Licence number L9426/2024/1

Licence holder Perdaman Chemicals and Fertilisers Pty Ltd

ACN 121 263 741

Registered business address Alluvion Building, Level 17

58 Mounts Bay Road

PERTH WA 6000

DWER file number DER2024/000051

Duration 19/03/2024 to 18/03/2044

Date of issue 19/03/2024

Premises details Project Ceres

Legal description –

Part of Lot 700 on Plan P411759
Part of Lot 3014 on Plan P042282
Part of Lot 3013 on Plan P042282
Part of Lot 701 on Plan P411760
Part of Lot 706 on Plan P411760

As defined by the premises map in Schedule 1 and

the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 12: Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	850,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 19 March 2024, by:

MANAGER, PROCESS INDUSTRIES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Premises history

Date	Reference number	Summary of changes
14/07/2022	W6630/2021/1	Works approval granted authorising production up to 450,000 tonnes per annual period.
18/12/2023	W6630/2021/1	CEO initiated amendment to give effect to the Minister for Environment's determination on appeal 028/22
19/03/2024	L9426/2024/1	Licence granted, including authorised annual production of up to 850,000 tonnes per annual period.

Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure that crushing and screening activities conducted at the specified crushing and screening locations only utilise the authorised equipment as specified in Table 1.

Table 1: Authorised equipment

Crushing and Screening location	Authorised Equipment	Infrastructure location
Site C	Primary equipment:	Figure 2
	• 1 x Jaw crusher;	
	• 1 x Secondary Cone Crusher;	
	 1 x Secondary Cone Crusher (this additional infrastructure only to be used when structural fill is required); 	
	1 x Incline screen;	
	2 x Track mounted stacker;	
	Supporting equipment:	
	 1 x Excavator (loading tool or equivalent); 	
	• 1 x Loader;	
	1 x Dust suppression water tank with generator	
Site F	Primary Equipment:	Figure 3
	1 x Jaw crusher;	
	• 1 x Secondary Cone crusher;	
	1 x Inline screen;	
	1 x Track mounted stacker;	
	Supporting equipment:	
	 1 x Excavator (loading tool or equipment); 	
	1 x Loader;	
	1 x Dust suppression water tank with generator.	
Back up equipment ¹	1 x Jaw crusher;	Within
	1 x Secondary Cone crusher;	prescribed
	1 x Inline screen;	premises defined in
	• 1 x Excavator (loading tool or equivalent);	Figure 1,
	1 x Loader.	Schedule 1.

Note 1: Equipment listed as "Back-up equipment" is only authorised to be used as replacement for equipment authorised for Site C and Site F and not in addition to that equipment.

2. The licence holder must ensure that the site infrastructure and equipment listed in Table 2, and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

 Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Ope	erational requirement	Infrastructure location
Authorised crushing and screening	a)	The mobile crushing and screening plant must only operate at:	Locations detailed as
equipment as listed in Table 1.		 i. locations within the clearing boundary specified in Figure 2 and Figure 3; and 	within "Approved locations for
		ii. locations that are greater than 100 m from heritage sites as identified and defined in the approved Cultural Heritage Management Plan (as indicatively depicted in Figure 6);	crushing and screen plant – Sites C and F" in Figure 6.
	b)	Water systems to be used to minimise dust generation at material transfer points, crusher, and material stockpiles whenever materials are being processed by the crushing and screening plant;	
	c)	Partial enclosure of transfer points (via transfer chutes) with sprays on the Track mounted stacker and Secondary cone crusher equipment (specified in Table 1);	
	d)	The track mounted stacker is lowered as low as possible when stacking commences and the drop height is minimised to as low as reasonably practicable at all other times to reduce material drop height;	
	e)	Water storage tanks to be located adjacent to each crushing and screening plant location to provide adequate volumes of water for dust suppression;	
	f)	Sufficient quantities of water are to be maintained/stored on the premises to ensure daily dust suppression requirements are met;	
	g)	Chemical dust suppressants to be applied, or water trucks to be operated, on roads and open areas to ensure dust generation is kept to a minimum;	
	h)	Stockpiles must not exceed 5 m in height above ground level;	
	i)	Maximum of 3 stockpiles operated at each Site specified in Table 1 (6 in total);	
	j)	Plant to be operated with exhaust mufflers from the Original Equipment Manufacturer (OEM) or systems meeting or exceeding the OEM specifications;	
	k)	Plant equipment and process material stockpiles must only be operated within constructed earthen bunds that are at least 750mm in height, that prevent surface water runoff from the crushing and screening plant and process material stockpiles being discharge from the premises; and	
	l)	Subject to condition 3, average daily throughput of 5,000 tonnes (combined for Site C and Site F);	

- 3. The licence holder must ensure that the total annual production of material (from combined Site C and Site F crushing and screening equipment) does not exceed 850,000 tonnes per annual period.
- **4.** The licence holder must proactively manage dust generating activities on the premises by:
 - (a) conducting daily visual inspections of the premises while operating crushing and screening equipment to monitor for dust control equipment availability, implementation and dust mitigation effectiveness;
 - (b) completing air quality inspection reports on days that pose a higher risk of dust emissions (including but not limited to days where high wind conditions and high temperatures are experienced) that record the management measures that have been implemented to control dust, including watercart load sheets to record total volumes of water used for dust suppression; and
 - (c) utilising weather forecasting tools to inform daily work activities and dust suppression activities to target and mitigate dust emissions from crushing and screening activities.

