

**The Government of  
The Hong Kong Special Administrative Region**

**Environmental Protection Department**

**Contract No. EP/SP/68/12**

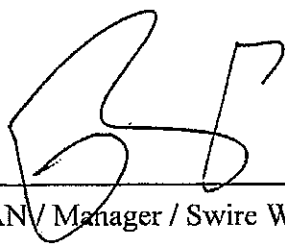
**Outlying Islands Transfer Facilities Follow-on Contract**

**Sok Kwu Wan Transfer Facility**

**Annual Environmental Audit Report (Operation)**

**April 2023 – March 2024**

Prepared by



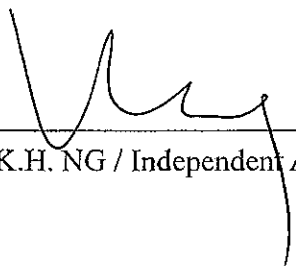
\_\_\_\_\_  
Ted CHAN / Manager / Swire Waste Management Limited

Checked by



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Patrick YEUNG / Senior Environmental Protection Inspector  
/ Environmental Protection Department

Audited by



\_\_\_\_\_  
K.H. NG / Independent Auditor

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## 1. INTRODUCTION

Under the requirements of Section 4 of Environmental Permit No EP-014/1998/A, the measures were undertaken to assure the Sok Kwu Wan Transfer Facility was operated in accordance with the permit.

This report documents the findings of environmental monitoring and audit works for the facility from April 2023 to March 2024.

Environmental monitoring for the odour, noise and water quality was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Full details of the above environmental monitoring tests are described in the **Section 2**. In addition, the environmental complaint handling procedures were also checked and reported in **Section 4** of this report.

## 2. DESCRIPTION OF ENVIRONMENTAL MONITORING TESTS

**Table 1: Summary of Environmental Monitoring Parameters**

<u>Test</u>	<u>Location</u>	<u>Frequency</u>	<u>Parameter</u>	<u>Limits</u>
Odour	Site Boundary See Map ( <b>Appendix A1</b> )	Monthly	Odour	Odour strength not exceed “Slight” odour intensity
Noise	Nearest Sensitive Receiver See Map ( <b>Appendix B1</b> )	Monthly	L <sub>Aeq</sub> (30min)	55 dBA (07:00-23:00) 45 dBA (23:00-07:00)
Marine Water	Four monitoring locations and two control sites. See Map ( <b>Appendix C1</b> )	Weekly	Dissolved Oxygen (DO)	<u>Surface &amp; Middle</u> 4 mg/L except 5 mg/L for FCZ or 1%-ile of baseline data for surface and middle layer <u>Bottom</u> 2 mg/L and or 1%-ile of baseline data for bottom layer
			Water Turbidity (Turbidity)	99%-ile of baseline or 130% of upstream control station's Turbidity at the same tide of the same day
			Suspended Solids (SS)	99%-ile of baseline or 130% of upstream control station's SS of the same tide of the same day

## 2.1 Odour

### 2.1.1 Monitoring Location

The monitoring takes place at the boundary of the facility. The patrol route is shown in **Appendix A1**.

### 2.1.2 Monitoring Frequency

The odour monitoring is conducted once (1) per month.

### 2.1.3 Monitoring Methodology

The odour patrol is conducted by a sensory team, which includes a representative (1) from Independent Third-party Accredited Laboratory, one (1) from the Contractor and one (1) from the EPD. The test consists of three (3) person patrolling the site boundary and recording the location and strength of odour identifiable as arising from the facility. The odour intensity is categorized into five (5) classes:

**Table 2: Odour Intensity Classification**

<b>Class</b>	<b>Remarks</b>
Not detected	No odour perceived or an odour so weak that it cannot be readily characterized or described
Slight	Identifiable odour, slight
Moderate	Identifiable odour, moderate
Strong	Identifiable odour, strong
Extreme	Severe odour

The odour patrol record is set out in **Appendix A2**.

## 2.2 Noise

### 2.2.1 Monitoring Location

Noise monitoring is carried out at the nearest Noise Sensitive Receiver (NSR) in accordance with the EM&A Manual. **Appendix B1** shows the location of this monitoring position.

### 2.2.2 Monitoring Frequency

The noise monitoring is conducted once (1) per month.

### 2.2.3 Monitoring Methodology

The noise monitoring during the Operations phase for the SKWTF was performed in accordance with the “Technical Memorandum for the Assessment of Noise from places other than Domestic, Public or Construction Sites”. The monitoring requirements are summarized as follow:

- The Sound Level Meters in compliance with the IEC61672: 2002 Class 1 and 2 for carrying out the noise monitoring.
- The Sound Level Meter will be set on a tripod at a height of 1.2 m above the ground, subject to local monitoring condition.
- The battery condition will be checked to ensure the correct functioning of the meter.
- Noise monitoring  $Leq_{(30\ min)}$  to be taken on a monthly basis for daytime measurements.
- Prior to and after each noise measurement, the meter will be calibrated using a Calibrator for 94.0 dB at 1,000 Hz. The measurement may be accepted as valid only if the calibration level agrees to within 1.0 dB.
- The wind speed will be frequently checked with the portable wind meter.
- Site conditions and interference noise sources will be recorded.
- Noise monitoring will be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

The Noise monitoring record is set out in **Appendix B2**.

## 2.3 Water quality

### 2.3.1 Monitoring Location

The number of marine water monitoring stations for Sok Kwu Wan Transfer Facility is shown in **Table 3** and **Appendix C1** shows the locations of the marine water quality monitoring stations.

**Table 3: Locations of the marine water quality monitoring stations**

Facility	Station ID	No. of Stations
Sok Kwu Wan	Control Stations: SC1 & SC2 Impact Stations: S1, S2, S3 & S4	6

### 2.3.2 Monitoring Methodology

The marine water quality monitoring during the Operations phase for the SKWTF was performed in accordance with the EM&A Manual. The following set out the methods of measurement to be used during the environmental monitoring.

#### Dissolved Oxygen and Turbidity

The in-situ measurements of dissolved oxygen and turbidity are carried out using an In-situ Aqua Troll 600 Multi-parameter Sonde.

Where the depth of water is less than 3m, duplicate measurements of D.O. are to be taken at one depth to obtain an average reading.

With depths between 3m and 6m, measurements will be taken at 1m below the surface and 1m above the sea bed. In each depth, duplicate readings will be taken and an average value will be calculated.

