PF Formation

HITCHCOCK ROAD MAROOTA

Sand Extraction and Rehabilitation Project

ANNUAL ENVIRONMENTAL MANAGEMENT REPORT
2018-2019

ATTACHMENTS

1. Project approval
2. EPA Licence Annual Return
3. Monthly Environmental Operational Procedures Checklist
4. Annual Environmental Operational Procedures
5. Location Weather Chart
6. Site Current Photos
7. Current Site Plan
8. Weighbridge Verification Certificate
9. CCC Meeting Minutes
10. Noise Management Report
11. Air Quality Report
12. Surface Water Monitoring Results
13. Ground Water Management Report
14. Rehabilitation Report

ATTACHMENT 1

PROJECT APPROVAL

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project referred to in Schedule 1, subject to the conditions set out in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for on-going environmental management of the project.

Hon Kristina Keneally MP
Minister for Planning

Sydney 3 February 2009

SCHEDULE 1

Project Application:	06_0104
Proponent:	PF Formation
Approval Authority:	Minister for Planning
Land:	See Appendix 1
Project:	Hitchcock Road Sand Project

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DEFINITIONS

AEMR	Annual Environmental Management Report
Council	The Hills Shire Council
Day	The period from 7.00am to 6.00pm on Monday to Saturday, and

8.00am to 6.00pm on Sundays and Public Holidays	
DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
DPI	Department of Primary Industries
DWE	Department of Water and Energy
EA	Environmental Assessment for the project titled *Hitchcock Road Sand Extraction and Rehabilitation Project Environmental Assessment and, Appendices* (3 volumes), dated November 2007, prepared by DFA Consultants, including the response to submissions and preferred project report
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under the *Protection of the Environment Operations Act 1997*
Evening	The period from 6.00pm to 10.00pm
Extraction Area	The land described as the extraction area in Appendix 1
Land	Land means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Minister	Minister for Planning, or delegate
Night	The period from 10.00pm to 7.00am on Monday to Saturday, and 10.00pm to 8.00am on Sundays and Public Holidays
Privately owned land	Land not owned by a public agency or the Proponent or its related companies
Preferred Project Report	The Proponent's Preferred Project Report dated September 2008, prepared by DFA Consultants, as modified in the Proponent's email to the Department of 18 November 2008
Project	The development as described in the EA
Proponent	PF Formation, or its successors in title
Response to Submissions	The Proponent's response to issues raised in submissions, dated March 2008, prepared by DFA Consultants, and subsequent submissions to the Department dated 27 August 2008

RTA	Roads and Traffic Authority
SHTW	Sydney Hinterland Transition Woodland
Site	Land to which the project application applies
Statement of Commitments	The Proponent's commitments in Appendix 3
Strategy A, Strategy B	The alternative rehabilitation proposals described in the preferred project report
Vegetation Offset	The conservation and enhancement program described in the preferred project report, to occur on the land shown on the plan in Appendix 5
VENM	Virgin Excavated Natural Material, as defined in the *Protection of the Environment Operations Act 1997*

SCHEDULE 2
ADMINISTRATIVE

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

Terms of Approval

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (b) preferred project report; (c) statement of commitments; and (d) conditions of this approval.

   Notes:
   - *The layout of the project is shown in the figure in Appendix 2; and*
   - *The statement of commitments is included in Appendix 3.*

3. If there is any inconsistency between the above:
   (a) the preferred project report shall prevail over the EA; (b) the conditions of this approval shall prevail generally, to the extent of the inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   (a) any reports, plans, programs or correspondence that are submitted in accordance with the conditions of this approval; and
   (b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.

Existing Sand Mining Consent

5. Subject to an agreement in accordance with condition 7 below, the Proponent may accept material extracted from Lot 2 DP 555184 and Lot 1 DP 34599 in accordance with the development consent issued by the Land and Environment Court on 14 July 1998 to be transported across the site and to the slurry plant on Lot 1 DP 570966 via the slurry pipeline and processed on Lot 198 DP 752025.