Monitoring

- 5. The licence holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this Licence is calibrated, operated and maintained in accordance with the manufacturer's specifications.
- 6. The licence holder must, where the requirements for calibration cannot be practicably met, or discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.
- 7. The licence holder must undertake monitoring in Table 3 in accordance with the specifications in that table.

Table 3: Monitoring of ambient air quality

	onitoring point ference ¹	Parameter	Unit	Averaging period	Frequency	Method	Management trigger criteria
Fix	xed dust monito	rs					
•	Monitor 1; Monitor 2 – West Industrial Area; Monitor 3 – Yara boundary; and Monitor 4 – Heritage site 9439.	Particulates as PM _{2.5} Particulates as PM ₁₀	µg/m³	10 minutes	Continuous	As per manufacturer's specifications for 'ETS TP- 2510 Dust Concentrator Sensor' ² .	N/A 80 μg/m³

Mobile dust monitor						
Receptor Monitor ³	Particulates as PM _{2.5} Particulates as PM ₁₀	µg/m³	10 minutes	Continuous	As per manufacturer's specifications for 'ETS TP- 2510 Dust Concentrator Sensor' ² .	N/A 80 μg/m ³

- Note 1: As shown in Figure 7 of Schedule 1 and specified by the coordinates in Schedule 3.
- Note 2: Near real time monitor with response time of <90 seconds.
- Note 3: Additional mobile dust monitor to be located (and re-located as necessary) between crushing and screening activities and the closest adjacent heritage sites (as shown in Figure 6) for the purposes of detecting dust emissions from crushing and screening activities.
- **8.** Immediately upon being notified of management trigger criteria specified in Table 3 being exceeded, the licence holder must:
 - (a) conduct a trigger investigation within 20 minutes of being alerted to the management trigger criteria exceedance to identify any potential cause of the management trigger criteria exceedance; and
 - (b) upon identification of a potential on-site source/s during the trigger investigation conducted in accordance with part (a) of this condition, immediately control visible dust emissions by:
 - applying additional dust suppression/water loading to crushing and screening plant; and/or
 - ii. increasing moisture conditioning of material; and/or
 - iii. increasing watercart operations on roads and any dust generating areas within the premises; and/or
 - iv. limiting works on site to only essential activities to minimise dust generation; and/or
 - v. decreasing the operating speed of plant and equipment on site; and/or
 - vi. ceasing crushing and screening activities and/or
 - vii. implementing other dust mitigation measures to reduce dust from premises activities.
- **9.** In the event that the management trigger criteria for a parameter in Table 3 is exceeded, the licence holder must:
 - (a) continue to actively monitor dust levels for the duration of the event (until dust levels return below the trigger criteria);
 - (b) continue to apply additional dust mitigation measures for the duration of the event;
 - (c) maintain records (including photographic or video footage) of the work area(s) at the time of the exceedance;
 - (d) maintain records of the management trigger event including:
 - i. date(s), time and duration of the event;
 - ii. site specific weather conditions; and
 - iii. management actions that were implemented to reduce dust emissions.

10. The licence holder must undertake monitoring in Table 4 in accordance with the specifications in that table.

Table 4: Monitoring of ambient meteorological conditions

Monitoring point reference	Parameters	Unit	Averaging period	Frequency	Method
Weather	Wind speed	m/s	10 minute	Continuous	As per manufacturer's specifications for 'AirMetER- DX' monitor.
Station (WC1) ¹	Wind direction	degrees			
	Temperature	° C	1 hour		

Note 1: As shown in Figure 8 of Schedule 1.

Records and reporting

- 11. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **12.** The licence holder must:
 - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - (b) prepare and submit to the CEO by no later than 30 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- **13.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
 - (a) the calculation of fees payable in respect of this licence;
 - equipment established in accordance with condition 1 of this licence, including periods when back-up equipment are utilised;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition 2 of this licence:
 - (d) total daily category 12 throughput tonnages;
 - (e) inspections and air quality monitoring reports conducted in accordance with condition 4;
 - (f) monitoring undertaken in accordance with condition 7 and condition 10; and
 - (g) complaints received under condition 11 of this licence.
- **14.** The books specified under condition 13 must:
 - (a) be legible;

- (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
- (c) be retained by the licence holder for the duration of the licence; and
- (d) be available to be produced to an inspector or the CEO as required.
- 15. The licence holder must submit to the CEO by no later than 30 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 5, and which provides information in accordance with the corresponding requirements set out in Table 5.

Table 5: Annual Environmental Report

Condition or table	Requirement	Format or form	
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.	None specified.	
-	Actual daily production throughputs for prescribed premises categories.		
Condition 7 (Table 3)	Monitoring of ambient air quality (PM ₁₀ and PM _{2.5})	Tabulated dust monitoring data results calculated as 10 minute averages.	
Condition 8 Condition 9	Summary of trigger exceedance events and management action(s) taken.	None specified.	
Condition 11	Complaints summary.	None specified.	
Condition 12	Compliance	Annual Audit Compliance Report (AACR).	

