, was any monitoring underway?		x	
If yes, what parameters are being monitored and were the correct procedures adopted?			N/A
Have any mitigation measures been implemented as a result of exceedance of Action-Limit Levels? If so, do they appear to be effective?			N/A

Agreement No. 42/2002 Fill Bank at Tseung Kwan O Area 137 - Investigation

Observations (FB)

Issue	Action
1) Some uncapped and unlabelled waste lubricating oil containers were found to be stored in the Chemical Waste Shed. The Shed was fully stored with waste oil containers (both 20L & 200L) and the floor of the Shed was found to be contaminated by waste oil. A number of containers were still stored without any drip trays.	The Contractor should arrange a licensed chemical waste collector to collect the waste oil ASAP, and properly cap and label all the chemical / oil containers. Also, the Contractor should place all the chemical wastes into drip trays inside the Shed. Furthermore, the contaminated floor of the Shed should be cleaned and the wastewater should be collected.
2) Two patches of ground at the maintenance workshop were found contaminated with lubricating oil due to maintenance work.	The Contractor should clean up the contaminated ground ASAP. Also, the Contractor was reminded to provide impermeable sheet on the ground before conducting maintenance works.
3) Two unlabelled containers (18L and 200L) were placed directly on the ground at the maintenance workshop without drip trays. The 18L container was also uncapped.	The Contractor was reminded to properly label and cap all chemicals on-site, and place them into drip trays.
4) C&D material stockpile was too close to the waterfront of the Barge Handling Area (BHA). Some C&D material was observed to have fallen into the marine water.	The Contractor was reminded to keep the stockpiles behind the concrete walkway and any spilled material (onto the walkway) should be cleaned regularly.
5) The 200L oil drum in a drip tray by the excavation works for the waste-checking platform close to the site offices was unlabelled.	The Contractor should properly label the container.

Appendix I

Weekly ET's Site Inspection Record

Inspection Date : 01 December 2005
Time : 10:30

Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : ~~Calm /~~ Light ~~/ Breeze / Strong~~
Temperature : 23°C
Humidity : ~~High / Moderate /~~ Low

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Fugitive Dust Emission				
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.		√		Refer to item 5
▪ Water sprays shall be provided and used to dampen materials.	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	√			
▪ The designated site main haul road shall be paved or regular watering.		√		Refer to item 4
▪ Frequent watering of work site shall be at least three times per day.	√			
▪ Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shot concrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	√			
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	√			
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	√			
Noise Impact				
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	√			
▪ Air compressors and hand held breakers should have noise labels.	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	√			

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Water Quality				
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained.	√			
▪ Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	√			
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	√			
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	√			
▪ The material shall be properly covered to prevent washed away especially before rainstorm.		√		Refer to item 5
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	√			
▪ The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	√			
▪ Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided.	√			
▪ The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	√			
▪ Wastewater collected from canteen kitchen, including that from basins, sinks and floor drains, shall be discharged into foul sewers via grease traps.	√			
▪ Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas.	√			
▪ The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash.	√			
▪ All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
▪ Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal.	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	√			
▪ Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.		√		Refer to item 3
▪ A waste collection vessel shall be deployed to remove floating debris.	√			

Landscape and Visual				
▪ The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	√			
▪ The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	√			
▪ Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	√			
▪ The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	√			
Other Environmental Factors				
▪ C&D waste sorted from mixed C&D material at eh C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	√			
▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	√			
▪ Any unused materials or those with remaining functional capacity should be recycled.	√			
▪ All generators, fuel and oil storage are within bundle areas.	√			
▪ Oil leakage from machinery, vehicle and plant is prevented.	√			

Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Photo Ref.	Further Action Required (Yes/No)
1	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05) and item #2 (21/11/05), chemical containers placed inside the Chemical Waste Storage Shed were found covered improperly and some containers were still found without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers.	051201_001	Yes
2	Follow up action to previous comments items #4 (11/11/05), item #2 (15/11/05) and item #1 (21/11/05), oil spillage from the maintenance work of the excavator was cleaned up.	051201_002	No
3	Silt curtain at Marine Barging Area was found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	051201_003	Yes
4	Haul road at Barging Handling Area was dry and potential fugitive dust emission was observed. The frequency of watering the haul road and exposed area should be increased especially during dry season in order to prevent the generation of dust.	051201_004	Yes
5	Two stockpiles of C&D materials next to the U-channel at DP4 were found without cover. The stockpiles should be covered with tarpaulin sheets.	051201_005	Yes
6	Rubbish such as plastic bags was observed at the water truck filling station. The Contactor was reminded to clean up the rubbish and keep the site are tidy.	051201_006	Yes

Remark

	Name	Signature	Date
Inspected by	H T Chow		01 December 2005
Checked by	Linda Law		01 December 2005