With a water depth greater than 6m, measurements will be taken at 1m below surface, the mid-depth and 1m above the sea bed. In each depth, duplicate readings will be taken and an average value will be calculated.

#### Suspended solids

The suspended solids monitoring is carried out in according to the in-house method (E-T-053) with reference to the standard method APHA 17ed 2540 D. The testing method is summarized as below:

A well-mixed sea water sample is filtered through a weighed standard glass-fiber filter and wash thoroughly with water to remove dissolved solids on the filter. The non-filterable residue retained on the filter is dried at 103 to 105°C. The increase in weight of the filter represents the suspended solids content.

### 3 **RESULTS**

#### 3.1 **Odour**

##### 3.1.1 Summary of Number of Monitoring Events and Exceedances for Odour monitoring

**Table 4: Summary of Number of Monitoring Events and Exceedances for Odour monitoring**

Monitoring Parameter	Location	No. of monitoring events	No. of Exceedance
		April 2023 – March 2024	
Odour	Point 1	12	0
	Point 2	12	0
	Point 3	12	0
	Point 4	12	0
	Point 5	12	0
	Point 6	12	0
<b>Total</b>		<b>72</b>	<b>0</b>

##### 3.1.2 Conclusion

No odour could be detected during the odour patrols. The results show compliance with the odour objectives.

Please refer to Appendix A2 for the odour monitoring record.

#### 3.2 **Noise**

##### 3.2.1 Summary of Number of Monitoring Events and Exceedances for Noise monitoring

**Table 5: Summary of Number of Monitoring Events and Exceedances for Noise monitoring**

Monitoring Parameter	Location	No. of monitoring events	No. of Exceedance
		April 2023 – March 2024	
Noise	NSR	13	5
<b>Total</b>		<b>13</b>	<b>5</b>

### 3.2.2 Conclusion

During the reporting period, some of the noise monitoring results have exceeded the compliance objectives. According to the notes recorded by the field operator of the Independent Third-party Accredited Laboratory, the major noise source was identified from the pedestrians, helicopters, the natural noise of birds and insects and the village vehicles. The noise emanated from the SKWTF was considered insignificant.

In addition, EPD site staff conducted random checking of on-site CCTV records and confirmed no operational activities were being carried out at the facility during nighttime. Hence, it is reasonable to believe that the night-time noise level at SKWTF was insignificant.

The noise level monitoring record taken at the NSR of SKWTF is set out in **Appendix B2**.

### 3.3 Water Quality

#### 3.3.1 Summary of Number of Monitoring Events and Exceedances for Water quality monitoring

A total of 136 sets of water samples were collected in 4 sampling days during the reporting period. A summary of the exceedances is shown in the following **Table 6**.

**Table 6: Summary of exceedance of Marine Water Quality at SKWTF**

Sampling Point	Type of Exceedance		
	DO	Turbidity	SS
S1	0	0	0
S2	0	0	0
S3	0	0	0



S4	0	0	0
Total	0	0	0

### 3.3.2 Conclusion

The laboratory results show that none of the water samples exceeded the control limits of Dissolved Oxygen, Turbidity and Suspended Solid as stipulated in the Environmental Permit or Marine Water Quality Objectives.

The water quality monitoring record is set out in **Appendix C2**

## 4 **STATUS OF ENVIRONMENTAL COMPLAINT HANDLING**

No verbal or written complaints were received during the reporting period.

## 5 **CONCLUSION**

Based on the monitoring results during the audit period as well as a review of our observations the following can be concluded.

The environmental protection systems that are currently in use, when combined with the existing level of environmental awareness at the facility, are sufficient to meet current regulatory constraints relating to the environment.

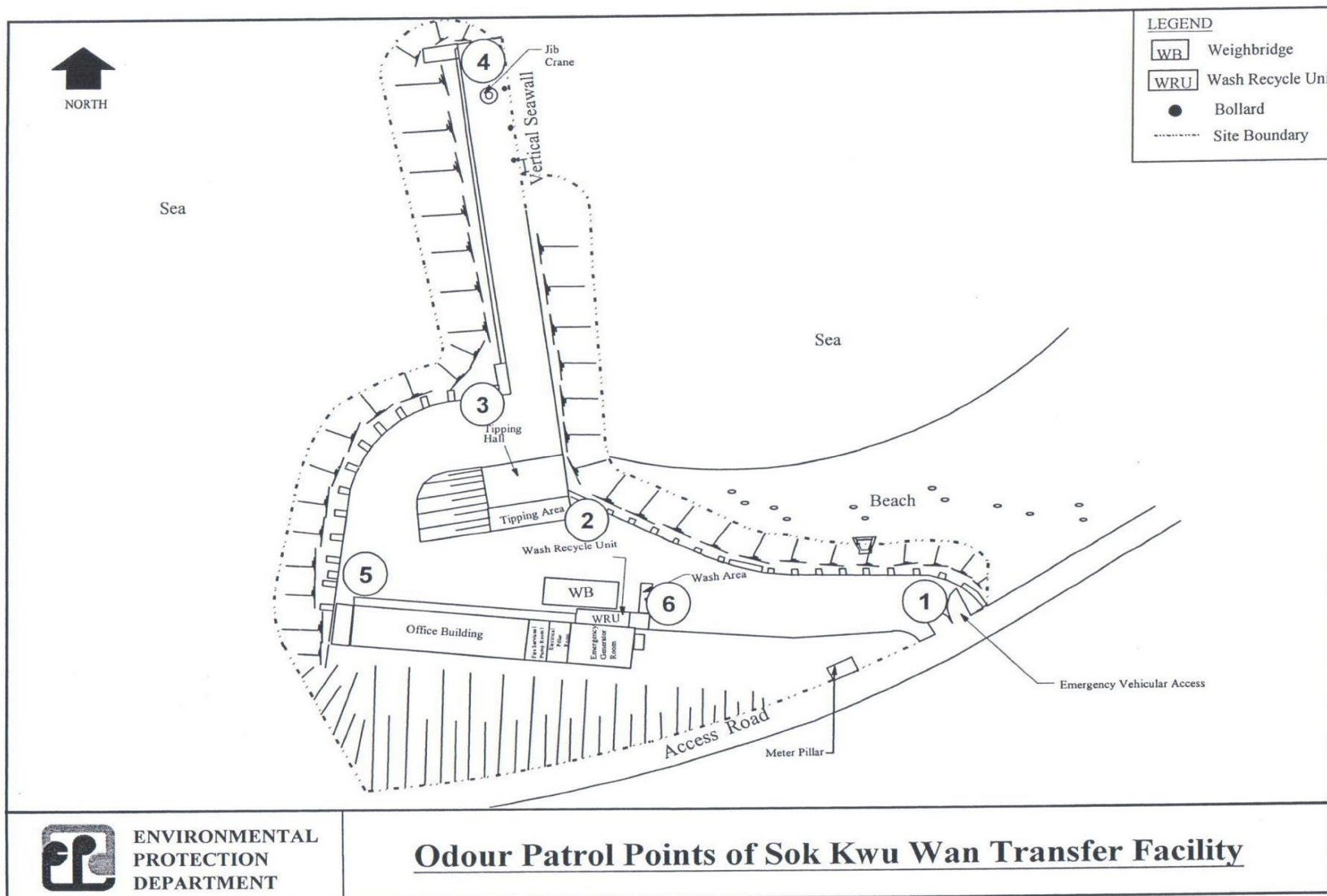
The methods and frequency of environmental monitoring produce a database that is adequate to assist station management in making accurate and timely decisions relating to the modification of environmental systems or operational practices if needed.