Definitions

In this licence, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
ACN	Australian Company Number
air quality inspection reports	means a report that details relevant site environmental conditions, operational conditions, dust suppression activities, volumes of water applied for the purposes of dust suppression, dust control issues identified, and any corrective or remedial actions undertaken to manage dust emissions.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
continuous	means to operate with an availability greater than 90 per cent on a calendar monthly basis.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
high wind conditions	means wind speeds above 30km/hr
high temperatures	means air temperatures that exceed 35 degrees Celcius

Term	Definition
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
m	metre
μg/m³	microgram per cubic metre
mm	millimetre
PM _{2.5}	means particulate matter with an aerodynamic diameter of less or equal to 2.5 µm.
PM ₁₀	means particulate matter with an aerodynamic diameter of less or equal to 10 μ m and includes PM _{2.5} .
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

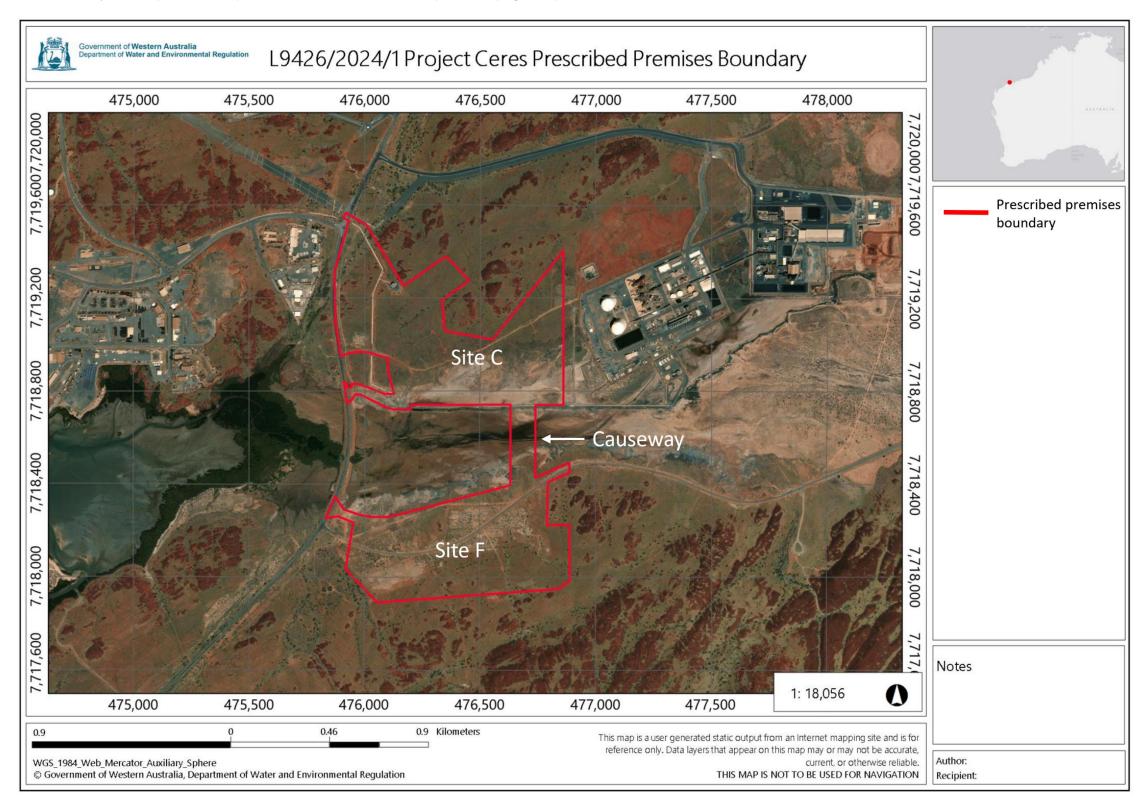


Figure 1: Map of the boundary of the prescribed premises

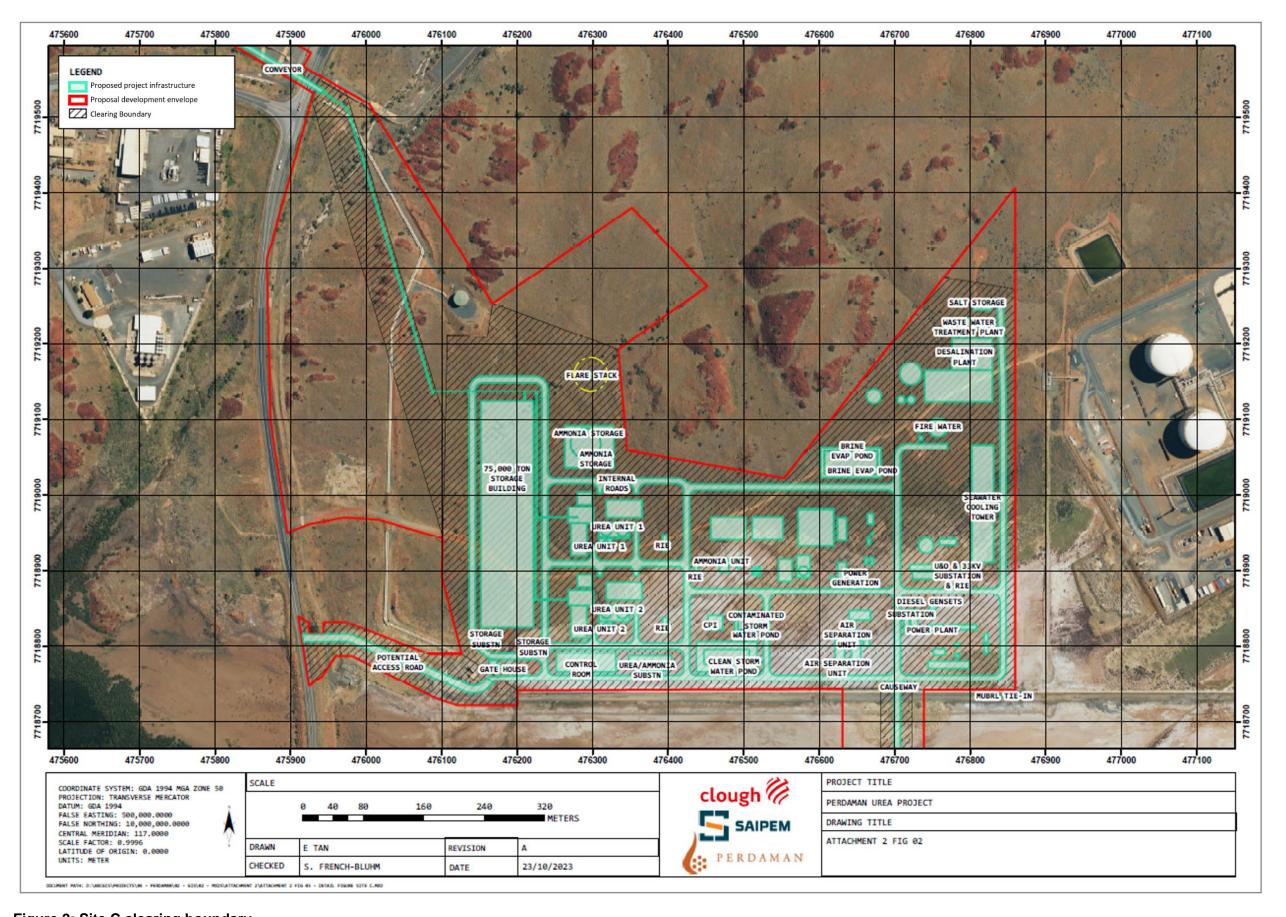


Figure 2: Site C clearing boundary

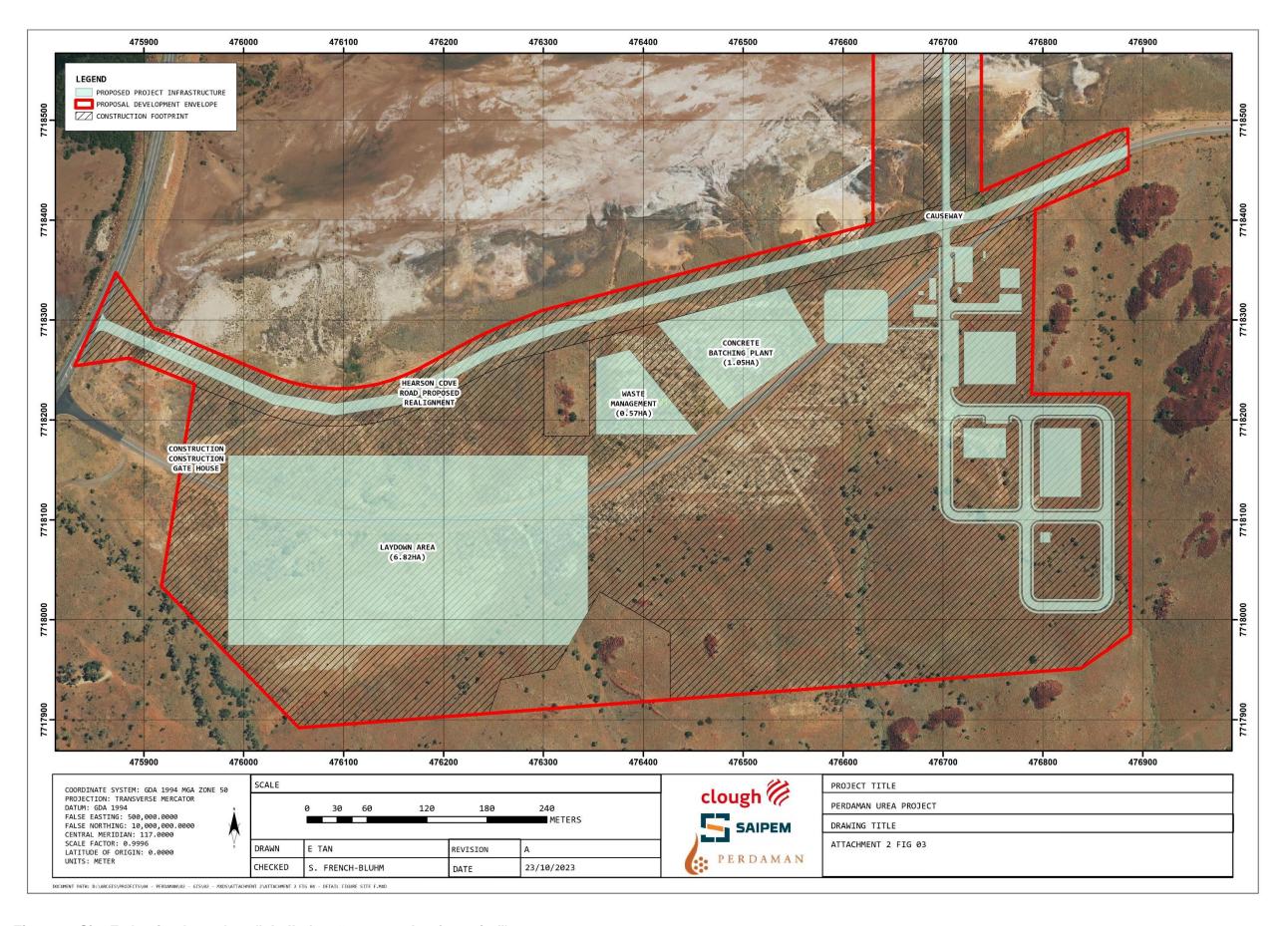


Figure 3: Site F clearing boundary (labelled as "construction footprint")