Photos

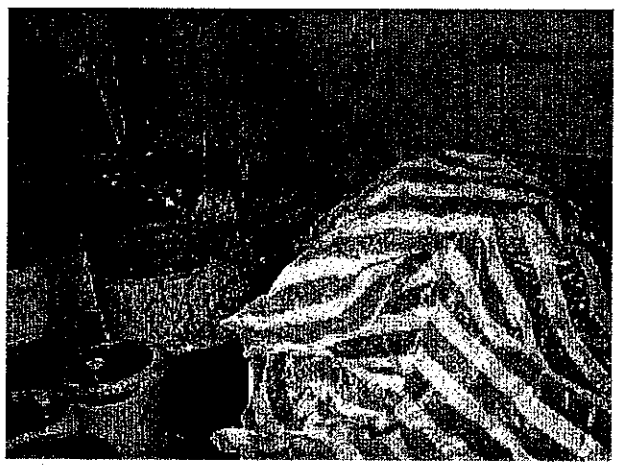


Photo 051201_001

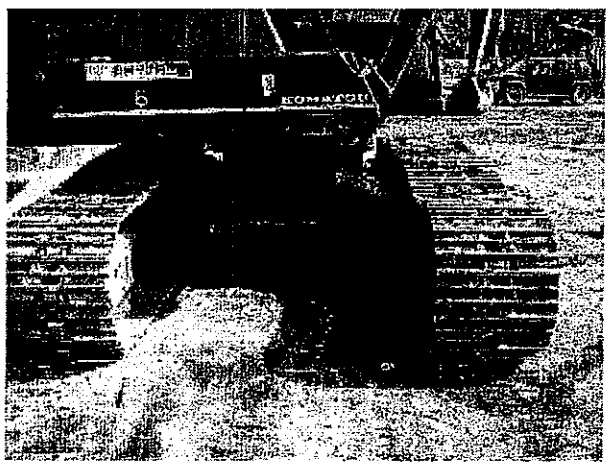


Photo 051201_002

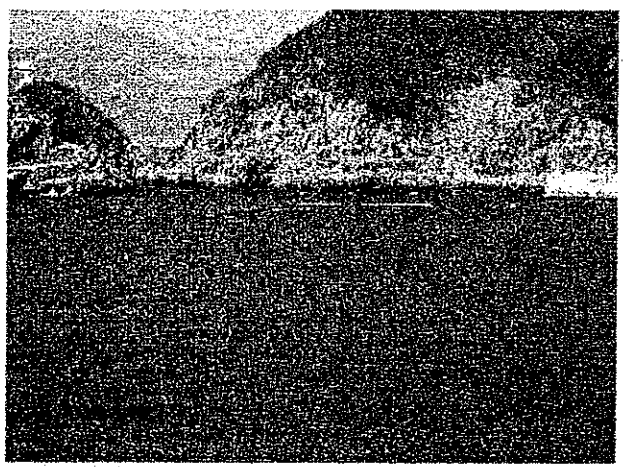


Photo 051201_003

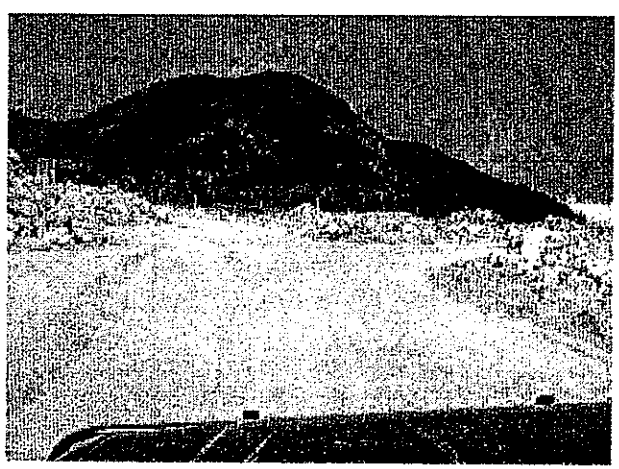


Photo 051201_004

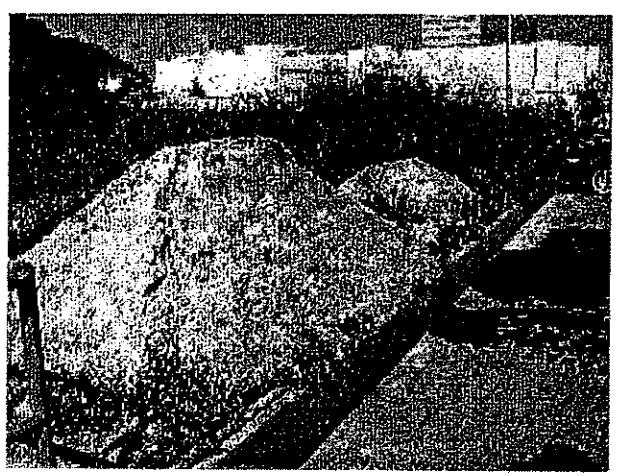


Photo 051201_005

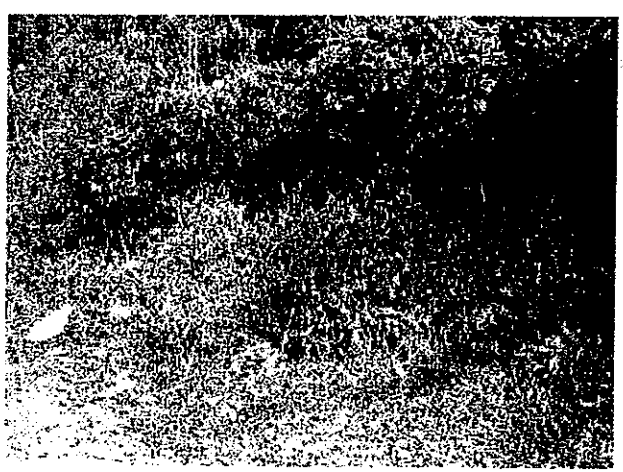


Photo 051201_006

Follow-up Action of the Weekly Site Inspection

Inspection Date : 01 December 2005
Time : 10:30

Inspected by Name : Jerry W K Tam (Contractor)
H T Chow (ET)

Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : ~~Calm /~~ Light ~~/ Breeze / Strong~~

Temperature : 23°C
Humidity : ~~High / Moderate /~~ Low

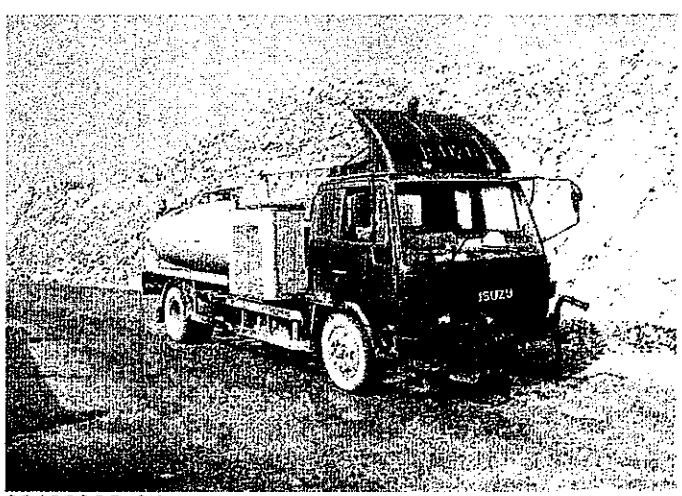
Item	Details of defective works or observations	Response	Date of Action taken	Photo Ref.
1	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05) and item #2 (21/11/05), chemical containers placed inside the Chemical Waste Storage Shed were found covered improperly and some containers were still found without appropriate labels. The Contractor was reminded to provide appropriate labels and covers / caps for all oil containers.	*The chemical containers concerned will be arranged for collection and removed off site by Chemical Waste Collector as soon as possible.*	*30 Dec 2005*	**30122005_01**
2	Follow up action to previous comments items #4 (11/11/05), item #2 (15/11/05) and item #1 (21/11/05), oil spillage from the maintenance work of the excavator was cleaned up.	*The oil spillage has been properly cleaned up.*	*20 Dec 2005*	**20122005_02**
3	Silt curtain at Marine Barging Area was found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	*The damaged silt curtain has been fixed well.*	*20 Dec 2005*	**20122005_03**
4	Haul road at Barging Handling Area was dry and potential fugitive dust emission was observed. The frequency of watering the haul road and exposed area should be increased especially during dry season in order to prevent the generation of dust.	*The daily frequency of watering of the haul roads by water lorries has been increased.*	*20 Dec 2005*	**20122005_04**
5	Two stockpiles of C&D materials next to the U-channel at DP4 were found without cover. The stockpiles should be covered with tarpaulin sheets.	*The C&D material stockpiles have been removed away.*	*20 Dec 2005*	**20122005_05**
6	Rubbish such as plastic bags was observed at the water truck filling station. The Contactor was reminded to clean up the rubbish and keep the site are tidy.	*The rubbish observed at the water truck filling station has been cleaned up.*	*20 Dec 2005*	**20122005_06**

Photo of Follow-up Action

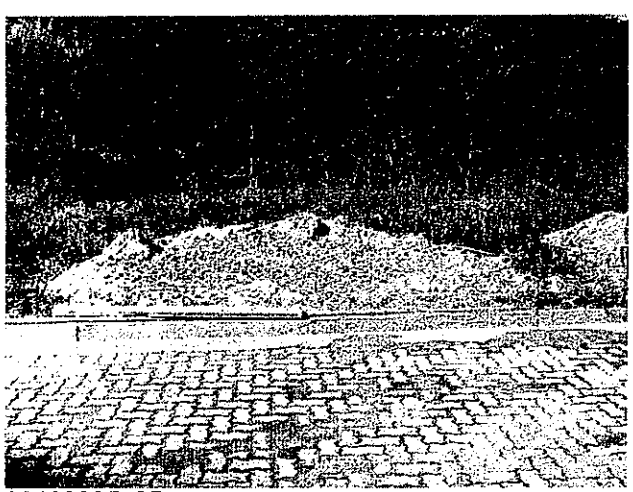
30122005_01

20122005_02

20122005_03



20122005_04



20122005_05

20122005_06

Inspection Date : 07 December 2005
Time : 11:00

Weather : ~~Sunny~~ / Fine ~~/ Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : ~~Calm~~ / Light ~~/ Breeze / Strong~~

Temperature : 14°C
Humidity : ~~High / Moderate /~~ Low

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Fugitive Dust Emission				
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.		√		Refer to item 5
▪ Water sprays shall be provided and used to dampen materials.	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	√			
▪ The designated site main haul road shall be paved or regular watering.	√			
▪ Frequent watering of work site shall be at least three times per day.	√			
▪ Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shot concrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	√			
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	√			
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	√			
Noise Impact				
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	√			
▪ Air compressors and hand held breakers should have noise labels.	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	√			

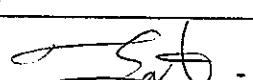
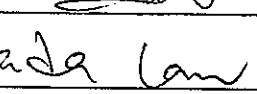
Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Water Quality				
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained.	√			
▪ Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	√			
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	√			
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	√			
▪ The material shall be properly covered to prevent washed away especially before rainstorm.		√		Refer to item 5
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	√			
▪ The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	√			
▪ Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided.	√			
▪ The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	√			
▪ Wastewater collected from canteen kitchen, including that from basins, sinks and floor drains, shall be discharged into foul sewers via grease traps.	√			
▪ Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas.	√			
▪ The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash.	√			
▪ All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
▪ Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal.	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	√			
▪ Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.		√		Refer to item 4
▪ A waste collection vessel shall be deployed to remove floating debris.	√			

Landscape and Visual				
▪ The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	√			
▪ The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	√			
▪ Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	√			
▪ The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	√			
Other Environmental Factors				
▪ C&D waste sorted from mixed C&D material at eh C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	√			
▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	√			
▪ Any unused materials or those with remaining functional capacity should be recycled.	√			
▪ All generators, fuel and oil storage are within bundle areas.	√			
▪ Oil leakage from machinery, vehicle and plant is prevented.	√			

Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Photo Ref.	Further Action Required (Yes/No)
1	Follow up action to previous comment item #6 (01/12/05), rubbish observed at the water truck filling station had been cleaned up.	051207_001	No
2	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05), item #2 (21/11/05) and item #1 (01/12/05), chemical containers placed inside the Chemical Waste Storage Shed were found covered improperly and some containers were still found without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers.	051207_002	Yes
3	Follow up action to previous comment item #4 (01/12/05), watering the haul road at Barging Handling Area was provided and no dust emission was observed.	051207_003	No
4	Follow up action to previous comment item #3 (01/12/05), silt curtain at Marine Barging Area was still found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	051207_004	Yes
5	Follow up action to previous comment item #5 (01/12/05), the stockpile of C&D materials next to the U-channel at DP4 were still found without cover. The stockpiles should be covered with tarpaulin sheets.	051207_005	Yes