The current environmental management systems and performance provide a good foundation to develop a positive relationship with the community.

# **Appendix A**

## **Appendix A1**

### **Odour patrol points of Sok Kwu Wan Transfer Facility**



## **Appendix A2**

### **Odour Patrol Record**

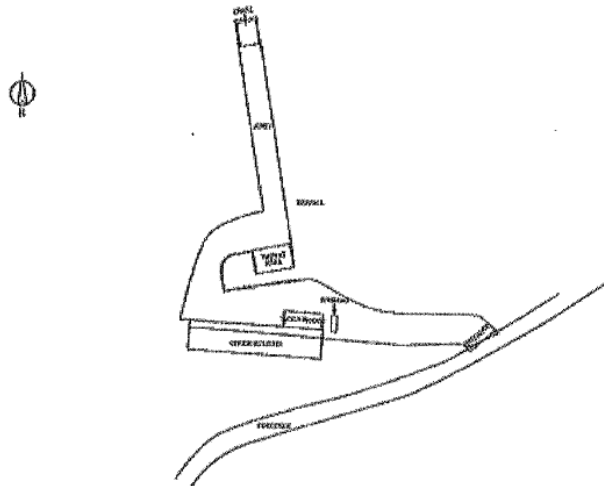


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.63 m/s

Wind Direction: E

Measurement Date 2023/Apr/13

Start Time: 11:34 End Time: 11:54

Sensory Patrol Included: Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	all
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

- Legend : ( ) :Containers nearby the indicated location  
 → :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

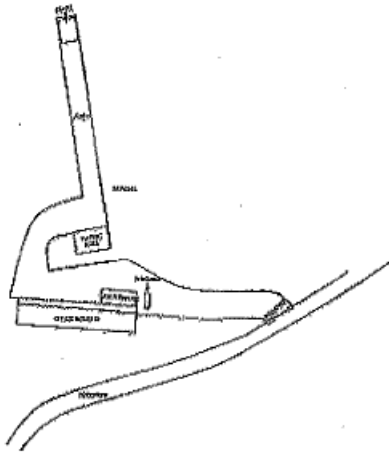


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.6 m/s

Wind Direction: NE

Measurement Date 13/9/2023

Start Time: 1015 End Time: 1030

Sensory Patrol Included: Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD No EPI on duty

Classification	Location
<input checked="" type="checkbox"/> Not detected	AT
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

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- Strong :Identifiable odour, strong
- Extreme :Severe odour

- Legend : ( ) :Containers nearby the indicated location  
 → :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

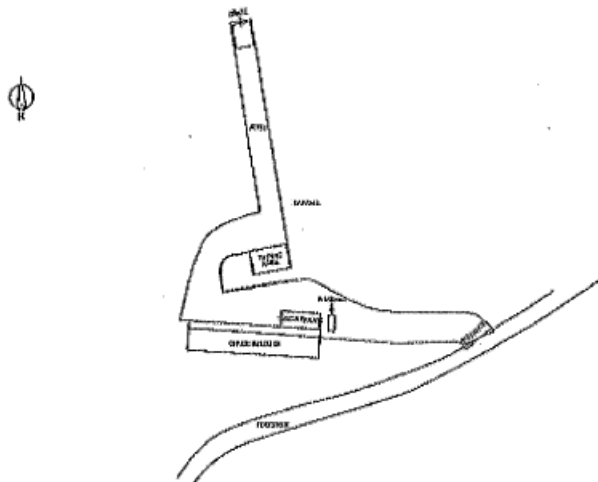


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.2 ms<sup>-1</sup>

Wind Direction: E

Measurement Date 13 JUN 2023 Start Time: 1035 End Time: 1050

Sensory Patrol Included: Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	ALL
<input type="checkbox"/> Slight	Z
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

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- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
→ :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

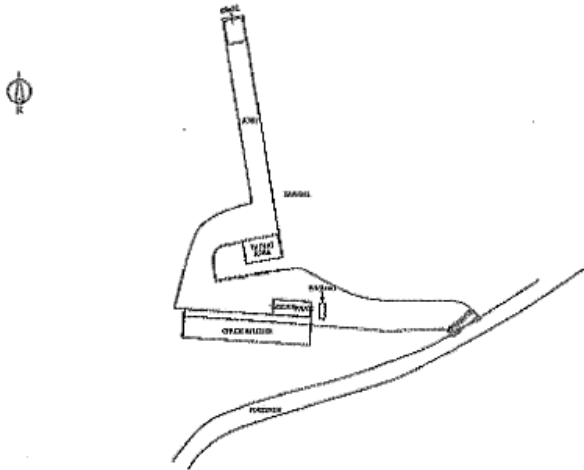



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
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Fax : (852) – 3565 4160  
Email : mattlab@fugro.com


**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.2 m/s      Wind Direction: SOW 

Measurement Date 4 JUL 2023      Start Time: 10:05      End Time: 10:20

Sensory Patrol Included:      Representative of FUGRO Staff 

   Representative of SWIRE WASTE MANAGEMENT LTD 

   Representative of EPD    No EPI on duty

Classification	Location
<input checked="" type="checkbox"/> Not detected	<u>ALL</u>
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
   → :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.