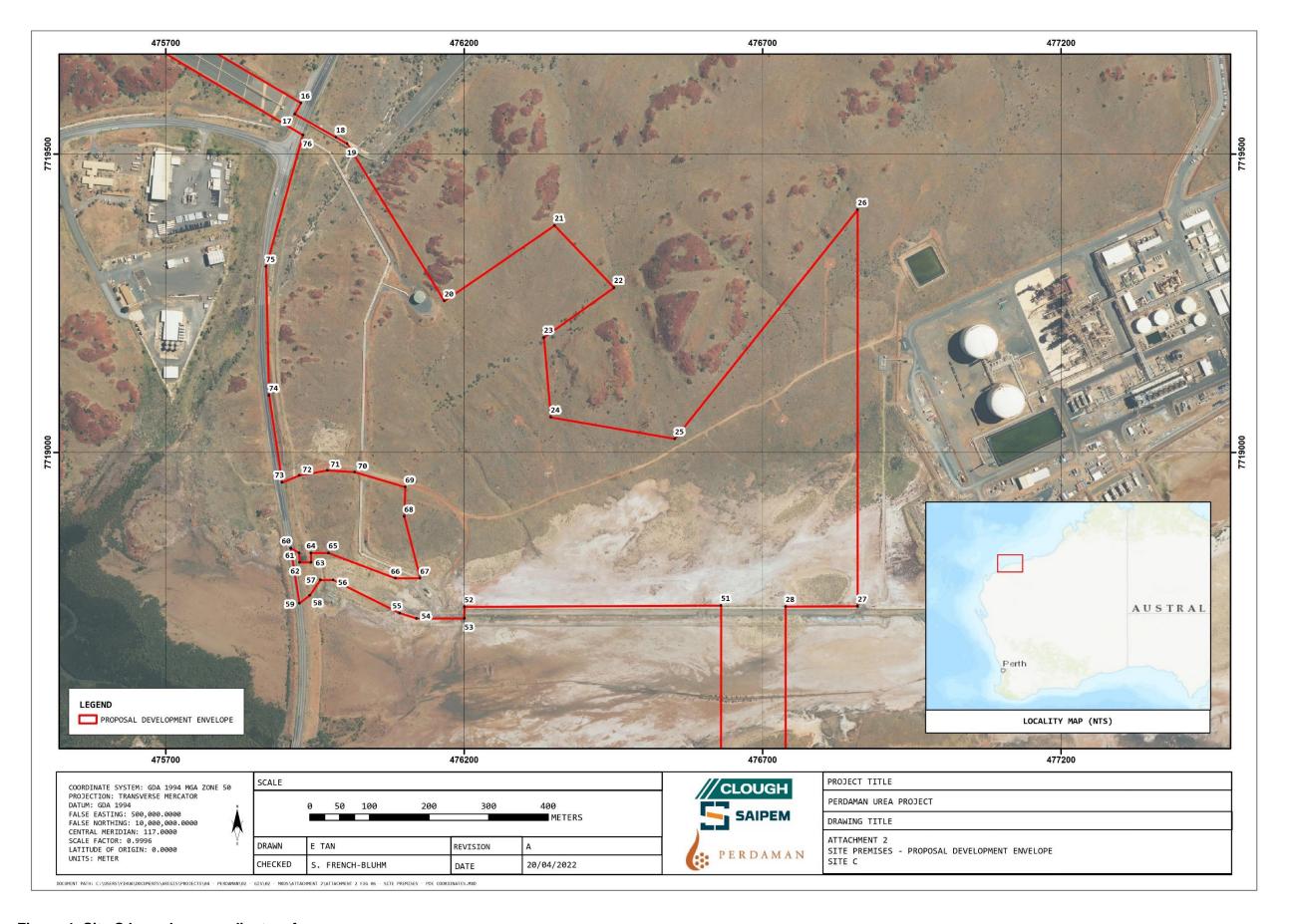


Figure 4: Site C boundary coordinate references

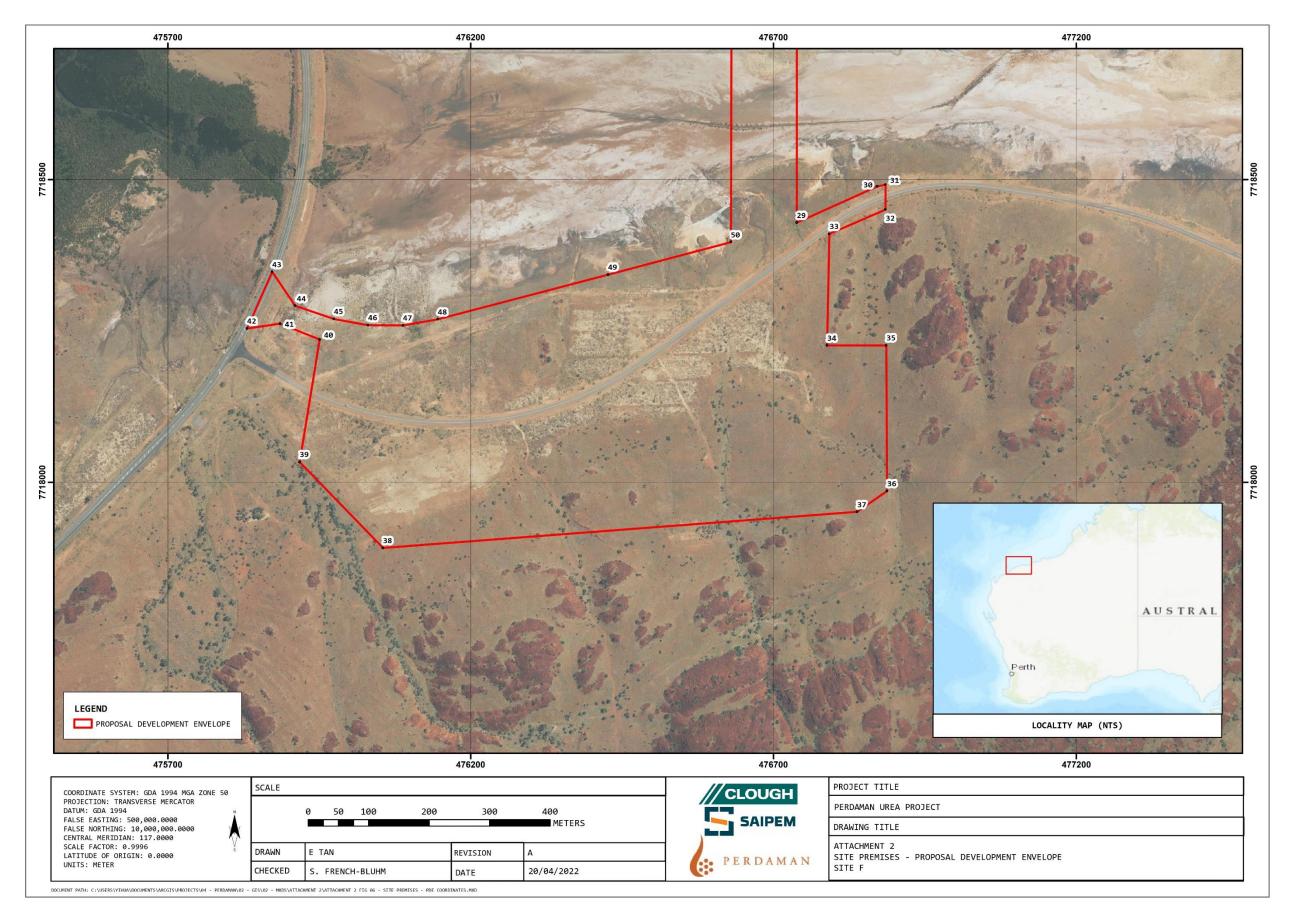


Figure 5: Site F boundary coordinate references

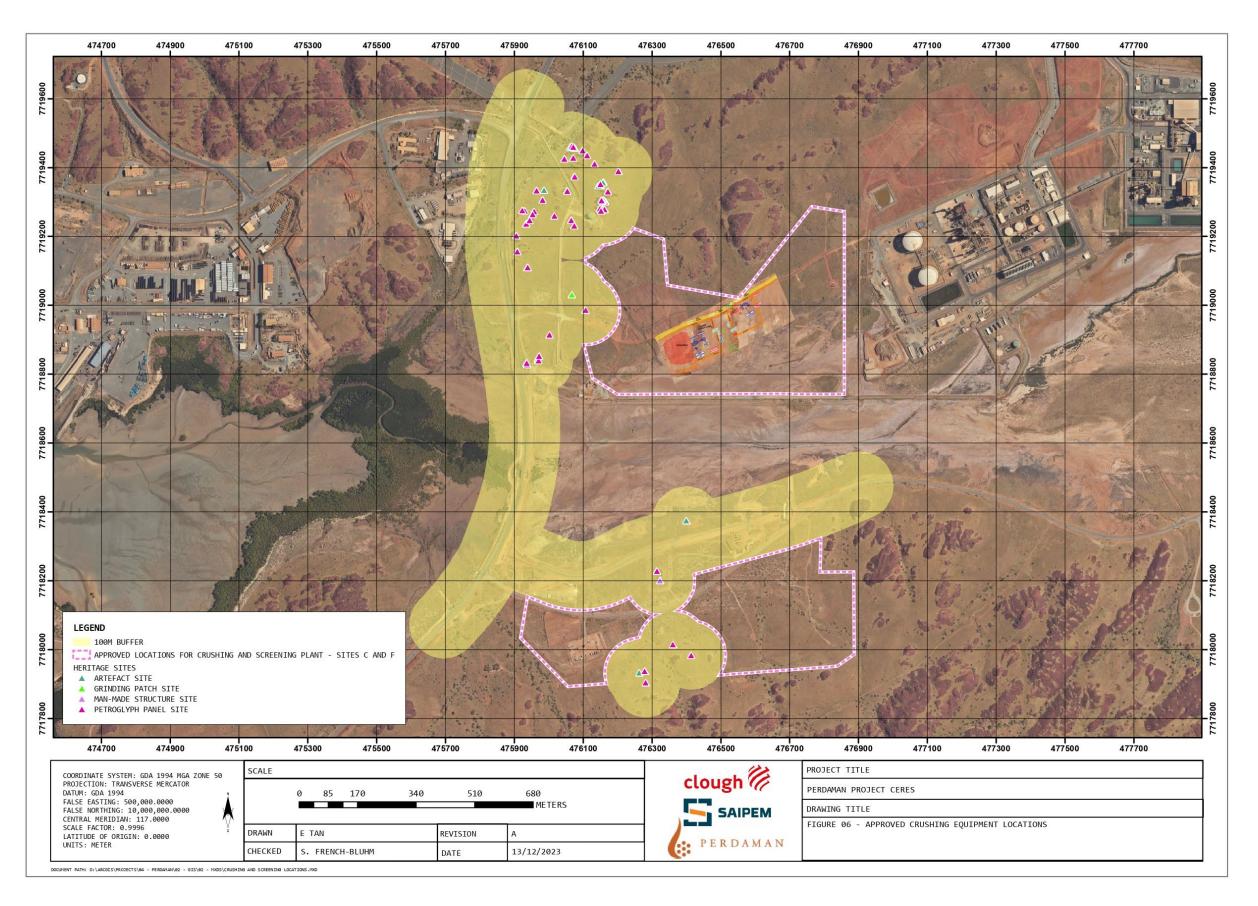


Figure 6: Map displaying buffer from identified heritage sites and public roads and indicative crushing and screening locations. Heritage locations are defined within the approved Cultural Heritage Management Plan