Remark

	Name	Signature	Date
Inspected by	H T Chow		07 December 2005
Checked by	Linda Law		07 December 2005

Photos

Photo 051207_001

Photo 051207_002

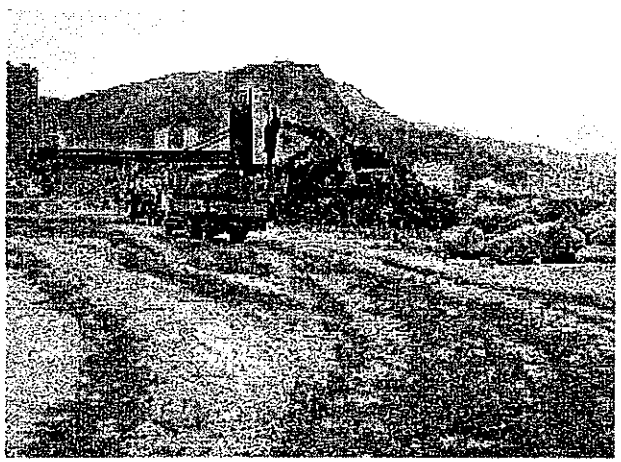


Photo 051207_003

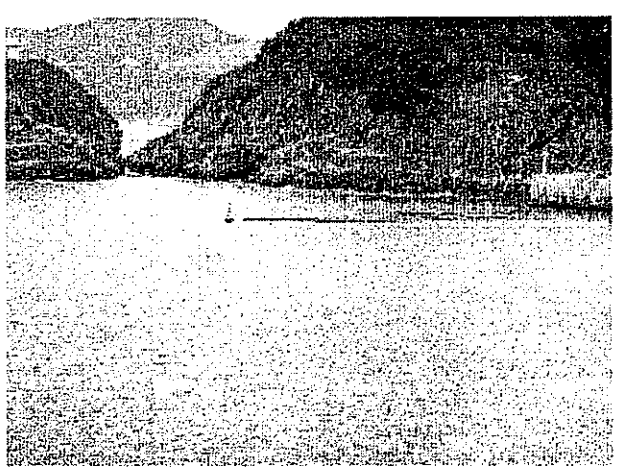


Photo 051207_004

Photo 051207_005

Follow-up Action of the Weekly Site Inspection

Inspection Date : 07 December 2005
Time : 11:00

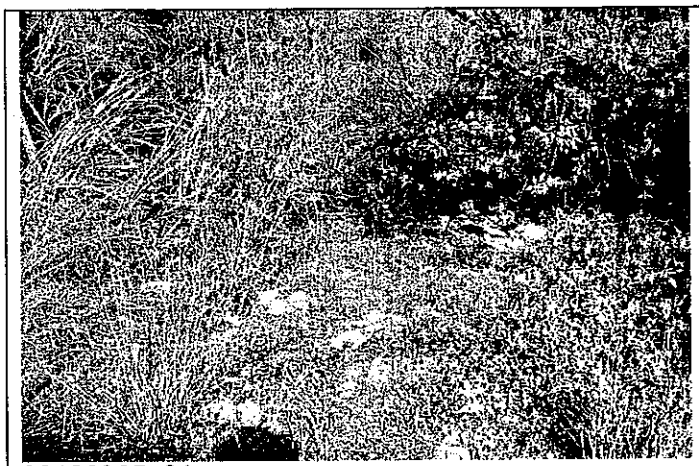
Inspected by Name : Jerry W K Tam (Contractor)
H T Chow (ET)

Weather : ~~Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : ~~Calm /~~ Light ~~/ Breeze / Strong~~

Temperature : 14°C
Humidity : ~~High / Moderate /~~ Low

Item	Details of defective works or observations	Response	Date of Action taken	Photo Ref.
1	Follow up action to previous comment item #6 (01/12/05), rubbish observed at the water truck filling station had been cleaned up.	*The rubbish observed at the water truck filling station has been cleaned up.*	*20 Dec 2005*	**20122005_01**
2	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05), item #2 (21/11/05) and item #1 (01/12/05), chemical containers placed inside the Chemical Waste Storage Shed were found covered improperly and some containers were still found without appropriate labels. The Contractor was reminded to provide appropriate labels and covers / caps for all oil containers.	*The chemical containers concerned will be arranged for collection and removed off site by Chemical Waste Collector as soon as possible.*	*30 Dec 2005*	**30122005_02**
3	Follow up action to previous comment item #4 (01/12/05), watering the haul road at Barging Handling Area was provided and no dust emission was observed.	*The daily frequency of watering of the haul roads by water lorries has been increased.*	*20 Dec 2005*	**20122005_03**
4	Follow up action to previous comment item #3 (01/12/05), silt curtain at Marine Barging Area was still found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	*The damaged silt curtain has been fixed well.*	*20 Dec 2005*	**20122005_04**
5	Follow up action to previous comment item #5 (01/12/05), the stockpile of C&D materials next to the U-channel at DP4 were still found without cover. The stockpiles should be covered with tarpaulin sheets.	*The C&D material stockpiles have been removed away.*	*20 Dec 2005*	**20122005_05**

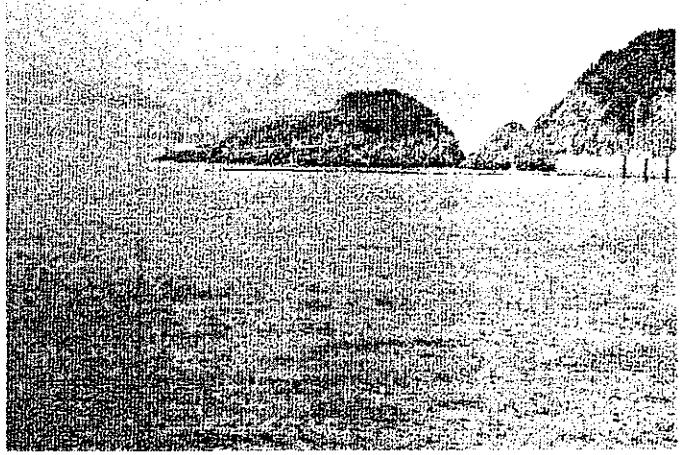
Photo of Follow-up Action



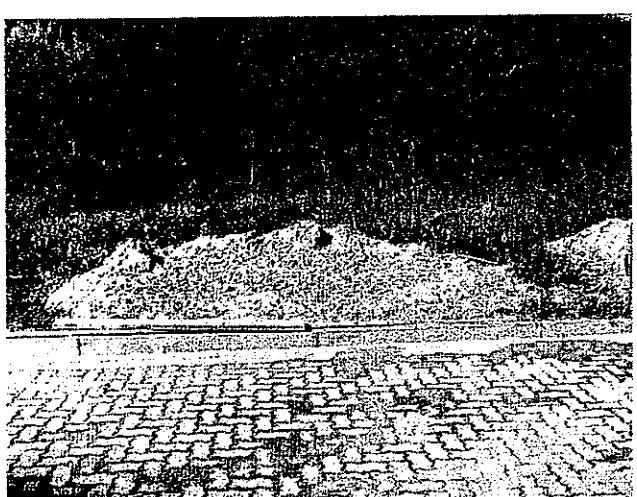
20122005_01

30122005_02

20122005_03



20122005_04



20122005_05

Inspection Date : 13 December 2005
Time : 10:45

Weather : ~~Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 13°C
Humidity : ~~High / Moderate /~~ Low

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Fugitive Dust Emission				
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.		√		Refer to item 4
▪ Water sprays shall be provided and used to dampen materials.	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	√			
▪ The designated site main haul road shall be paved or regular watering.	√			
▪ Frequent watering of work site shall be at least three times per day.	√			
▪ Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shot concrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	√			
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	√			
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	√			
Noise Impact				
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	√			
▪ Air compressors and hand held breakers should have noise labels.	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	√			

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Water Quality				
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained.	√			
▪ Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	√			
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	√			
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	√			
▪ The material shall be properly covered to prevent washed away especially before rainstorm.		√		Refer to item 4
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	√			
▪ The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	√			
▪ Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided.	√			
▪ The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	√			
▪ Wastewater collected from canteen kitchen, including that from basins, sinks and floor drains, shall be discharged into foul sewers via grease traps.	√			
▪ Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas.	√			
▪ The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash.	√			
▪ All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
▪ Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal.	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	√			
▪ Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.		√		Refer to item 3
▪ A waste collection vessel shall be deployed to remove floating debris.	√			