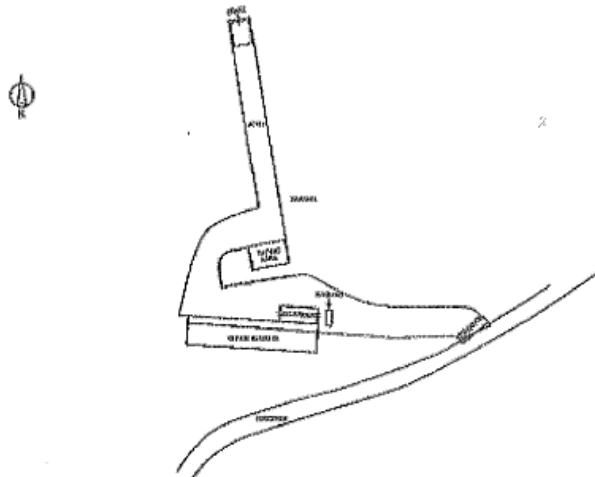


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### SWIRE WASTE MANAGEMENT LTD SOK KWU WAN TRANSFER FACILITY Odour Measurement Record



Wind Speed: 0.2m/s Wind Direction: NW

Measurement Date 18/11/2003 Start Time: 1400 End Time: 1415

Sensory Patrol Included: Representative of FUGRO Staff [Signature]  
Representative of SWIRE WASTE MANAGEMENT LTD [Signature]  
Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	<u>NW</u>
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

#### Classification Criteria:

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
→ :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

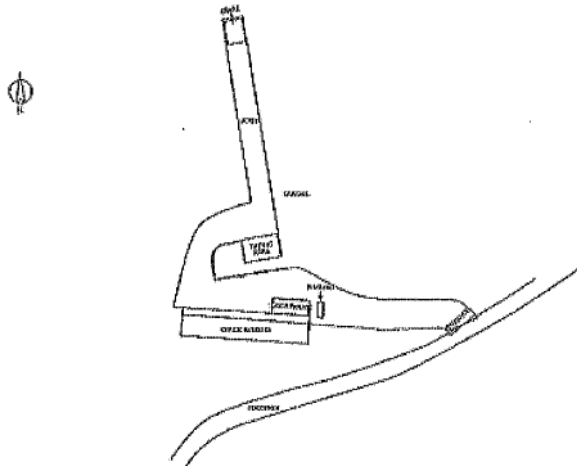


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.5 m/s Wind Direction: E

Measurement Date 12 SEP 2023 Start Time: 10:40 End Time: 10:55

Sensory Patrol Included: Representative of FUGRO Staff [Signature]  
 Representative of SWIRE WASTE MANAGEMENT LTD [Signature]  
 Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	ALL
<input type="checkbox"/> Slight	Z
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
 → :Direction of wind

Remarks:  
 Please Call the on duty supervisor when arrived.

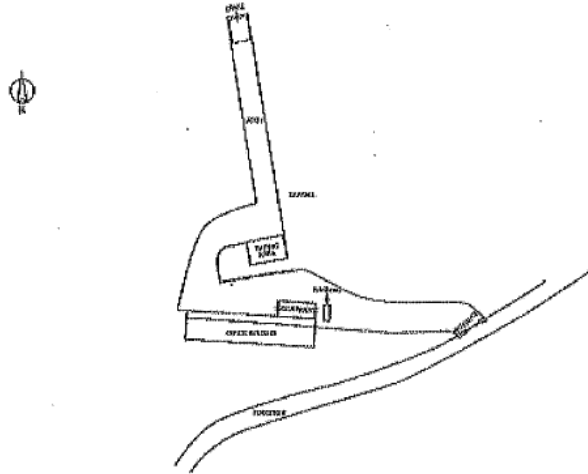


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.2ms<sup>-1</sup>

Wind Direction: E

Measurement Date 13 OCT 2023

Start Time: 1045 End Time: 1100

Sensory Patrol Included:

Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	ALL
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
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- Strong :Identifiable odour, strong
- Extreme :Severe odour

- Legend : ( ) :Containers nearby the indicated location
- :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

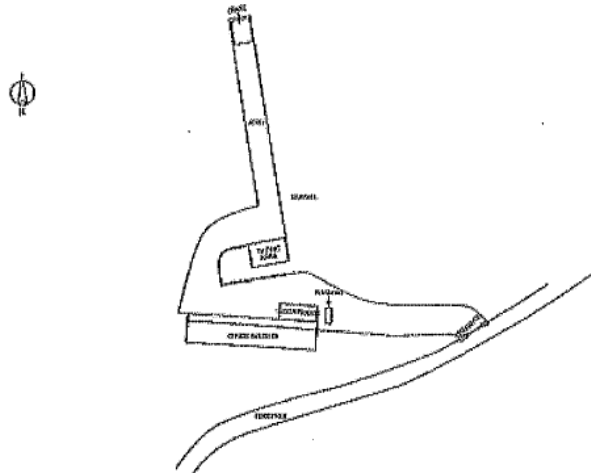


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.6 ms<sup>-1</sup> Wind Direction: E

Measurement Date 10 Nov 2023 Start Time: 1045 End Time: 1100

Sensory Patrol Included: Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	ALL
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
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- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
→ :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

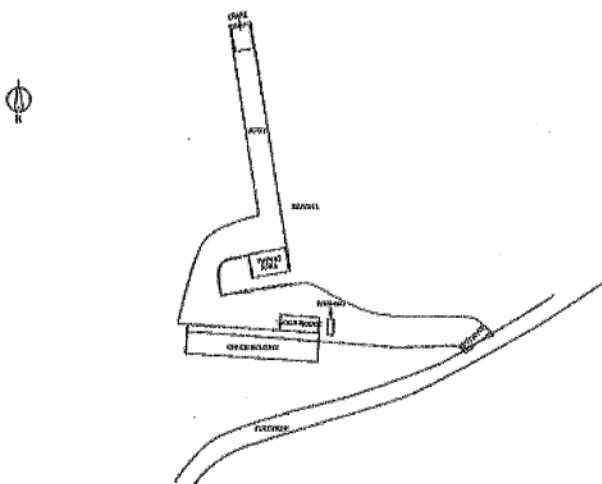


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### SWIRE WASTE MANAGEMENT LTD SOK KWU WAN TRANSFER FACILITY Odour Measurement Record



