





Peter Scott Field Studies Centre

Monthly Environmental Impact Monitoring Report

August 2020

Peter Scott Field Studies Centre

Impact Monitoring Report

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1 EXECUTIVE SUMMARY

1.1 Introduction

This is the 1st monthly Environmental Monitoring and Audit (EM&A) report for the non-statutory Environmental and Ecological Assessment (EEA) for the Peter Scott Field Studies Centre Demolition and Rebuild (online [here](#)). This EM&A report addresses the effectiveness of the recommended mitigation measures. This report covers the period 1-31 August 2020 (the 'reporting period').

1.2 Environmental Monitoring, and Site Inspection and Audit

During the reporting period, the major construction works involve demolition, as follows:

Week 1: Roof floor (water tank, stair hood, cantilever slab beam and staircases, external wall column, partition wall slab), removal of concrete debris.

Week 2: Ground floor (external wall, cantilever slab, column).

Week 3: Ground floor slab, removal of soil fill between ground floor slab and footings, sorting and recycling of materials.

Week 4: Footings, removal of concrete debris. Sorting and recycling of materials.

Table 1: Environmental monitoring events and site /inspections & audits carried out in the reporting period.

Environmental Aspect	Monitoring Parameters / Inspection & Audit	No. monitoring locations	Dates
Air Quality	1-hour TSP	Two	5 th & 17 th August
Noise	Leq(30min)	Two	5 th & 17 th August
Site Inspections	Joint Site Inspection and Auditing by IEC, ET & Contractor	Project Site	5 th , 14 th , 21 st and 28 th

1.3 Exceedance of Action and Limit (A/L) Levels

The relevant baseline monitoring of air quality and noise was carried out from 30 March 2020 to 3 April 2020, ahead of demolition. Based on this monitoring data, Action and Limit Levels were calculated in the Baseline Monitoring Report for subsequent use for the EM&A program during the demolition and construction period.

During the reporting period, no exceedance or complaint was recorded.

Table 2: Record of exceedances.

Environmental Aspect	Monitoring parameters	Action Level	Limit Level	Result	Action
Air Quality	1-hour TSP	295µg/m ³ (ASR1) 292µg/m ³ (ASR2)	500µg/m ³	No exceedance	Not required
Noise	Leq30min (dB(A))	One documented complaint	75dB(A)	No complaint or exceedance	Not required

1.4 Site inspections

During the reporting period, a total of four site inspections and audits were carried out to verify the environmental performance and to ensure mitigation measures were properly implemented. Weekly site inspection and audit was carried out on 5th, 14th, 21st and 28th August 2020 by the ET and the Contractor, while the IEC conducted joint inspection on 5th and 21st August. The only issue observed during these inspections was in relation to the sedimentation tank, which was found to be inoperable on 5th August, and was rectified on the same day. No activities or practices that might adversely impact local ecology were noted.

During the reporting period, no exceedances regarding noise or air quality occurred, and no environmental complaints, summons or prosecution were received. Environmental mitigation measures were implemented, and demolition activities were not generating adverse impacts off-site.

2 INTRODUCTION

2.1 Project Background

This Environmental Monitoring and Audit (EM&A) report for the Peter Scott Field Studies Centre Demolition and Rebuild summarises the effectiveness of the mitigation measures recommended in the non-statutory Environmental and Ecological Assessment (EEA).

AEC Limited has been commissioned as the Environmental Team, while SMEC fulfills the role of Independent Environmental Checker. WWF-Hong Kong is the Project Proponent, Faithful and Gould is the Project Manager and Willey Construction and Engineering Company is the Demolition Contractor.

Baseline monitoring for air quality and noise is required to determine the ambient environmental conditions before the demolition and construction works. This was carried out between 30 March 2020 and 3 April 2020 for air quality and noise before demolition and construction works commenced. The baseline monitoring report details the monitoring results and findings for air quality and noise in advance of the erection of scaffolding. Action and limit levels were derived based on the baseline monitoring data. The commencement of the demolition works of PSFSC was on 4th August 2020.

As part of the EM&A program, this is the 1st monthly EM&A report which presents the monitoring results as well as findings from site inspection and audit for the reporting period 1-31 August 2020.

2.2 Project Location

The site of the PSFSC is located on Tam Kon Chau Road in an area zoned “Government, Institution or Community” (“GIC”) on the Mai Po and Fairview Park OZP No. S/YL-MP/6 and surrounded by an area zoned “Conservation Area” (“CA”). The location of PSFSC is shown in **Figure 1**.

2.3 Activities

Demolition commenced on 4th August 2020. During the reporting period, construction activities of the project included the following:

Demolition, as follows.

Week 1: Roof floor (water tank, stair hood, cantilever slab beam and staircases, external wall column, partition wall slab), removal of concrete debris.

Week 2: Ground floor (external wall, cantilever slab, column).