Landscape and Visual				
▪ The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	√			
▪ The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	√			
▪ Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	√			
▪ The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	√			
Other Environmental Factors				
▪ C&D waste sorted from mixed C&D material at eh C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	√			
▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	√			
▪ Any unused materials or those with remaining functional capacity should be recycled.	√			
▪ All generators, fuel and oil storage are within bundle areas.	√			
▪ Oil leakage from machinery, vehicle and plant is prevented.	√			

Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Photo Ref.	Further Action Required (Yes/No)
1	Fuel tank was placed on the ground near the Contractor Site Office. Drip tray should be provided for all chemical containers at the site.	051213_001	Yes
2	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05), item #2 (21/11/05), item #1 (01/12/05) and item #2 (07/12/05), some chemical containers placed inside the Chemical Waste Storage Shed were still found covered improperly and without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers.	051213_002	Yes
3	Follow up action to previous comments item #3 (01/12/05) and item #4 (07/12/05), silt curtain at Marine Barging Area was still found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	051213_003	Yes
4	Follow up action to previous comments item #5 (01/12/05) and item #5 (07/12/05), the stockpile of C&D materials next to the U-channel at DP4 were still found without cover. The stockpiles should be covered with tarpaulin sheets.	051213_004	Yes

Remark

	Name	Signature	Date
Inspected by	H T Chow		13 December 2005
Checked by	Linda Law		13 December 2005

Photos

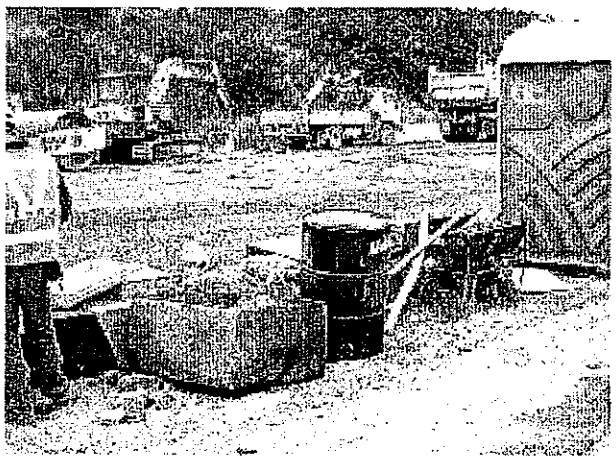


Photo 051213_001

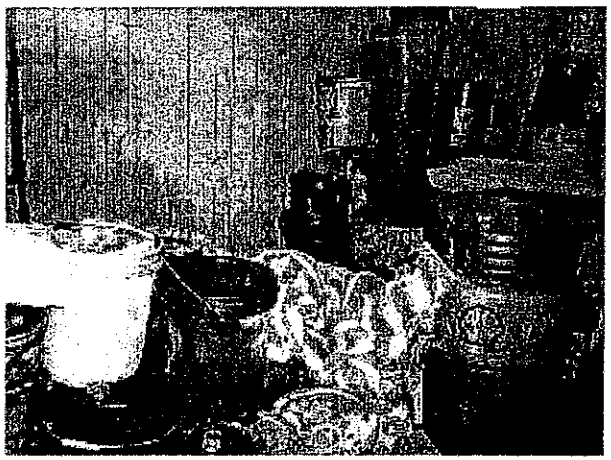


Photo 051213_002

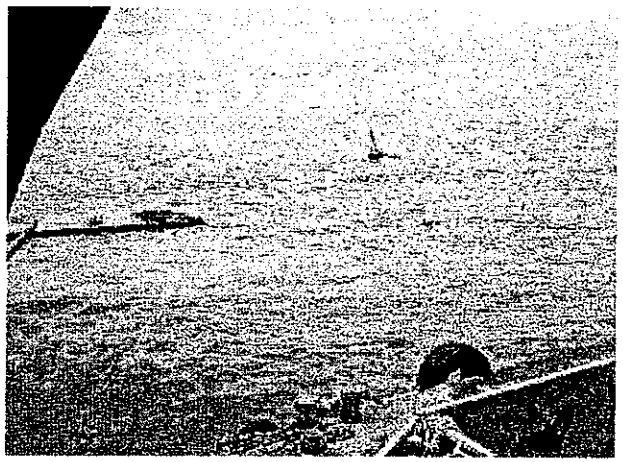


Photo 051213_003

Photo 051213_004

Follow-up Action of the Weekly Site Inspection

Inspection Date : 13 December 2005
Time : 10:45

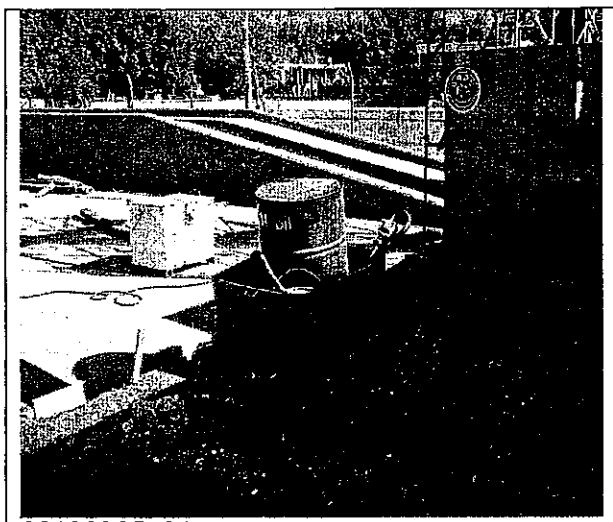
Inspected by Name : Jerry W K Tam (Contractor)
H T Chow (ET)

Weather : ~~Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 13°C
Humidity : ~~High / Moderate /~~ Low

Item	Details of defective works or observations	Response	Date of Action taken	Photo Ref.
1	Fuel tank was placed on the ground near the Contractor Site Office. Drip tray should be provided for all chemical containers at the site.	*A drip tray has been properly provided for the fuel tank.*	*20 Dec 2005*	**20122005_01**
2	Follow up action to previous comments item #3 (11/11/05) , item #3 (15/11/05), item #2 (21/11/05), item #1 (01/12/05) and item #2 (07/12/05), some chemical containers placed inside the Chemical Waste Storage Shed were still found covered improperly and without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers.	*The chemical containers concerned will be arranged for collection and removed off site by Chemical Waste Collector as soon as possible.*	*30 Dec 2005*	**30122005_02**
3	Follow up action to previous comments item #3 (01/12/05) and item #4 (07/12/05), silt curtain at Marine Barging Area was still found damaged. The Contractor was reminded to repair the damaged part of silt curtain immediately.	*The damaged silt curtain has been fixed well.*	*20 Dec 2005*	**20122005_03**
4	Follow up action to previous comments item #5 (01/12/05) and item #5 (07/12/05), the stockpile of C&D materials next to the U-channel at DP4 were still found without cover. The stockpiles should be covered with tarpaulin sheets.	*The C&D material stockpiles have been removed away.*	*20 Dec 2005*	**20122005_04**

Photo of Follow-up Action



20122005_01

30122005_02

20122005_03

20122005_04

Inspection Date : 20 December 2005
Time : 11:30

Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 17°C
Humidity : ~~High / Moderate /~~ Low

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Fugitive Dust Emission				
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.	√			
▪ Water sprays shall be provided and used to dampen materials.	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	√			
▪ The designated site main haul road shall be paved or regular watering.	√			
▪ Frequent watering of work site shall be at least three times per day.	√			
▪ Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shot concrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	√			
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	√			
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	√			
Noise Impact				
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	√			
▪ Air compressors and hand held breakers should have noise labels.	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	√			

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Water Quality				
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained.	√			
▪ Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	√			
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	√			
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	√			
▪ The material shall be properly covered to prevent washed away especially before rainstorm.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	√			
▪ The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	√			
▪ Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided.	√			
▪ The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	√			
▪ Wastewater collected from canteen kitchen, including that from basins, sinks and floor drains, shall be discharged into foul sewers via grease traps.	√			
▪ Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas.	√			
▪ The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash.	√			
▪ All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
▪ Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal.	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	√			
▪ Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	√			
▪ A waste collection vessel shall be deployed to remove floating debris.	√			

Landscape and Visual				
▪ The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	√			
▪ The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	√			
▪ Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	√			
▪ The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	√			
Other Environmental Factors				
▪ C&D waste sorted from mixed C&D material at eh C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	√			
▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	√			
▪ Any unused materials or those with remaining functional capacity should be recycled.	√			
▪ All generators, fuel and oil storage are within bundle areas.		√		Refer to item 3
▪ Oil leakage from machinery, vehicle and plant is prevented.		√		Refer to item 2

Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Photo Ref.	Further Action Required (Yes/No)
1	Follow up action to previous comments item #3 (11/11/05), item #3 (15/11/05), item #2 (21/11/05), item #1 (01/12/05), item #2 (07/12/05) and item #2 (13/12/05) some chemical containers placed inside the Chemical Waste Storage Shed were still found covered improperly and without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers. Besides, the Contractor should keep tidy and maintain the Chemical Waste Storage Shed properly.	051220_001	Yes
2	Lubricating oil was found spilled / leaked from the site machines during the process of repairing / maintenance at Workshop. Tarpaulin sheets should be provided before repairing or maintenance. Alternatively, the Contractor should soak up the spilled oil and handle the contaminated soil as chemical waste immediately.	051220_002 & 051220_003	Yes
3	One 200L and one 20L oil containers were found placed on the ground without labels at Workshop. The Contractor was reminded to provided drip tray but also appropriate labeling for all chemical containers.	051220_004, 051220_005 & 051220_006	Yes
4	Follow up action to previous comment item #1 (13/12/05), drip tray was found provided for the fuel tank near the Contractor Site Office.	051220_007	No
5	Follow up action to previous comments item #5 (01/12/05), item #5 (07/12/05) and item #4 (13/12/05), the stockpile of C&D materials next to the U-channel at DP4 were still found removed.	051220_008	No
6	Follow up action to previous comments item #3 (01/12/05), item #4 (07/12/05) and item #3 (13/12/05), silt curtain at Marine Barging Area was still found repaired.	051220_009	No

Remark

	Name	Signature	Date
Inspected by	Linda Law	Linda Law	20 December 2005
Checked by	C L Lau		20 December 2005

Photos

Photo 051220_001

Photo 051220_002

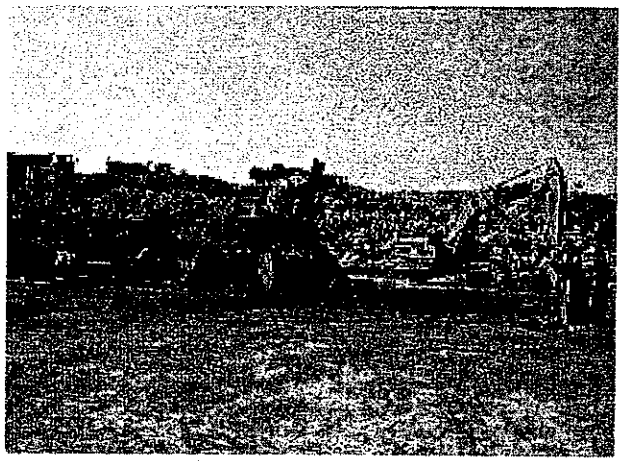


Photo 051220_003

Photo 051220_004

Photo 051220_005

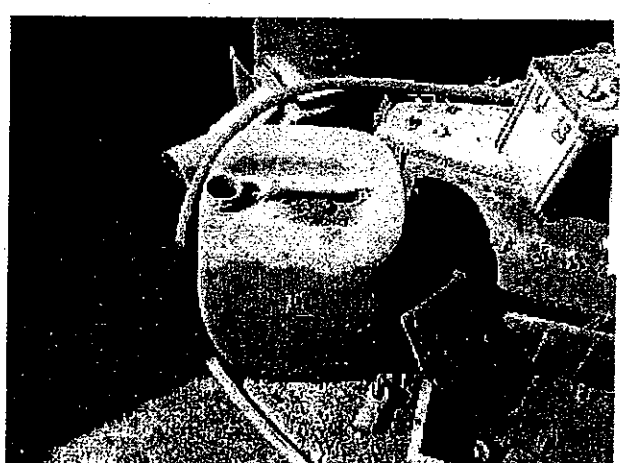


Photo 051220_006

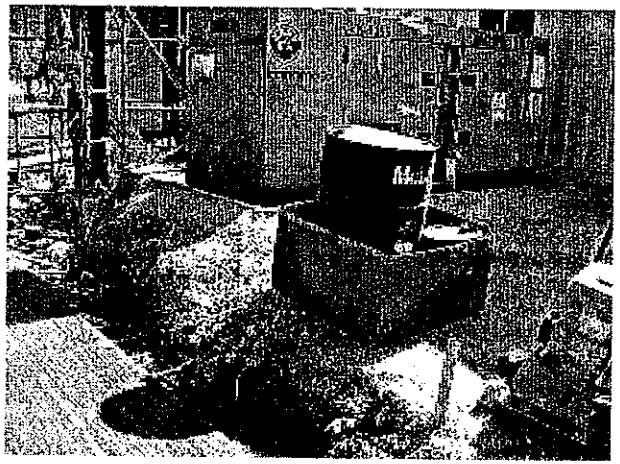


Photo 051220_007

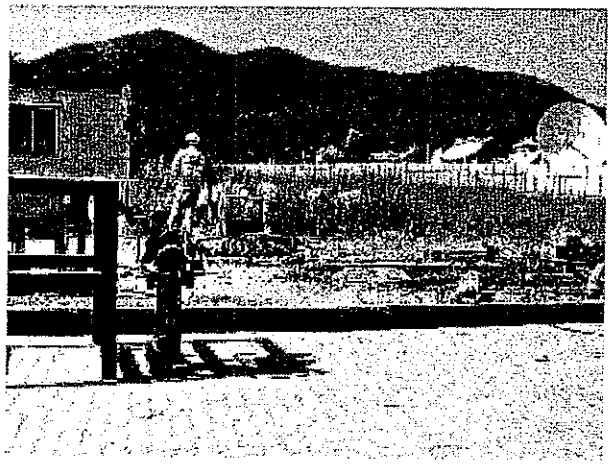


Photo 051220_008

Photo 051220_009

Follow-up Action of the Weekly Site Inspection

Inspection Date : 20 December 2005
Time : 11:30

Inspected by Name : Antony Wong (IEC)
Jerry W K Tam (Contractor)
Linda Law (ET)

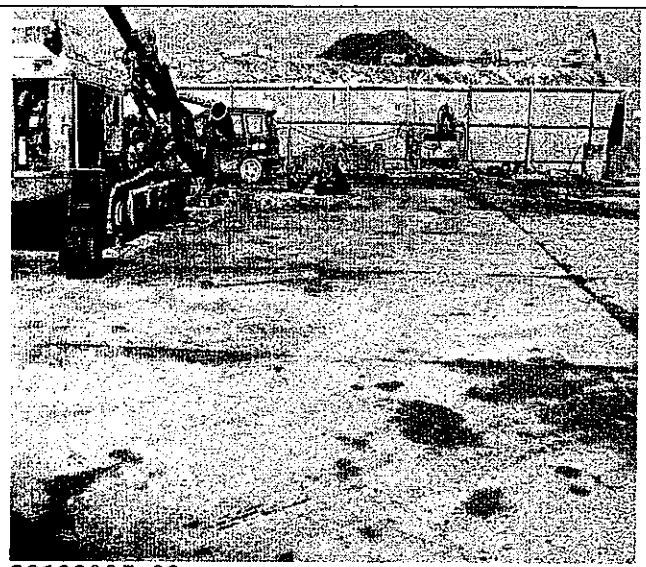
Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 17°C
Humidity : ~~High / Moderate /~~ Low

Item	Details of defective works or observations	Response	Date of Action taken	Photo Ref.
1	Follow up action to previous comments item #3 (11/11/05), item #3 (15/11/05), item #2 (21/11/05), item #1 (01/12/05), item #2 (07/12/05) and item #2 (13/12/05) some chemical containers placed inside the Chemical Waste Storage Shed were still found covered improperly and without appropriate labels. The Contractor was reminded to provided appropriate labels and covers / caps for all oil containers. Besides, the Contractor should keep tidy and maintain the Chemical Waste Storage Shed properly.	*The chemical containers concerned will be arranged for collection and removed off site by Chemical Waste Collector as soon as possible.*	*30 Dec 2005*	**30122005_01**
2	Lubricating oil was found spilled / leaked from the site machines during the process of repairing / maintenance at Workshop. Tarpaulin sheets should be provided before repairing or maintenance. Alternatively, the Contractor should soak up the spilled oil and handle the contaminated soil as chemical waste immediately.	*The spilled oil has been cleaned up and the contaminated soil has been treated as chemical waste for removal properly.*	*30 Dec 2005*	**30122005_02**
3	One 200L and one 20L oil containers were found placed on the ground without labels at Workshop. The Contractor was reminded to provide drip tray but also appropriate labeling for all chemical containers.	*The oil containers have been removed off site.*	*30 Dec 2005*	**30122005_03**

Photo of Follow-up Action

30122005_01



30122005_03

30122005_02

Inspection Date : 29 December 2005
Time : 09:50

Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 18°C
Humidity : ~~High /~~ Moderate ~~/ Low~~

Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Fugitive Dust Emission				
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.	√			
▪ Water sprays shall be provided and used to dampen materials.	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	√			
▪ The designated site main haul road shall be paved or regular watering.	√			
▪ Frequent watering of work site shall be at least three times per day.	√			
▪ Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shot concrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	√			
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	√			
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	√			
Noise Impact				
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	√			
▪ Air compressors and hand held breakers should have noise labels.	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	√			