Wind Speed: 0.3 m/s

Wind Direction: NE

Measurement Date 2023/Dec/4

Start Time: 09:20 End Time: 09:35

Sensory Patrol Included:

Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	all
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

#### Classification Criteria:

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

- Legend : ( ) :Containers nearby the indicated location
- :Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

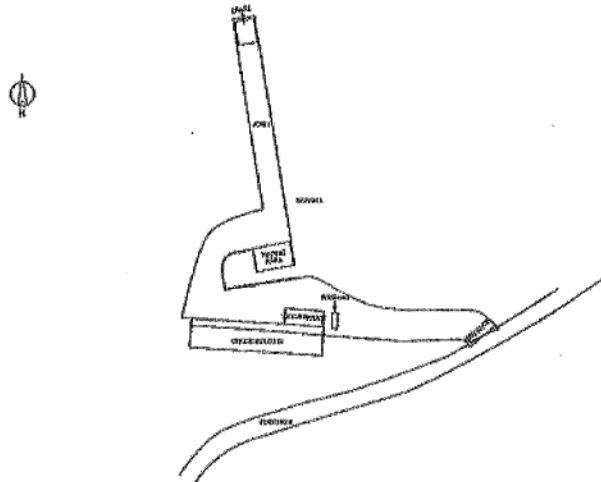


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**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.3 m/s

Wind Direction: E

Measurement Date: 2024/Jan/12

Start Time: 12:50 End Time: 13:00

Sensory Patrol Included:

Representative of FUGRO Staff: [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD: [Signature]

Representative of EPD: \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	all
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

**Classification Criteria:**

- Not detected : No odour perceived or an odour so weak that it cannot be readily characterised or described.
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- Strong : Identifiable odour, strong
- Extreme : Severe odour

- Legend : ( ) : Containers nearby the indicated location
- : Direction of wind

Remarks:  
Please Call the on duty supervisor when arrived.

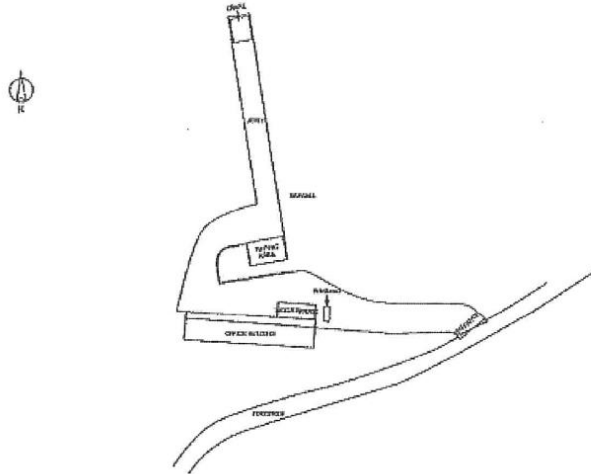


**FUGRO TECHNICAL SERVICES LIMITED**

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1 Kwai On Rd, Kwai Chung,  
NT, Hong Kong

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Fax : (852) – 3565 4160  
Email : matlab@fugro.com

**SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record**



Wind Speed: 0.8 m/s      Wind Direction: E  
 Measurement Date 8/2/2024      Start Time: 13:15      End Time: 13:25  
 Sensory Patrol Included:      Representative of FUGRO Staff [Signature]  
    Representative of SWIRE WASTE MANAGEMENT LTD [Signature]  
    Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	All
<input type="checkbox"/> Slight	2
<input type="checkbox"/> Moderate	2
<input type="checkbox"/> Strong	2
<input type="checkbox"/> Extreme	2

**Classification Criteria:**  
 Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.  
 Slight :Identifiable odour, slight  
 Moderate :Identifiable odour, moderate  
 Strong :Identifiable odour, strong  
 Extreme :Severe odour

Legend : ( ) :Containers nearby the indicated location  
 → :Direction of wind

Remarks:  
 Please Call the on duty supervisor when arrived.

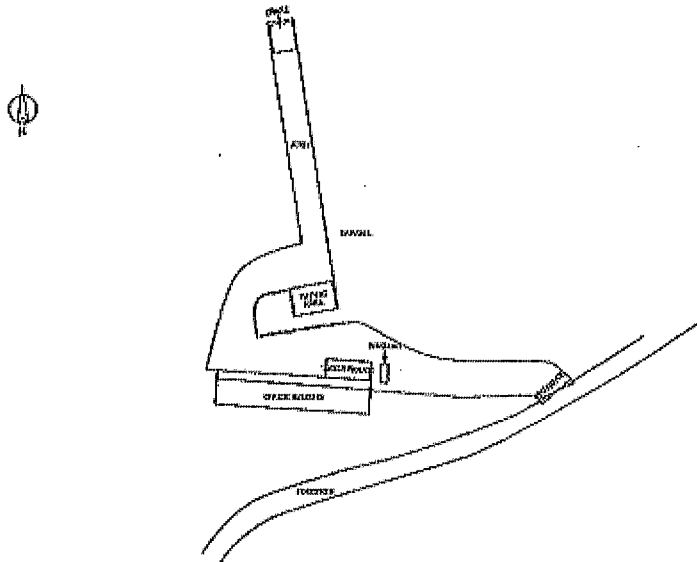


FUGRO TECHNICAL SERVICES LIMITED

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Email : matlab@fugro.com

SWIRE WASTE MANAGEMENT LTD  
SOK KWU WAN TRANSFER FACILITY  
Odour Measurement Record



Wind Speed: 0.5 m/s

Wind Direction: N

Measurement Date 7/3/2024

Start Time: 1400 End Time: 1415

Sensory Patrol Included:

Representative of FUGRO Staff [Signature]

Representative of SWIRE WASTE MANAGEMENT LTD [Signature]

Representative of EPD \_\_\_\_\_

Classification	Location
<input checked="" type="checkbox"/> Not detected	<u>A1</u>
<input type="checkbox"/> Slight	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Strong	
<input type="checkbox"/> Extreme	

Classification Criteria:

- Not detected :No odour perceived or an odour so weak that it cannot be readily characterised or described.
- Slight :Identifiable odour, slight
- Moderate :Identifiable odour, moderate
- Strong :Identifiable odour, strong
- Extreme :Severe odour

- Legend : ( ) :Containers nearby the indicated location
- : → :Direction of wind