Limits on Approval

6. Extraction and processing operations may take place until 30 November 2028.

Note: Under this approval, the Proponent is required to rehabilitate the site and provide offsets to the satisfaction of the Director-General. Consequently this approval will continue to apply in all other respects other than the right to conduct extraction and processing operations until the site has been rehabilitated and the offset provided to a satisfactory standard.

7. The quantity of processed material produced at the site, together with material produced on Lot 2 DP 555184 and Lot 1 DP 34599 in accordance with the development consent issued by the Land and Environment Court on 14 July 1998, shall not exceed 400,000 tonnes a year.

Prior to the commencement of any processing of extractive material (under the above consent) from activities on Lot 2 DP 555184 or Lot 1 DP 34599, the Proponent shall demonstrate, to the satisfaction of the Director-General, that it has reached an agreement with the owners of those Lots regarding the proportion of the extraction limit as it applies to each Lot.

8. The Proponent shall restrict total laden truck movements associated with the project to:
   (a) 200 per day, for the Proponent's combined operations at Maroota;
   (b) 20 per day, for trucks importing VENM to the site; and
   (c) 10 per day, for trucks entering/exiting the site between 6.00am and 7.00am.

Note: For the avoidance of doubt, 200 is the maximum laden truck movement volume allowed on any one day, including the VENM and early morning truck movements.

9. The Proponent shall not undertake any extraction within 2 metres of the established wet weather groundwater level.

Note: The wet weather groundwater level shall be established in accordance with condition 3 of Schedule 3.

10. The Proponent shall not disturb any SHTW vegetation (as shown on the plan in Appendix 5) on site without the prior written approval of the Director-General. In seeking this approval the Proponent shall demonstrate, to the satisfaction of the Director-General, that it has established at least 3.7 hectares of SHTW on the site, to a standard that meets the criteria in Appendix 6.

Note: This demonstration must include an assessment by a suitably qualified and independent ecologist.

Management Plans / Monitoring Programs

11. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

Demolition

12. The Proponent shall ensure that all demolition work is carried out in accordance with *AS 2601-2001: The Demolition of Structures*, or its latest version.

Protection of Public Infrastructure

13. The Proponent shall:

(a) repair, or pay all reasonable costs associated with repairing, any public infrastructure that is damaged by the project; and
(b) relocate, or pay all reasonable costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Operation of Plant and Equipment

14. The Proponent shall ensure that all plant and equipment used at the site is:

(a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient condition.

Crown Land

15. The Proponent shall not commence any development authorised by this approval on Crown land without the prior approval of the Department of Lands.

Section 94 Contributions

16. The Proponent shall pay a monthly contribution to the Council for the upgrade and maintenance of roads in accordance with Baulkham Hills Shire Council's section 94 plan in force at the date of this approval.

SCHEDULE 3
ENVIRONMENTAL PERFORMANCE

GENERAL EXTRACTION AND PROCESSING PROVISIONS

Identification of Boundaries

1. Within 3 months of the date of this approval, or as otherwise agreed by the Director-General, the Proponent shall:

(a) engage an independent registered surveyor to survey the boundaries of the approved limit of extraction and the approved ancillary work areas;
(b) submit a survey plan of these boundaries to the Director-General; and
(c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

Note: The limit of extraction and ancillary areas is shown conceptually on the layout plans in Appendix 2, as amended/clarified by the conditions below.

General Limits of Extraction

2. Notwithstanding the layout plans in Appendix 2, the Proponent shall not undertake extraction within:

(a) 30 metres of Hitchcock Road; and
(b) 10 metres of the property boundary of Lot 2 DP 555184, unless sand extraction has commenced on that lot, and extraction in this buffer has been agreed by the Director-General.

Maximum Extraction Depth Map

3. The Proponent shall:
(a) establish the wet weather groundwater level for the site based on all available (and at least 12 months) site specific groundwater monitoring data;
(b) engage a suitably qualified and experienced expert to establish the maximum extraction depths to which extraction can be undertaken on site, to comply with condition 9 of Schedule 2;
(c) submit a Maximum Extraction Depth Map (contour map or similar) for the project to the DirectorGeneral within 3 months of the date of this approval; and (d) comply with the extraction depths specified in the map, to the satisfaction of the Director-General.