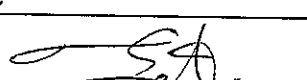
Environmental Checklist	Implementation Stages*			Remark
	Yes	No	N/A	
Water Quality				
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained.	√			
▪ Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	√			
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	√			
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	√			
▪ The material shall be properly covered to prevent washed away especially before rainstorm.	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	√			
▪ Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	√			
▪ The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	√			
▪ Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided.	√			
▪ The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	√			
▪ Wastewater collected from canteen kitchen, including that from basins, sinks and floor drains, shall be discharged into foul sewers via grease traps.	√			
▪ Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas.	√			
▪ The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash.	√			
▪ All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
▪ Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal.	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	√			
▪ Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	√			
▪ A waste collection vessel shall be deployed to remove floating debris.	√			

Landscape and Visual				
▪ The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	√			
▪ The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	√			
▪ Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	√			
▪ The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	√			
Other Environmental Factors				
▪ C&D waste sorted from mixed C&D material at eh C&DMSF shall be removed from the temporary buffer storage area on a daily basis and transfer to SENT landfill for disposal.	√			
▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	√			
▪ Any unused materials or those with remaining functional capacity should be recycled.	√			
▪ All generators, fuel and oil storage are within bundle areas.	√			
▪ Oil leakage from machinery, vehicle and plant is prevented.	√			

Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Photo Ref.	Further Action Required (Yes/No)
1	Follow up action to previous comments item #3 (11/11/05), item #3 (15/11/05), item #2 (21/11/05), item #1 (01/12/05), item #2 (07/12/05), item #2 (13/12/05) and item #1 (20/12/05), the finding was found improved and no further actions were required.	051229_001	No
2	Follow up action to previous comment item #2 (20/12/05), lubricating oil spilled / leaked from the site machines at Workshop were cleaned up.	051229_002	No
3	Follow up action to previous comment item #3 (20/12/05), one 200L and one 20L oil containers were removed.	051229_003	No

Remark

	Name	Signature	Date
Inspected by	H T Chow		29 December 2005
Checked by	Linda Law		29 December 2005

Photos

Photo 051229_001

Photo 051229_002

Photo 051229_003

Follow-up Action of the Weekly Site Inspection

Inspection Date : 29 December 2005
Time : 09:50

Inspected by Name : Jerry W K Tam (Contractor)
H T Chow (ET)

Weather : Sunny ~~/ Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy~~
Wind : Calm ~~/ Light / Breeze / Strong~~

Temperature : 18°C
Humidity : ~~High /~~ Moderate ~~/ Low~~

Item	Details of defective works or observations	Response	Date of Action taken	Photo Ref.
---	No defective works or observations were recorded.	No further actions were required.	---	---

Appendix J

Implementation Schedule of Mitigation Measures

Environmental Mitigation Implementation Schedule

Environmental Protection Measures	Location	Implementation Status			
		Implemented	Partially implemented	Not implemented	Not Applicable
Air Quality					
▪ Dust control / mitigation measures shall be provided to prevent dust nuisance.	All areas	√			
▪ A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.	Northern Site Boundary	√			
▪ Water sprays shall be provided and used to dampen materials.	All areas	√			
▪ Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	All areas	√			
▪ All vehicles shall be restrict to a maximum speed of 10 km per hour.	All areas	√			
▪ Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	Site Egress	√			
▪ The designated site main haul rout shall be paved or regular watering.	All haul roads	√			
▪ Frequent watering of work site shall be at least three times per day.	All areas	√			
▪ Wheel washing facilities including high pressure water jet shall be provided at the entrance of work site.	Site Egress	√			
▪ Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	Site Egress	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	All areas	√			
▪ Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	All areas	√			
▪ When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	C&DMSF				√
▪ The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	C&DMFS				√
▪ The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	C&DMFS				√
Noise Impact					
▪ The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	All areas	√			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	All areas	√			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	All areas	√			
▪ Air compressors and hand held breakers should have noise labels.	All areas	√			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	All areas	√			
▪ Noisy equipment and mobile plant shall always be site away from NSRs.	All areas	√			

Environmental Protection Measures	Location	Implementation Status			
		Implemented	Partially implemented	Not implemented	Not Applicable
Water Quality					
▪ The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained regularly.	All areas		√		
▪ A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	Along the seafront	√			
▪ A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	C&DMFS				√
▪ The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	All areas		√		
▪ The material shall be properly covered to prevent washed away especially before rainstorm.	All areas	√			
▪ The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	Temporary Slopes	√			
▪ A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	Wheel Washing facility	√			
▪ Obtain Discharge License	Site Office	√			
▪ Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	Barge Handling Area (BHA)	√			
▪ The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities.	Barge Handling Area (BHA)	√			
▪ A waste collection vessel shall be deployed to remove floating debris.	Barge Handling Area (BHA)	√			
Landscape and Visual					
• Construction of lighting to avoid spillage and glare	All areas	√			
• Hydroseeding	Completed slopes	√			
• Hoarding erection	Site boundary	√			
• Damage to surrounding area avoided	All areas	√			
Other Environmental Factors					
• C&D waste sorted from mixed C&D material shall be transfer to SENT landfill for disposal.	All areas	√			
• Plan and stock construction materials carefully to minimise generation of waste.	All areas	√			
• Any unused materials or those with remaining functional capacity should be recycled.	All areas	√			
• All generators, fuel and oil storage are within bunded areas.	All areas	√			
• Oil leakage from machinery, vehicle and plant is prevented.	All areas		√		
• Bund chemical storage area to 110% capacity.	All areas	√			
• Prevent disposal of hazardous materials to air, soil and water body	All areas	√			
• Provide rubbish skips at all work areas	All areas	√			

Appendix K

Interim Notification of Environmental Quality Limits Exceedance

Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Woo
Fill Bank at Tseung Kwan O Area 137