Remarks:

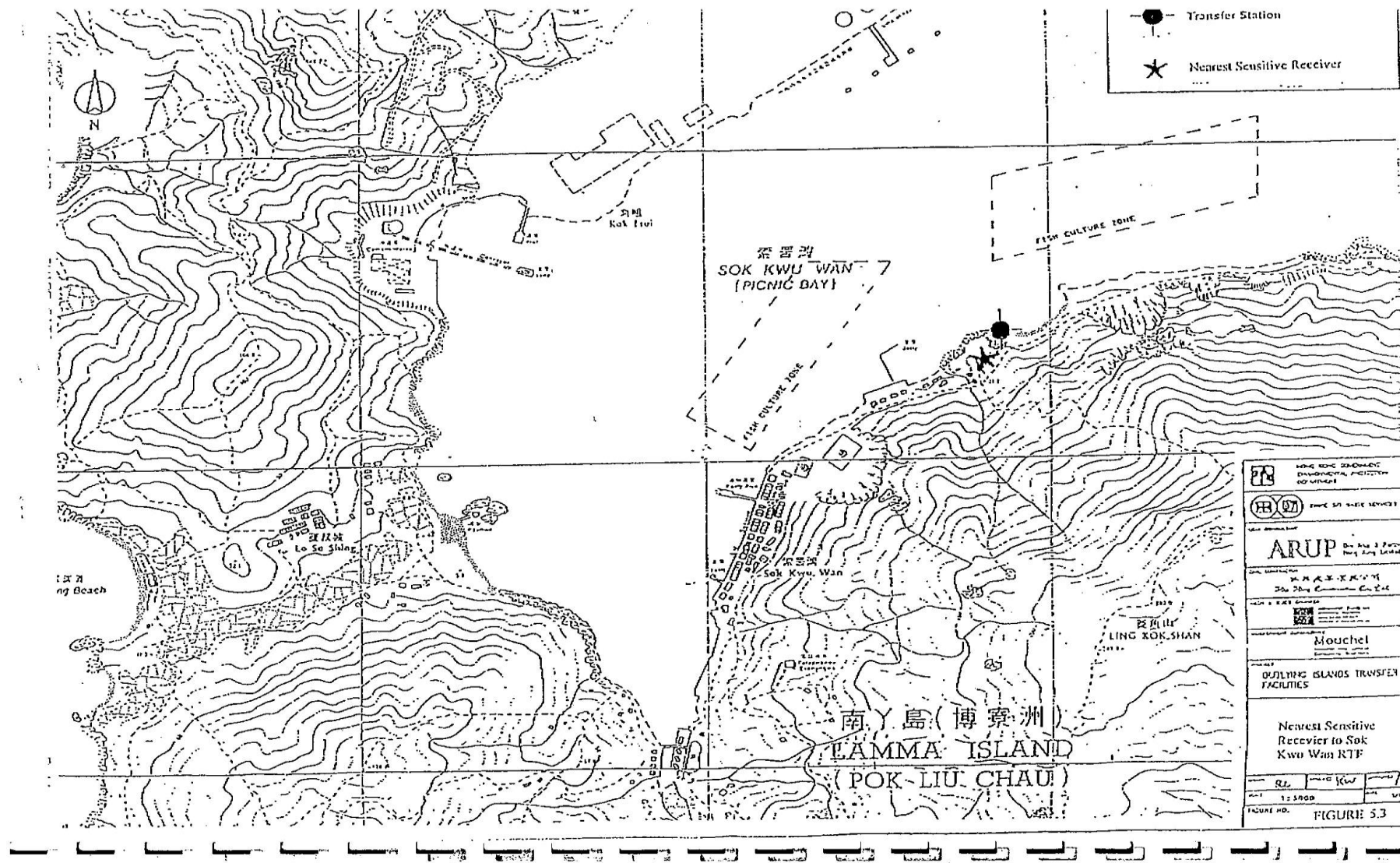
Please Call the on duty supervisor when arrived.