4. Within 3 months of the completion of the Independent Environmental Audit (see condition 6 of Schedule 5), the Proponent shall review and update the Maximum Extraction Depth Map for the project to the satisfaction of the Director-General.

NOISE

Operational Noise Assessment Criteria

5. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 1 at any residence or on more than 25 per cent of any privately-owned land.

Noise Assessment Location	Day	Night	
	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{A1\ (1\ minute)}$
R1 - Hammond	41	35	45
R2 – Hitchcock	40	35	45
R5 – Pignataro	42	35	45
R6 – Camilleri	40	35	45
R7 – Maroota Public School	$36_{(LAeq(1\ Hour))}$	N/A	N/A
R8 – Portelli	39	35	45
R9 – Young	39	35	45
R10 - Tornatola	39	35	45

Table 1: Noise Impact Assessment Criteria

Notes:

- *To determine compliance with the $L_{Aeq(15\ minute)}$ noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, alternative means of determining compliance may be accepted (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.*
- *To determine compliance with the $L_{A1(1\ minute)}$ limit, noise from the project is to be measured at 1 metre from the dwelling façade.*
- *The noise limits apply under meteorological conditions of:*
  - *wind speed up to 3m/s at 10m above ground level;*
  - *temperature inversion conditions of up to 3 degrees C/100m and wind speed up to 2m/s at 10m above the ground;*

  where the wind velocity and temperature gradients are determined to be relevant to the project site in accordance with the NSW Industrial Noise Policy.
- *The Director-General may relax the noise limits in Table 1 for any property where the Proponent has an agreement with the relevant owner/s to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.*
- *For more information on the noise assessment locations see Appendix 4.*

Cumulative Noise Criteria

6. The Proponent shall take all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other extractive industries does not exceed the following amenity criteria on any privately owned land, to the satisfaction of the Director-General:

- $L_{Aeq(11\ hour)}$ *50 dB(A) – Day;*
- $L_{Aeq(4\ hour)}$ *45 dB(A) – Evening; and*
- $L_{Aeq(9\ hour)}$ *40 dB(A) – Night.*

Operating Hours

7. The Proponent shall comply with the operating hours in Table 2.

Activity	Day	Time
	Monday - Friday	7.00am to 6.00pm
	Saturday	8.00am to 1.00pm
	Sunday and Public Holidays	None
	Monday – Saturday	7.00am to 6.00pm
	Sunday and Public Holidays	None
	Monday – Saturday	6.00am to 6.00pm
	Sunday and Public Holidays	None
	Monday – Saturday	7.00am to 6.00pm
	Sunday and Public Holidays	None

Table 2: Operating Hours

Notes:

- *Product transportation prior to 7.00am is restricted as per condition 8 of Schedule 2.*
- *Maintenance activities may be conducted outside the hours in Table 2 provided that the activities are not audible at any residence beyond the boundary of the site.*

- *This condition does not apply to delivery of material if that delivery is required by police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, notification is to be provided to DECC and the affected residents as soon as possible, or within a reasonable period in the case of emergency.*

Noise Management Plan

8. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan shall:
   (a) be submitted to the Director-General within 3 months of the date of this approval;
   (b) be prepared in consultation with DECC;
   (c) include details of how the noise performance of the project would be monitored, and include a noise monitoring protocol for evaluating compliance with the relevant noise limits in this approval; and
   (d) include an investigation and assessment (including modelling) of additional reasonable and feasible noise mitigation measures that would be implemented to ensure that noise emissions at all stages of the project comply with the noise impact assessment criteria in Table 1.

Note: The EA predicted that receiver locations R5, R6, R9 and R10 would exceed the applicable noise criteria by between 2 and 5 decibels, during worst case operations.

9. If the additional noise mitigation measures identified in condition 8(d) are not able to reduce noise levels to within 2 decibels of the impact assessment criteria in Table 1 then, upon receiving a written request from the applicable landowner, the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

   These additional mitigation measures must be reasonable and feasible.