Interim Notification of Exceedances of Action / Limit Levels

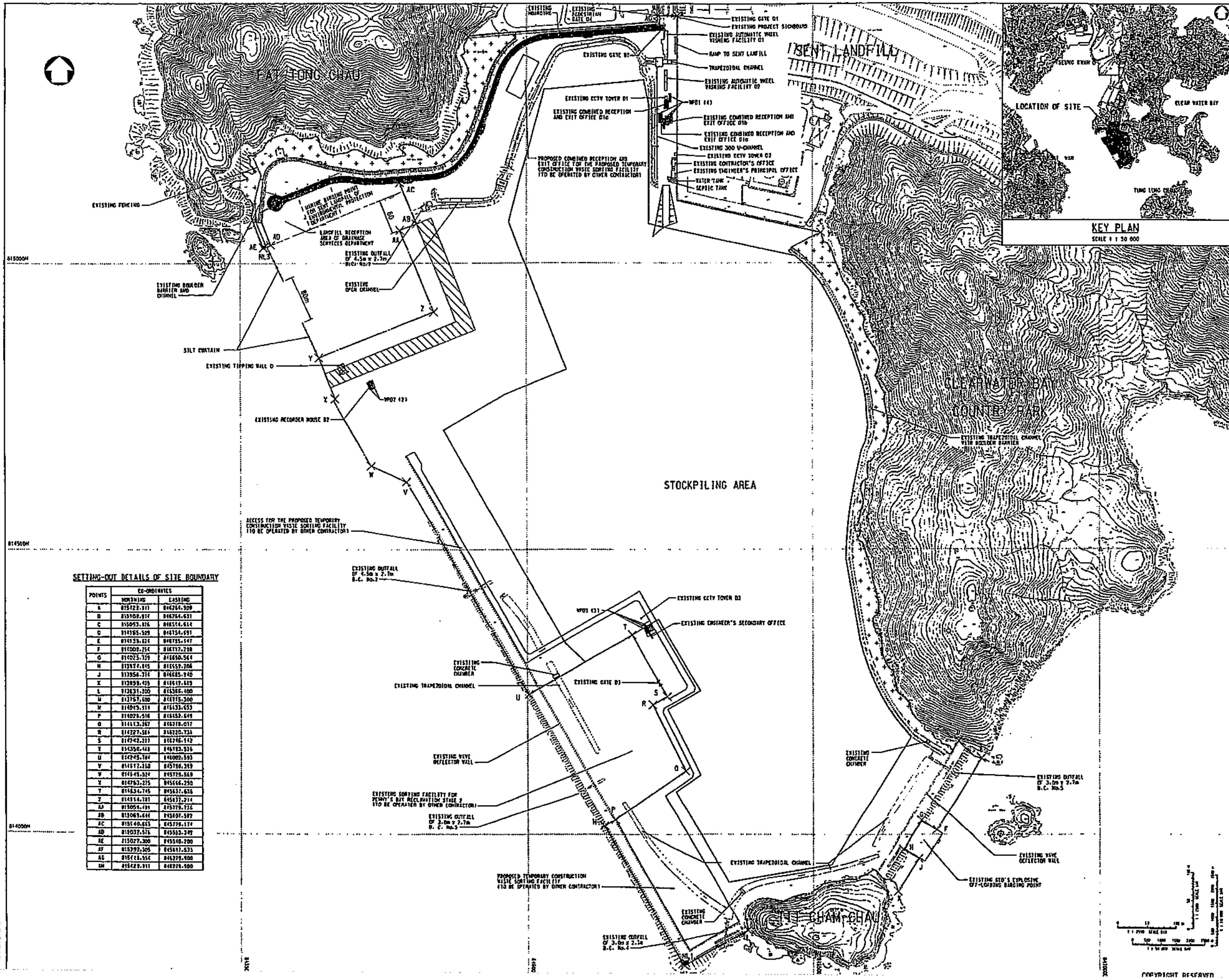
Part 1 – Turbidity

Date	Monitoring Location	Tide Mode	Measured Value (NTU)	Action Level* (NTU)	Limit Level* (NTU)	Possible Reason(S) for the Exceedance	Action taken to be taken	Remarks
21/12/05	M4	Mid-ebb	4.08	4.28 or 120% of upstream control stations C1 (2.26 x 1.2 = 2.71)	4.58 or 130% of upstream control stations C1 (2.26 x 1.3 = 2.94)	As there was no sediment plume observed from the Fill Bank and no wastewater discharge was noted from the Fill Bank and the TKO Basin, the exceedance was considered not due to the Fill Bank. The exceedance might be due to natural fluctuation of Turbidity in the water body around the area. Hence, no further actions were required.	Nil	Nil

* Traceable to Method Statement (Marine Water Quality Monitoring and Audit Manual) of Contract No.CV/2002/08, Rev. 2, Section 3.1 – 3.21

Appendix L

Site General Layout plan



NOTES:

1. ALL CO-ORDINATES REFER TO HONG KONG GEODETIC DATUM 1980 AND IN METRES.
2. ALL LEVELS REFER TO HONG KONG PRINCIPAL DATUM (P.D.) AND IN METRES.
3. ALL DIMENSIONS ARE IN METRES.
4. EXISTING BARGE HANDLING AREA PAVED WITH CONCRETE. FOR DETAILS OF CONCRETE SURFACING, REFER TO DRAWING No. H1504.
5. ALL EXISTING FEATURES SHOWN ARE INDICATIVE ONLY. THE LINES, LEVELS, DIMENSIONS AND DETAILS OF THESE FEATURES DEPEND ON THE ACTUAL CONDITION AT THE TIME WHEN THE CONTRACTOR IS GIVEN POSSESSION OF THE SITE.

LEGEND :

- SITE BOUNDARY
- WP02 (2) EXISTING WEIGHING POINT 02 WITH RECORDER HOUSE AND 2 WEIGHBRIDGE
- EXISTING BARGE HANDLING AREA
- NL1 EXISTING NAVIGATION LIGHT
- BUFFER ZONE
- ACCESS TO BE MAINTAINED AT ALL TIMES FOR DRAINAGE SERVICES DEPARTMENT AND ENVIRONMENTAL PROTECTION DEPARTMENT

SETTING-OUT DETAILS OF SITE BOUNDARY

POINTS	CO-ORDINATES	
	NORTHING	EASTING
A	815723.111	846264.909
B	815108.814	846264.631
C	815053.826	846514.614
D	814165.509	846754.691
E	814133.624	846755.547
F	814009.254	846717.290
G	814025.339	846650.564
H	813977.845	846559.206
J	813954.314	846615.940
K	813859.425	846619.629
L	813631.200	846365.400
M	813757.600	846275.300
N	814085.119	846133.653
P	814028.516	846052.649
Q	814153.367	846278.017
R	814227.581	846220.734
S	814242.237	846246.142
T	814350.418	846113.536
U	814245.784	846002.593
V	814617.310	845790.389
W	814645.324	845725.569
X	814763.275	845666.290
Y	814834.745	845637.636
Z	814914.787	845837.714
AA	815050.499	845779.736
AB	815069.644	845807.582
AC	815540.663	845779.174
AD	815032.576	845533.349
AE	815027.300	845540.200
AF	815392.305	845817.533
AG	815418.554	846229.900
AH	815429.911	846229.900

REVISION

	name	initial	date
designed	P. NG	SIGNED	5-5-2005
drawn	S.K. CHAN	SIGNED	5-5-2005
traced	S.K. CHAN	SIGNED	5-5-2005
checked	T.W. SIU	SIGNED	5-5-2005

approved

H.Y. LUK
Chief Engineer
Date 5-5-2005

contract no. CV/2005/05

file no.

project no.

contract
OPERATION OF FILL BANK AT TSEUNG KWAN O AREA 137 AND BARGING FACILITIES AT HONG KONG ISLAND AND MUI WO

drawing title
TSEUNG KWAN O AREA 137 FILL BANK - GENERAL LAYOUT

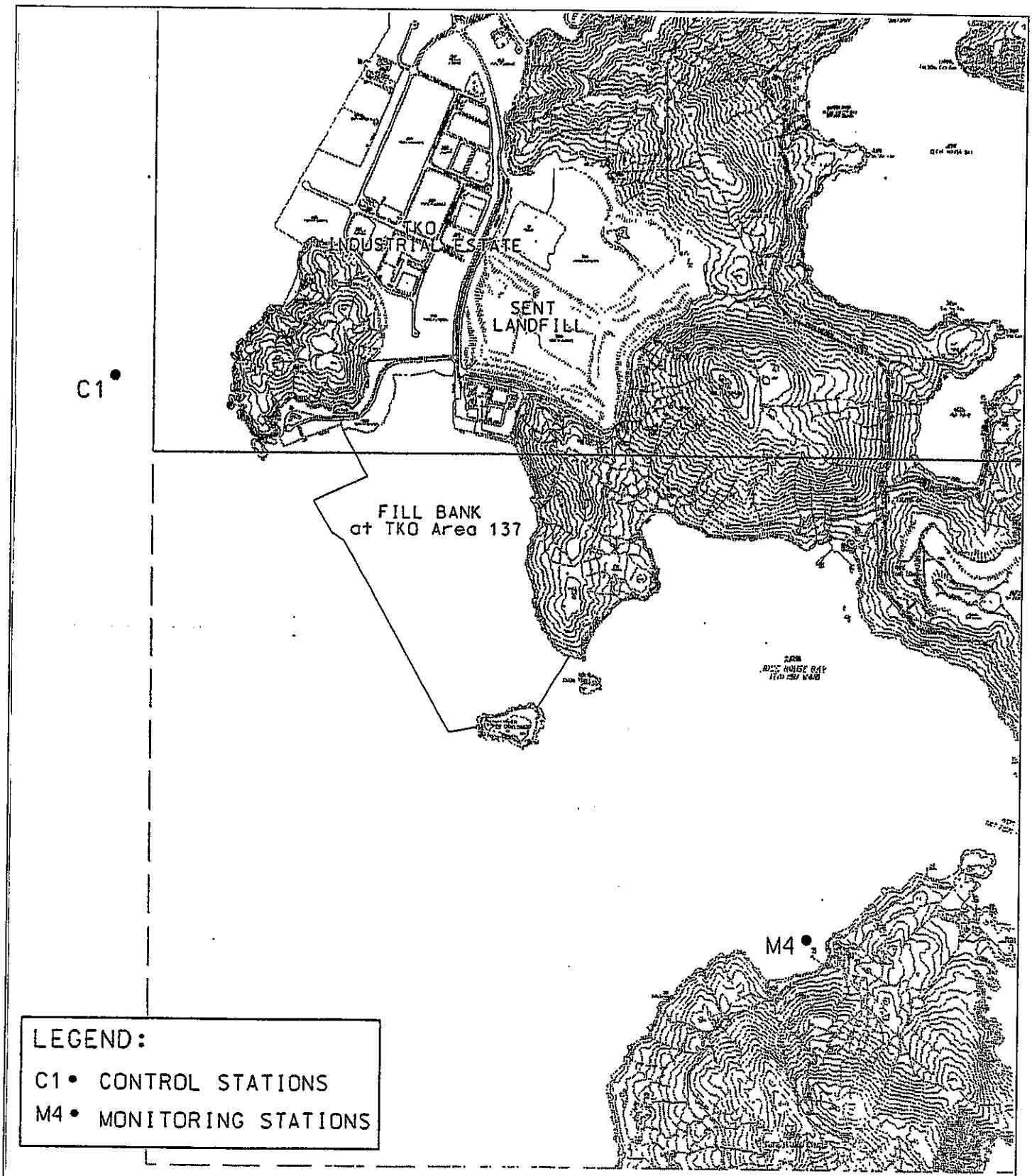
drawing no. FM10035-16

scale 1 : 2500 OR AS SHOWN

office
FILL MANAGEMENT DIVISION
CIVIL ENGINEERING OFFICE

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT HONG KONG

Figures



Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Woo

Figure 1

Locations of Water Quality Monitoring Stations –
Fill Bank at Tseung Kwan O Area 137