# **Appendix B**

## **Appendix B1**

### **Location of Noise Sensitive Receiver (NSR)**



## **Appendix B2**

### **Noise monitoring record (NSR)**

## Appendix B2 – Noise monitoring record (NSR)

### Sok Kwu Wan Transfer Facility

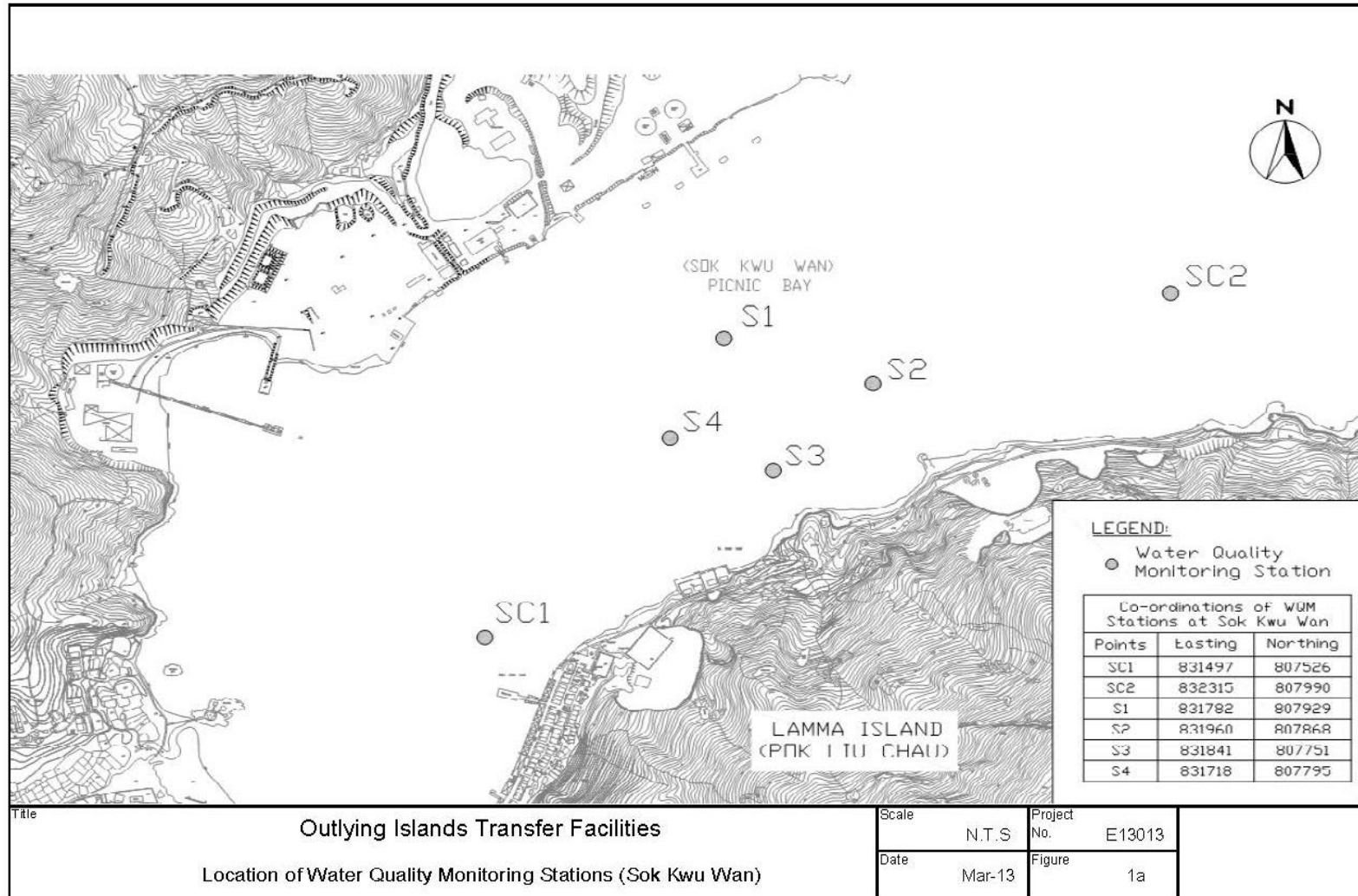
Measurement Date and Time	Noise Level Leq A(30 min) / (dB(A))	Remarks
13 April 2023 (11:46 – 12:16)	<b>60.5</b>	The major noise source was identified from the natural sound of birds and noise of village vehicles. The noise generated by the Transfer Facility was considered to be insignificant.
15 May 2023 (09:20 – 09:50)	53.0	N/A
13 June 2023 (09:22 – 09:52)	<b>65.6</b>	The major noise source was identified from the natural noise of birds and insects, noise of village vehicles and talking sound of pedestrians. The noise generated by the Transfer Facility was considered to be insignificant.
4 July 2023 (09:26 – 09:56)	<b>61.9</b>	The major noise source was identified from the village vehicles and the natural sound of insects. The noise generated by the Transfer Facility was considered to be insignificant.
18 August 2023 (13:40 – 14:10)	46.3	N/A
12 Sep 2023 (09:18 – 09:48)	<b>69.3</b>	The major noise source was identified from the natural sound of birds and engine noise of village vehicles passing through. The noise generated by the Transfer Facility was considered to be insignificant.
13 Oct 2023 (11:08 – 11:38)	<b>58.3</b>	The major noise source was identified from the village vehicles, helicopters, and the natural sound of birds. The noise generated by the Transfer Facility was considered to be insignificant.
10 Nov 2023 (11:10 – 11:40)	52.5	N/A
6 Dec 2023 (13:00 – 14:00)	46.7	N/A
7 Dec 2023 (02:27 – 02:57)	41.3	N/A
12 Jan 2024 (13:00 – 13:30)	50.0	N/A

8 Feb 2024 (12:50 – 13:20)	49.0	N/A
7 Mar 2024 (13:16 – 13:46)	48.4	N/A

# **Appendix C**

## **Appendix C1**

### **Locations of Marine Water Monitoring Stations**



## **Appendix C2**

### **Marine Water Monitoring Record**





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Email : matlab@fugro.com

Report No: 0015/17/ED/712

**TEST REPORT**

**Results:**

Sampling Date	Sampling Point	Level	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Total Suspended Solids (mg/L)
Sok Kwu Wan (12 June 2023) (12:16) Flood Tide	S1	S	11.67	1.40	4
		M	10.84	1.28	4
		B	10.51	1.05	4
	S2	S	11.82	1.41	4
		M	11.85	1.25	4
		B	10.41	1.08	4
	S3	S	11.67	1.52	4
		B	10.49	0.97	4
	S4	S	11.79	1.34	4
		M	10.98	1.21	4
		B	10.51	1.09	4
	SC1	S	11.79	1.44	4
		M	11.10	1.23	4
		B	10.13	1.08	4
	SC2	S	11.89	1.22	4
M		11.25	1.17	4	
B		10.50	1.08	4	
Sok Kwu Wan (12 June 2023) (06:55) Ebb Tide	S1	S	11.75	1.46	4
		M	10.93	1.20	4
		B	10.42	1.06	4
	S2	S	11.79	1.35	4
		M	10.89	1.14	4
		B	10.41	1.05	5
	S3	S	11.72	1.53	5
		B	10.51	1.02	5
	S4	S	11.80	1.27	4
		M	11.19	1.15	4
		B	10.14	1.01	4
	SC1	S	11.83	1.25	4
		M	11.22	1.22	4
		B	10.38	1.11	4
	SC2	S	11.69	1.42	4
M		10.85	1.13	4	
B		10.48	1.09	4	

Remark: 1) < = less than



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Report No: 0015/17/ED/712

**TEST REPORT**

**Photo Records of Sok Kwu Wan Marine Water Quality Monitoring:**



**12 June 2023 Flood Tide**  
**(No construction activities)**



**12 June 2023 Ebb Tide**  
**(No construction activities)**



**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
5 Lok Yi Street, Tai Lam,  
Tuen Mun, N.T.,  
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Tel : (852) – 2450 8233  
Fax : (852) – 2450 6138  
Email : matlab@fugro.com