   If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

AIR QUALITY

Impact Assessment Criteria

10. The Proponent shall ensure that dust generated by the project does not cause exceedances of the criteria listed in Tables 3, 4 and 5 at any residence or on more than 25 per cent of any privately owned land.

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	30 µg/m^3

Table 3: Long Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM_{10})	24 hour	50 µg/m^3

Table 4: Short Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m^2/month	4 g/m^2/month

Table 5: Long Term Impact Assessment Criteria for Deposited Dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.11991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Operating Conditions

11. The Proponent shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately owned land.

Air Quality Monitoring

12. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program shall:

(a) be submitted to the Director-General for approval within 3 months of the date of this approval; (b) be prepared in consultation with DECC;

(c) include details of how the air quality performance of the project would be monitored, providing for additional dust deposition monitoring in the vicinity of clusters of residences to the north and west of the site; and

(d) include a protocol for evaluating compliance with the relevant air quality criteria in this approval.

METEOROLOGICAL MONITORING

13. The Proponent shall ensure the project has a suitable meteorological station on the site or in the immediate vicinity that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* publication.

WATER

Water Supply

14. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations to match its water supply.

Note: The Proponent is required to obtain necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.

Discharges

15. The Proponent shall not discharge any water from the quarry or its associated operations except in accordance with an EPL.

Water Management and Monitoring

16. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan shall:
    (a) be submitted to the Director-General within 3 months of the date of this approval;
    (b) be prepared in consultation with DWE and DECC; and (c) include a:
        - Site Water Balance;
        - Erosion and Sediment Control Plan;
        - Surface Water Monitoring Program; and
        - Groundwater Monitoring Program.

17. The Site Water Balance shall:
    (a) include details of:
        - sources and security of water supply;
        - water use on site;
        - water management on site, including the location and capacity of water storages on site and the means of access;
        - off-site water transfers; and
        - reporting procedures; and
    (b) investigate and describe measures to minimise water use by the project.

18. The Erosion and Sediment Control Plan shall:
    (a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction*, *Volume 1*, *4th Edition*, *2004* (Landcom);
    (b) identify activities that could cause soil erosion and generate sediment;
    (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
    (d) describe the location, function, and capacity of erosion and sediment control structures;
    (e) demonstrate that the design capacity of basins intended to collect storm runoff will not be compromised by storage of operational water; and
    (f) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.

19. The Surface Water Monitoring Program shall include:
    (a) detailed baseline data on surface water flows and quality in downstream watercourses that could be affected by the project;
    (b) surface water quality and stream health assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts; and (c) a program to monitor:

- surface water flows, quality, and impacts on water users; • stream health; and
- channel stability.

20. The Groundwater Monitoring Program shall include:
    (a) provision of additional monitoring bores around the periphery of the site;
    (b) detailed baseline data on groundwater levels, flows and quality in the region, and particularly any groundwater bores, springs and seeps (including spring and seep fed dams) that may be affected by operations on site;
    (c) groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; (d) a program to monitor:
        - groundwater levels and quality in new and existing monitoring bores;
        - the impacts of the project on:
            - any groundwater bores, springs and seeps (including spring and seep fed farm dams) on privately-owned land; and
            - any groundwater dependent ecosystems; and

    (e) a protocol for further groundwater modelling to confirm the limits to excavation depth across the site permitted in accordance with condition 9 of Schedule 2.

LANDSCAPE MANAGEMENT

Rehabilitation

21. The Proponent shall progressively rehabilitate the site to the satisfaction of the Director-General, in a manner that is generally consistent with the concept final landform (Strategy A or Strategy B) in the preferred project report (as reproduced in Appendix 7).

Offset Strategy

22. The Proponent shall implement the Offset Strategy described in the preferred project report, and summarised in Table 6 (shown conceptually on the plan in Appendix 5), to the satisfaction of the Director-General.