Week 3: Ground floor slab, removal of soil fill between ground floor slab and footings, sorting and recycling of materials.

Week 4: Footings, removal of concrete debris. Sorting and recycling of materials.

Equipment used during demolition phase: mechanical wrecker, hydraulic excavator, electric machinery.

2.4 Concurrent Projects

The only concurrent project in the vicinity is the installation of a water pipe for public fire services hydrant upgrade along Tam Kon Chau Road. Minor road works for this were in progress throughout the month.

2.5 Monitoring Scope

The EM&A program requires impact monitoring of air quality and noise, as well as site inspections to identify any potential issues of water quality, waste and ecology.

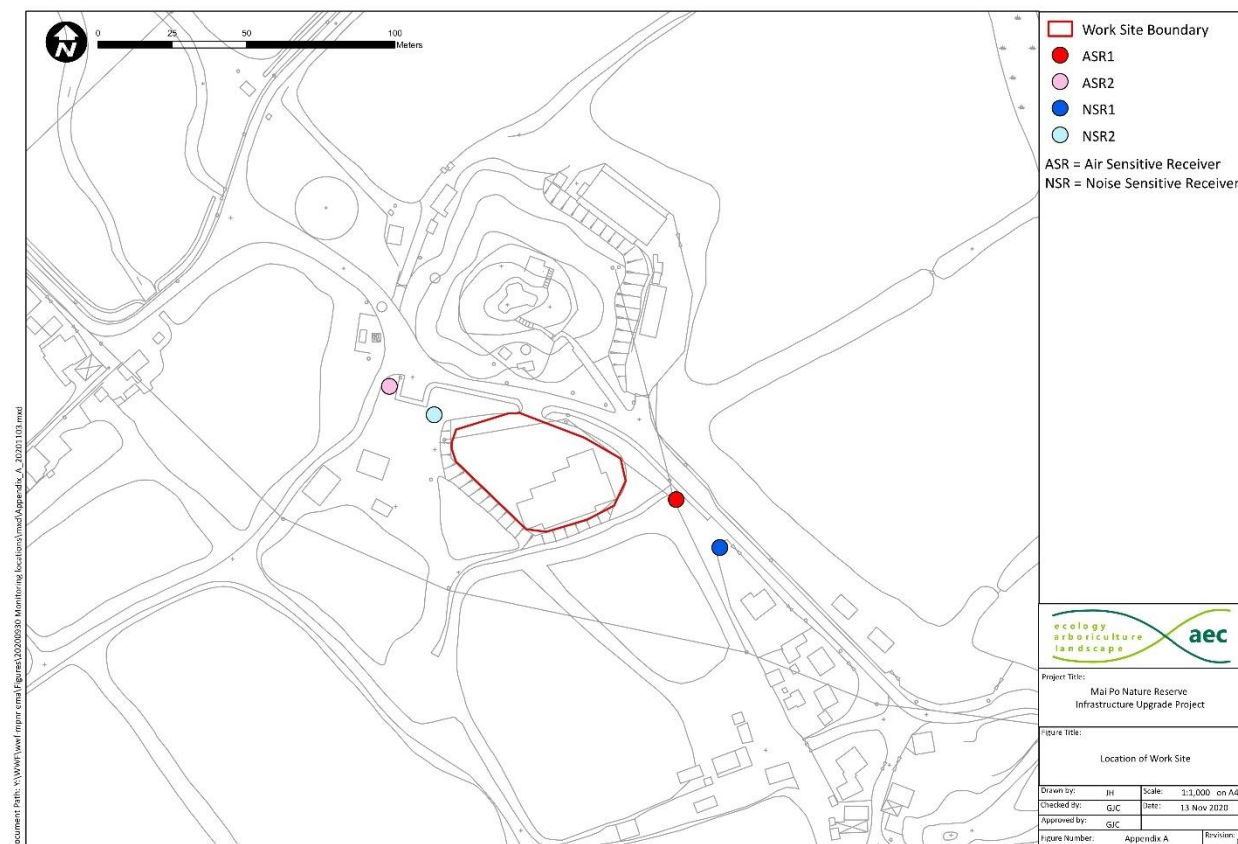
Table 3: Summary of EM&A requirements

Environmental Aspect	Monitoring Parameters	No. monitoring locations*
Air Quality	1-hour TSP	Two
Noise	Leq30min (dB(A))	Two
Site Inspections	IEC, ET & Contractor joint site Environmental Inspection and Auditing	Project Site.

*Location of monitoring points shown in **Figure 1** and photographs in **Appendix A**.

Calibration certificates of monitoring equipment are provided in **Appendix B**.

Figure 1. Location of Air Quality and Noise Sensitive Receivers / Monitoring Points



2.6 Licenses and Permits

A summary of the relevant permits, licenses, and/or notifications on environmental protection for the Project is presented below.