Report No: 0015/17/ED/718

**TEST REPORT**

**Results:**

Sampling Date	Sampling Point	Level	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Total Suspended Solids (mg/L)
Sok Kwu Wan (13 Sep 2023) (17:48) Flood Tide	S1	S	6.00	1.14	<2
		M	5.84	1.47	<2
		B	5.63	1.92	<2
	S2	S	6.05	1.16	<2
		M	5.79	1.74	<2
		B	5.58	1.97	<2
	S3	S	6.06	1.24	<2
		B	5.43	1.63	<2
	S4	S	5.98	1.22	<2
		M	5.85	1.60	<2
	SC1	B	5.59	1.96	2
		S	6.08	1.06	<2
		M	5.97	1.51	<2
	SC2	B	5.66	2.01	<2
		S	6.05	1.15	<2
M		5.82	1.61	<2	
Sok Kwu Wan (13 Sep 2023) (10:14) Ebb Tide	S1	B	5.70	1.84	<2
		S	6.12	1.09	<2
		M	6.03	1.33	<2
	S2	B	5.75	1.79	<2
		S	6.18	0.99	<2
		M	5.80	1.50	<2
	S3	B	5.62	1.90	<2
		S	6.16	1.16	3
	S4	B	5.57	1.49	3
		S	6.10	1.10	<2
		M	6.00	1.53	2
	SC1	B	5.62	1.84	2
		S	6.16	0.93	2
		M	6.06	1.38	2
	SC2	B	5.77	1.86	2
S		6.13	1.01	<2	
M		6.02	1.44	<2	
		B	5.74	1.79	<2

Remark: 1) < = less than



**FUGRO TECHNICAL SERVICES LIMITED**

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Report No: 0015/17/ED/718

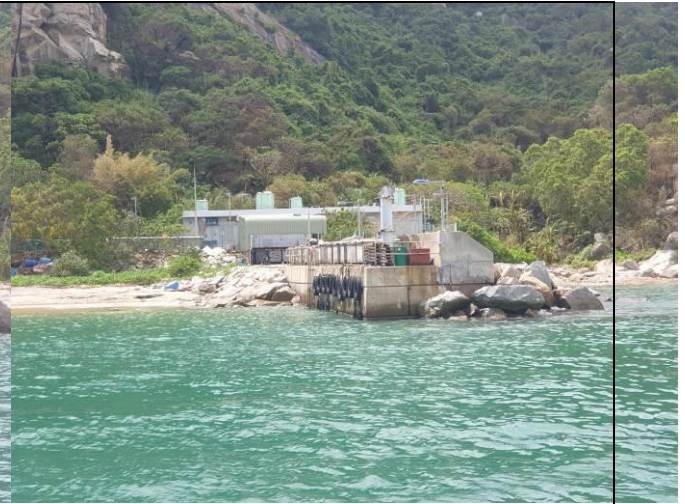
**TEST REPORT**

**Photo Records of Sok Kwu Wan Marine Water Quality Monitoring:**



**13 September 2023 Ebb Tide**

**(No construction activities)**



**13 September 2023 Flood Tide**

**(No construction activities)**



**FUGRO TECHNICAL SERVICES LIMITED**

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Report No: 0015/17/ED/0724

**TEST REPORT**

**Results:**

Sampling Date	Sampling Point	Level	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Total Suspended Solids (mg/L)
Sok Kwu Wan (6 Dec 2023) (06:14) Ebb Tide	S1	S	5.94	0.91	2
		M	5.94	0.98	4
		B	5.89	1.04	3
	S2	S	5.91	1.17	2
		M	5.84	1.20	2
		B	5.80	1.24	2
	S3	S	5.67	1.04	3
		B	5.91	1.14	2
	S4	S	5.61	1.24	3
		M	5.58	1.31	3
		B	5.53	1.37	2
	SC1	S	6.24	0.55	2
		M	6.18	0.60	3
		B	6.14	0.62	2
	SC2	S	5.99	1.28	3
M		5.96	1.31	3	
B		5.91	1.36	2	
Sok Kwu Wan (6 Dec 2023) (10:30) Flood Tide	S1	S	5.61	1.24	2
		M	5.58	1.31	2
		B	5.53	1.36	3
	S2	S	5.93	0.99	2
		M	5.84	1.03	2
		B	5.83	1.06	2
	S3	S	5.81	1.13	2
		B	5.68	1.24	3
	S4	S	6.20	0.60	3
		M	6.09	0.68	2
		B	6.02	0.73	2
	SC1	S	6.24	1.15	3
		M	6.18	1.11	3
		B	6.14	1.12	2
	SC2	S	5.99	1.28	3
M		5.96	1.31	2	
B		5.91	1.36	2	

Remark: 1) < = less than



**FUGRO TECHNICAL SERVICES LIMITED**

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Report No: 0015/17/ED/0724

**TEST REPORT**

**Photo Records of Sok Kwu Wan Marine Water Quality Monitoring:**



**6 December 2023 Flood Tide**  
**(No construction activities)**



**6 December 2023 Ebb Tide**  
**(No construction activities)**



**FUGRO TECHNICAL SERVICES LIMITED**

Fugro Development Centre,  
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Email : matlab@fugro.com

Report No: 0015/17/ED/732

**TEST REPORT**

**Results:**

Sampling Date	Sampling Point	Level	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Total Suspended Solids (mg/L)
Sok Kwu Wan (2 Mar 2024) (07:23) Flood Tide	S1	S	7.15	2.31	2
		M	7.06	2.40	2
		B	7.03	2.33	2
	S2	S	7.35	2.07	2
		M	7.31	2.10	2
		B	7.30	2.14	2
	S3	S	6.82	1.32	2
		B	6.79	1.41	2
	S4	S	7.43	1.88	2
		M	7.36	1.76	2
		B	7.30	1.94	2
	SC1	S	6.84	1.94	3
		M	6.81	2.01	3
		B	6.80	2.04	4
	SC2	S	6.92	1.74	4
M		6.97	1.77	2	
B		6.90	1.83	2	
Sok Kwu Wan (2 Mar 2024) (12:26) Ebb Tide	S1	S	6.92	2.04	2
		M	6.87	2.06	2
		B	6.86	2.10	2
	S2	S	7.85	1.73	2
		M	7.79	1.79	2
		B	7.75	1.83	2
	S3	S	7.06	2.11	2
		B	7.09	2.19	2
	S4	S	7.26	1.27	2
		M	7.14	1.29	2
		B	7.12	1.31	2
	SC1	S	6.67	2.46	2
		M	6.64	2.50	2
		B	6.60	2.51	2
	SC2	S	6.94	1.99	2
M		6.89	2.17	3	
B		6.84	2.22	3	

Remark: 1) <= less than

Report No: 0015/17/ED/732

**TEST REPORT**

**Photo Records of Sok Kwu Wan Marine Water Quality Monitoring:**



**2 March 2024 Flood Tide**  
**(No construction activities)**



**2 March 2024 Ebb Tide**  
**(No construction activities)**