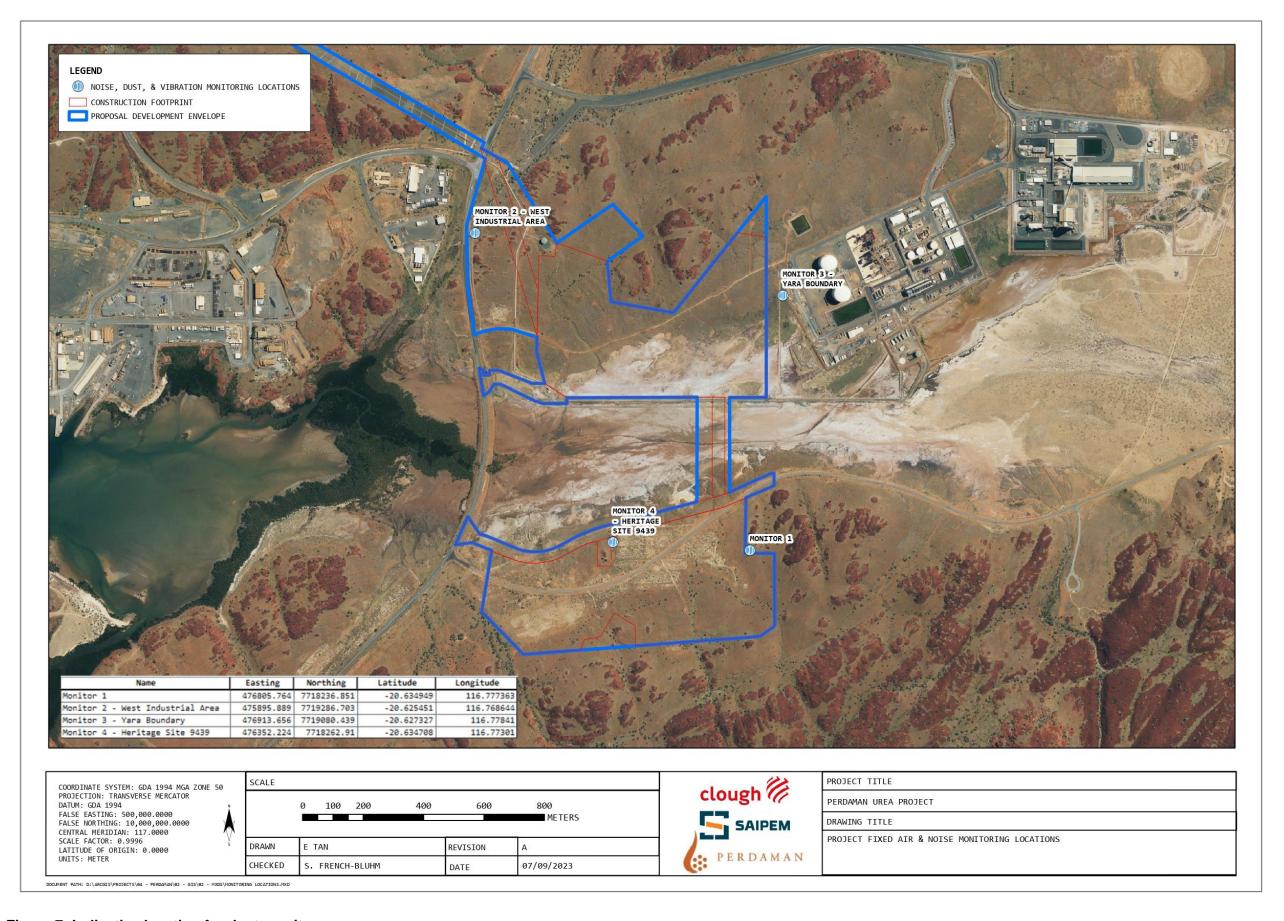


Figure 7: Indicative location for dust monitors

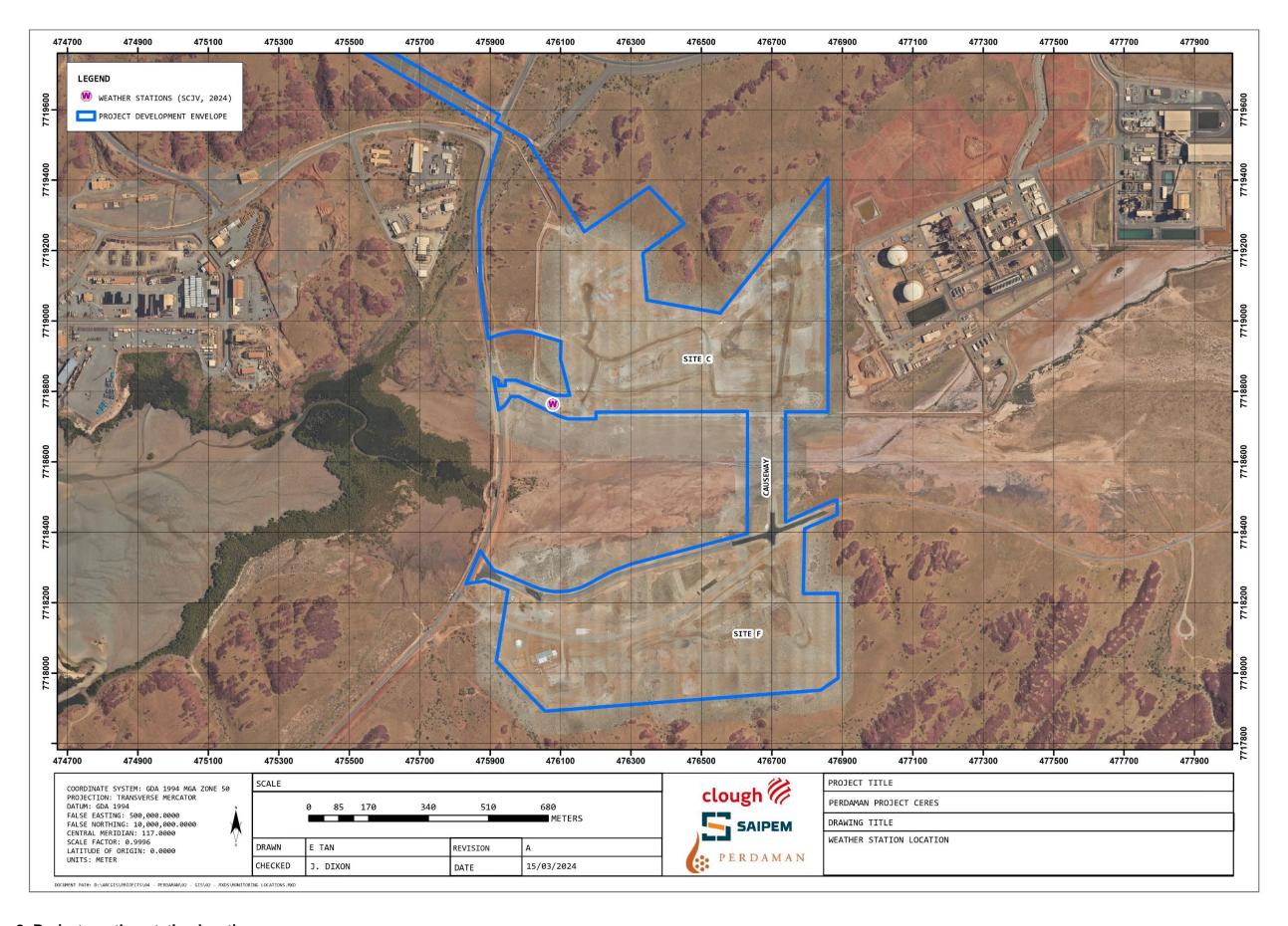


Figure 8: Project weather station location

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 7.

Table 7: Premises boundary coordinates (GDA1994, Zone 50)

Site C

Object ID (as reference in Figure 4)	Easting	Northing
17	475916.259	7719567.13
18	475985.102	7719528.18
19	476003.607	7719517.31
20	476166.892	7719253.51
21	476351.246	7719380.39
22	476450.896	7719276.29
23	476333.451	7719192.65
24	476344.919	7719059.03
25	476553.03	7719022.75
26	476859.09	7719406.64
27	476859.028	7718742.08
28	476738.322	7718741.95
51	476738.322	7718428.88
52	476871.202	7718488.62
53	476885.005	7718491.66
54	476885.21	7718450.77
55	476792.281	7718410.35
56	476788.64	7718226.04
57	476886.284	7718226.27

Object ID (as reference in Figure 4)	Easting	Northing
58	476887.533	7717985.82
59	476837.882	7717951.3
60	476055.261	7717891.8
61	475923.158	7718831.59
62	475924.118	7718816.05
63	475943.012	7718816.05
64	475943.012	7718831.59
65	475972.519	7718831.59
66	476084.79	7718789
67	476126	7718789
68	476099.386	7718892.72
69	476100.958	7718941.9
70	476016.484	7718967.19