Area	Minimum Size (hectares)
On-Site Revegetation Area (SHTW)	7.9
On-Site Revegetation Area (Other Woodland)	4.1
Total	**12**

Table 6: Offset Strategy

23. Within 3 years of the date of this approval, the Proponent shall make suitable arrangements to provide appropriate long term security for the offset areas to the satisfaction of the Director-General.

Note: The Department acknowledges that the arrangements may provide for staged or delayed implementation, in accordance with the extraction in these areas.

Landscape Management Plan

24. The Proponent shall prepare and implement a Landscape Management Plan for the project to the satisfaction of the Director-General. This plan must:

(a) be prepared in consultation with DECC by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
(b) be submitted to the Director-General for approval within 6 months of the date of this approval; and
(c) include a:
- Rehabilitation and Offset Management Plan; and
- Quarry Closure Plan.

Rehabilitation and Offset Management Plan

25. The Rehabilitation and Offset Management Plan must include:

(a) the rehabilitation objectives for the site, vegetation offsets and landscaping;
(b) a description of the short, medium, and long term measures that would be implemented to: • rehabilitate the site;
- implement the Offset Strategy; and
- maintain and enhance existing site vegetation outside the disturbance area;

(c) detailed performance and completion criteria for the site rehabilitation and implementation of the Offset Strategy;
(d) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
- progressively rehabilitating disturbed areas;
- implementing vegetation offsets;
- protecting vegetation and soil outside the disturbance areas;
- rehabilitating creeks and drainage lines on the site to ensure no net loss of stream length and aquatic habitat;
- undertaking pre-clearance surveys;
- managing impacts on fauna;
- landscaping the site to minimise visual impacts;
- conserving and reusing topsoil;
- collecting and propagating seed for rehabilitation works;
- salvaging and reusing material from the site for habitat enhancement;
- controlling weeds and feral pests;
- controlling access; and
- bushfire management;

(e) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
(f) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and (g) details of who would be responsible for monitoring, reviewing, and implementing the plan.

Quarry Closure Plan

26. The Quarry Closure Plan must:

(a) include provision for certification from a qualified geotechnical engineer that the final proposed landform is stable;
(b) define the objectives and criteria for closure of the quarry;
(c) investigate options for the future use of the site, including any final void;

(d) describe the measures that would be implemented to minimise or manage the ongoing (post closure) environmental effects of the project; and
(e) describe how the performance of these measures would be monitored over time.

Rehabilitation and Offset Bond

27. Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a rehabilitation and offset bond for the project with the Director-General. The sum of the bond shall be calculated at:

(a) $\$2.50/m^2$ for the area of disturbance in each 3 year review period, including the offset areas; and
(b) $\$1.00/m^2$ for the total area of land previously disturbed by the quarry, or as otherwise directed by the Director-General.

Notes:

- *If the rehabilitation and offsets are completed to the satisfaction of the Director-General, the DirectorGeneral will release the bond.*
- *If the rehabilitation and/or offsets are not completed to the satisfaction of the Director-General, the DirectorGeneral will call in all or part of the bond, and arrange for the satisfactory completion of the relevant works.*

ABORIGINAL HERITAGE

28. Should the Proponent discover material suspected of being Aboriginal relics or skeletal remains, work in that area shall cease and the Proponent shall advise DECC and proceed in accordance with DECC instructions.

TRAFFIC AND TRANSPORT

Materials Transport

29. The Proponent shall transport all excavated material between the extraction site and processing plant site, including processing residues, via slurry pipelines.

Note: When the slurry system is unusable by reason of breakdown or essential maintenance, extractive material may be transported by truck during the period of such breakdown or maintenance. The Proponent shall ensure that such periods are as brief as possible and shall advise the Council each day that truck transport is to be used.

Haulage Records

30. The Proponent shall record and maintain a log of the extraction quantities and traffic movement in and out of the site, available for inspection at the request of the Director-General or the Council.

Road Haulage

31. The Proponent shall ensure that:

(a) all loaded vehicles entering or leaving the site are covered; and
(b) all loaded vehicles leaving the site are cleaned of materials that may fall on the road, before they leave the site.