Table 4: Status of Environmental Licenses and Permits of the Project

Regulation	Description	Ref No.	Effective Date	Expiry Date
Air pollution Control (Construction Dust) Regulation	Notification pursuant to Section 3(1) of the Air Pollution Control (Construction Dust) Regulation	447992	12 August 2020	N/A
Water Pollution Control Ordinance – Discharge License	Deep Bay Water Control Zone WPCO Licence	WT00034973-2019	3 Jul 2020	N/A
Waste Disposal Regulation	Waste Disposal (Charges for disposal of construction waste) Regulation. Approval of Billing Account.	Application No. WFG20856 Account no. 7034504	17 Mar 2020	31 Mar 2025
Chemical Waste Producer Regulation	Waste Disposal Ordinance (Cap. 354). Registration as Chemical Waste Producer	WPN 5213-542- W3560-01	14 May 2020	N/A

2.7 Monitoring Schedule

Chronologically, monitoring occurred as follows:

Table 5: Dates of monitoring and attendance, August 2020.

Date	Monitoring aspect	AEC	SMEC	Wiley Construction and Engineering Co. Ltd
5 th	Air quality, noise and site inspection	Y	Y	Y
14 th	Site inspection	Y		Y
17 th	Air quality, noise	Y		
21 st	Site inspection	Y	Y	
28 th	Site inspection	Y		Y

3 RESULTS

3.1 Air Quality

No air quality exceedances were recorded during the Reporting Period. Results of air quality monitoring activities in the Reporting Period are summarized below.

Table 6: Action and Limit Levels, and summary of 1-hour TSP Air Quality Monitoring at ASR1 and ASR2.

Variable	5 th August 2020			17 th August 2020		
Weather	Cloudy			Fine		
ASR1	1st hour	2nd hour	3rd hour	1st hour	2nd hour	3rd hour
Time	9:00-10:00	10:00-11:00	11:00-12:00	9:00-10:00	10:00-11:00	11:00-12:00
Temp. (°C)	27			28		
Wind Direction	-			S		
Wind Speed (m/s)	-			0.8		
Dust Concentration (µg/m ³)	13	15	13	29	43	57
Action Level (µg/m ³)	295					
Limit Level (µg/m ³)	500					
ASR2	1st hour	2nd hour	3rd hour	1st hour	2nd hour	3rd hour
Time	9:00-10:00	10:00-11:00	11:00-12:00	9:00-10:00	10:00-11:00	11:00-12:00
Temp. (°C)	27			28		
Wind Direction	-			S		
Wind Speed (m/s)	-			0.5		
Dust Concentration (µg/m ³)	23	28	23	32	47	61
Action Level (µg/m ³)	292					
Limit Level (µg/m ³)	500					

3.2 Noise

No noise exceedances were recorded during the Reporting Period. Results of noise monitoring activities in the Reporting Period are summarized below.

Table 7: Action and Limit Levels, and summary of 1-hour Noise Monitoring Results –NSR1 and NSR2.

Variable	5 th August 2020	17 th August 2020
NSR1		
Time	11:00-11:30	11:00-11:30
Leq30min (dB(A))	57.6*	66.6*
Action Level	1 documented complaint	
Limit Level (dB(A))	75	
L10 (dB(A))	60.2*	67.2*
L90 (dB(A))	46.8*	52.1*
Notes	* includes +3dB(A) façade correction. Other noise from pipe-laying works.	
NSR2		
Time	10:30-11:00	10:30-11:00
Leq30min (dB(A))	58.2	58.7
Action Level	1 documented complaint	
Limit Level (dB(A))	75	
L10 (dB(A))	59.3	56.8
L90 (dB(A))	46.8	45.5

3.3 Site Inspection and Audit

Findings during the site inspection are listed below.

Table 8: Findings of Site inspections

Date	Findings	Follow-up Status
5 th August 2020	Sediment trap not in operation.	Repaired on 5 th August afternoon.
5 th August 2020	No adverse issue observed.	N/A.
14 th August 2020	No adverse issue observed.	N/A
21 st August 2020	No adverse issue observed.	N/A
28 th August 2020	No adverse issue observed.	N/A

Ecology

No activities or practices that might adversely impact local ecology were noted during the Reporting Period.

Water

The sediment trap was found on 5th August to be not operational, but this was repaired the same day. No other issues were noted during the Reporting Period.

Waste

A waste management plan was submitted and implemented. No non-compliance was observed in the reporting period.

4 ENVIRONMENTAL COMPLAINTS

No documented environmental complaints, environmental summons or prosecutions were received during the Reporting Period.

5 CONCLUSIONS

No exceedances regarding noise or air quality occurred, and no environmental complaints, summons or prosecution were received. Action/Limit levels were not reached. Environmental mitigation measures are being implemented, and demolition activities are not generating adverse impacts off-site.

Appendix A

Photographic Record of Air Quality and Noise Monitoring Locations



AQMP1



AQMP1



AQMP2



AQMP2



NMP1



NMP1



NMP2



NMP2