71	475970.742	7718970.11
72	475923.778	7718961.41
73	475895.063	7718949.84
74	475872.724	7719095.56
75	475867.783	7719311.19
76	475929.523	7719531.94

Site F

Object ID (as reference in Figure 5)	Easting	Northing
29	476738.322	7718428.88
30	476871.202	7718488.62
31	476885.005	7718491.66
32	476885.21	7718450.77
33	476792.281	7718410.35
34	476788.64	7718226.04
35	476886.284	7718226.27
36	476887.533	7717985.82
37	476837.882	7717951.3
38	476055.261	7717891.8
39	475917.435	7718033.74

Object ID (as reference in Figure 5)	Easting	Northing
40	475950.558	7718235.95
41	475885.216	7718262.14
42	475830.655	7718254.09
43	475872.134	7718347.63
44	475909.732	7718291.88
45	475974.071	7718269.9
46	476030.62	7718259.68
47	476088.084	7718259.42
48	476145.59	7718269.29
49	476426.84	7718343.29
50	476629.885	7718396.72

Schedule 3: Dust monitor coordinates

The coordinates for the Fixed Dust Monitors specified in Table 3 are listed in Table 8.

Table 8: Fixed Dust Monitor coordinates (GDA1994; Zone 50)

Monitor	Easting	Northing
Monitor 1	476805.764	7718236.851
Monitor 2 – West Industrial Area	475895.889	7719286.703
Monitor 3 – Yara boundary	476913.656	7719080.439
Monitor 4 – Heritage site 9439	476352.244	7718262.91