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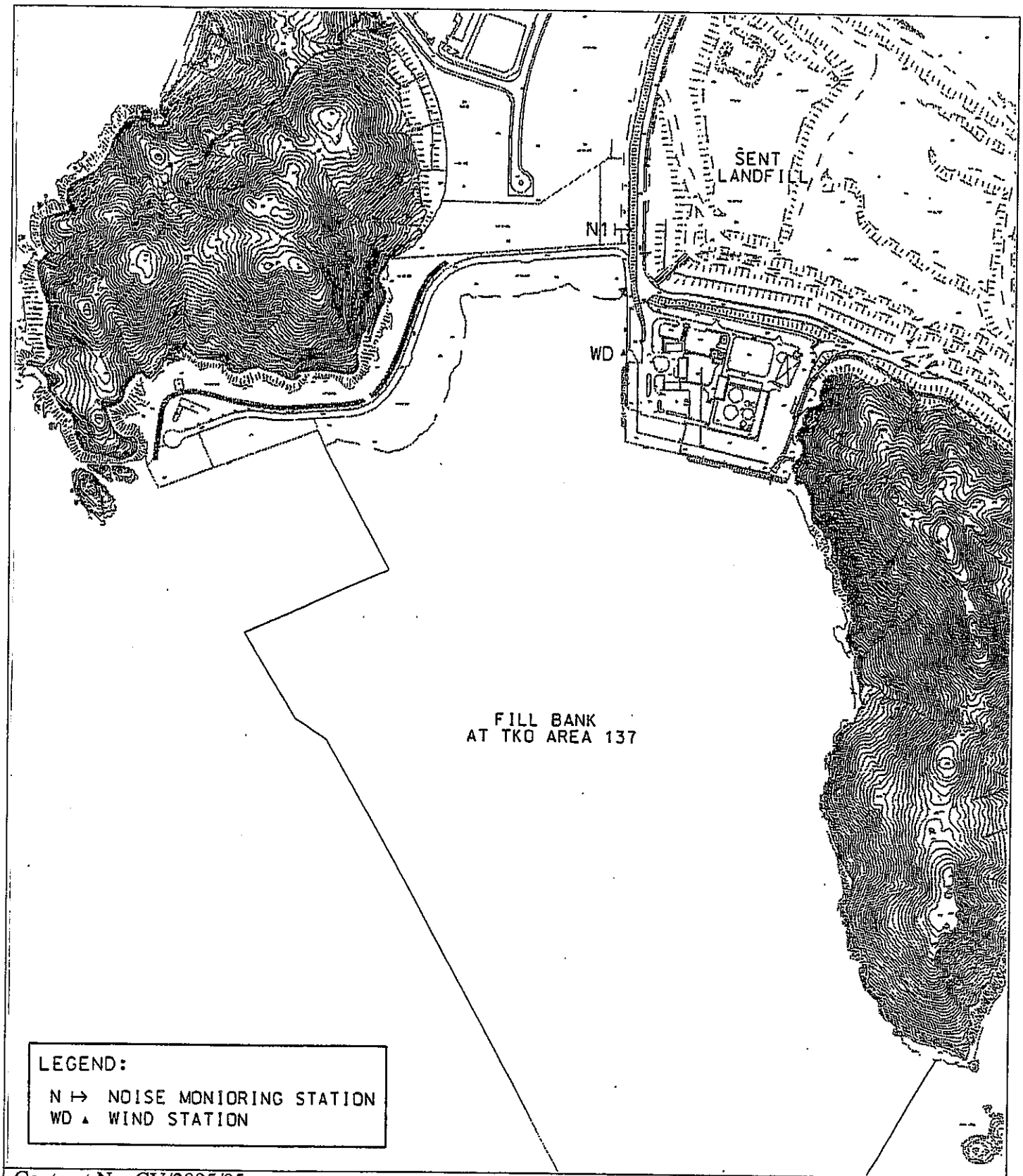
ETS-TESTCONSULT LIMITED



Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Woo

Figure 2

Locations of Noise Monitoring Station –
Fill Bank at Tseung Kwan O Area 137

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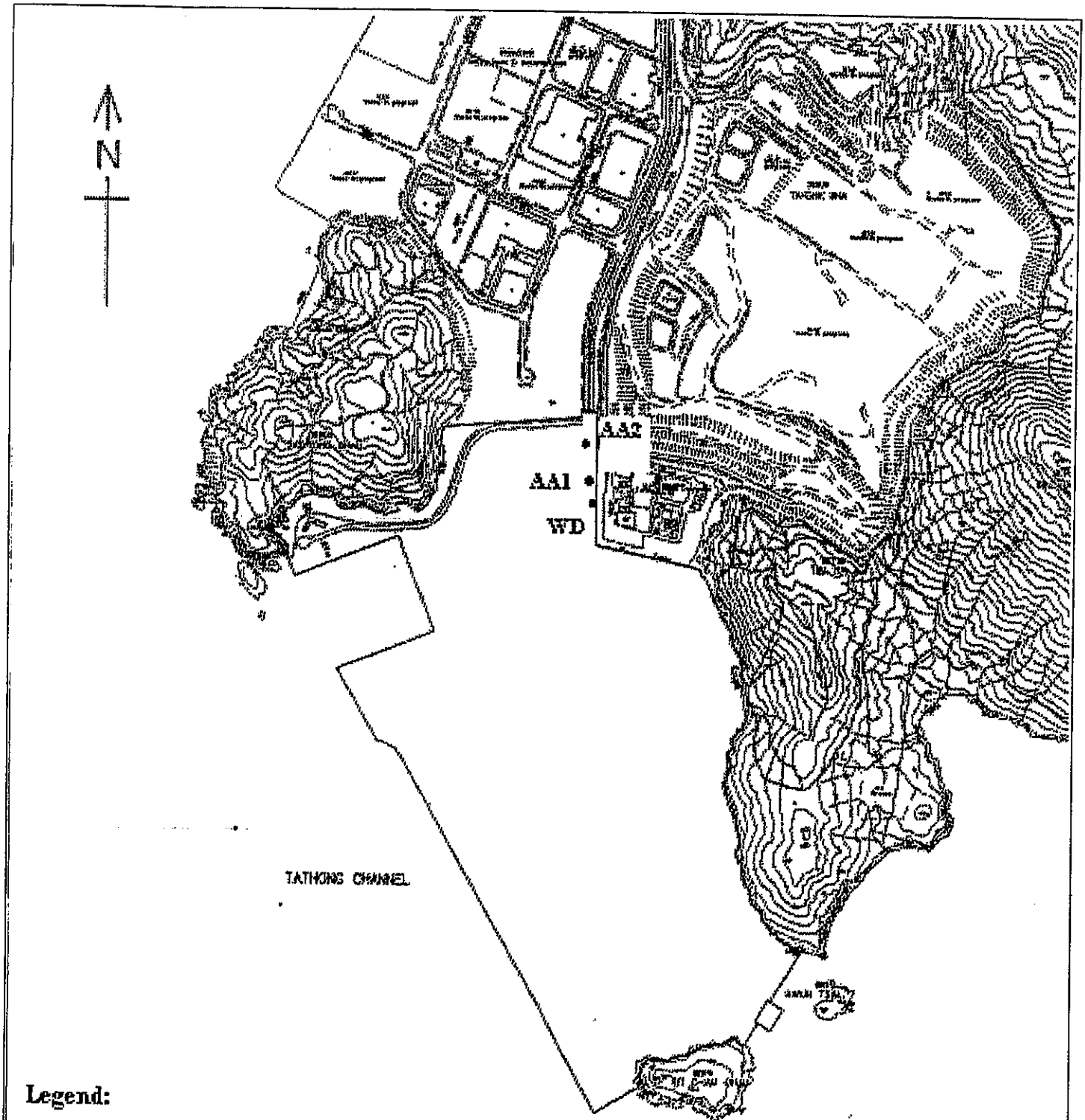
ETS-TESTCONSULT LIMITED



Contract No. CV/2005/05
Operation of Fill Bank at Tseung Kwan O Area 137 and Barging Facilities at Hong Kong Island and Mui Woo

Figure 3

Locations of Air Quality Monitoring Stations –
Fill Bank at Tseung Kwan O Area 137

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