VISUAL

Visual Amenity

32. The Proponent shall minimise the visual impacts of the project to the satisfaction of the DirectorGeneral.

Lighting Emissions

33. The Proponent shall:

(a) take all practicable measures to mitigate off-site lighting impacts from the project; and
(b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

Advertising

34. The Proponent shall not erect or display any advertising structure(s) or signs on the site without the written approval of the Director-General.

Note: This does not include traffic management and safety or environmental signs.

WASTE MANAGEMENT

Waste Minimisation

35. The Proponent shall:

(a) only import VENM to the site; and
(b) minimise the amount of waste generated by the project to the satisfaction of the DirectorGeneral.

EMERGENCY AND HAZARDS MANAGEMENT

Dangerous Goods

36. The Proponent shall ensure that the storage, handling, and transport of dangerous goods are conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

Safety

37. The Proponent shall secure the project to ensure public safety to the satisfaction of the DirectorGeneral.

Bushfire Management

38. The Proponent shall:

(a) ensure that the project is suitably equipped to respond to any fires on-site; and
(b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on site.

PRODUCTION DATA

39. The Proponent shall:

(a) provide annual production data to the DPI using the standard form for that purpose; and (b) include a copy of this data in the AEMR.

SCHEDULE 4
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in Schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the DirectorGeneral and the affected landowners and/or existing or future tenants accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.

INDEPENDENT REVIEW

2. If a landowner of privately owned land considers that the operations of the quarry are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Proponent in writing for an independent review of the impacts of the project on his/her land.

If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 3 months of the Director-General advising that an independent review is warranted:

(a) consult with the landowner to determine his/her concerns;
(b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the project is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and (c) give the Director-General and landowner a copy of the independent review.

3. If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

4. If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this non-compliance, then the Proponent shall:
(a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and

(b) conduct further monitoring to determine whether these measures ensure compliance; or

(c) secure a written agreement with the landowner to allow exceedances of the relevant criteria in Schedule 3, to the satisfaction

of the Director-General.

If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

If the Proponent is unable to finalise an agreement with the landowner, then the Proponent or landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 8).

5. If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 8).

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy shall be submitted to the Director-General within 3 months of the date of this approval, and;

(a) provide the strategic context for environmental management of the project;

(b) identify the statutory requirements that apply to the project;

(c) describe in general how the environmental performance of the project would be monitored and managed;

(d) describe the procedures that would be implemented to:

- keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project;
- receive, handle, respond to, and record complaints;
- resolve any disputes that may arise during the life of the project;
- respond to any non-compliance;
- manage cumulative impacts; and
- respond to emergencies; and

(e) describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the project.

ENVIRONMENTAL MONITORING PROGRAM

2. The Proponent shall prepare an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program shall be submitted to the Director-General concurrently with the submission of the various monitoring programs and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document.

REPORTING

Incident Reporting

3. Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.

4. Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that:
   (a) describes the date, time, and nature of the exceedance/incident;
   (b) identifies the cause (or likely cause) of the exceedance/incident;
   (c) describes what action has been taken to date; and
   (d) describes the proposed measures to address the exceedance/incident.

Annual Reporting

5. Within 12 months of the date of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General, relevant agencies and CCC. This report shall:

   (a) identify the standards and performance measures that apply to the project;
   (b) describe the works that will be carried out in the next 12 months;
   (c) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
   (d) include a summary of the monitoring results for the project during the past year; (e) include an analysis of these monitoring results against the relevant:
      - impact assessment criteria/limits;
      - monitoring results from previous years; and
      - predictions in the EA;
   (f) identify any trends in the monitoring results over the life of the project;
   (g) identify any non-compliance during the previous year; and
   (h) describe what actions were, or are being, taken to ensure compliance.

INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 12 months of the date of this approval, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit shall:
   (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
   (b) include consultation with the relevant agencies;

(c) assess the environmental performance of the project, and its effects on the surrounding environment;
(d) assess whether the project is complying with the relevant standards, performance measures and statutory requirements; and
(e) review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Note: The person(s) conducting the audit should have expertise in flora and fauna assessment, hydrogeology and quarry rehabilitation.

7. Within 6 weeks of completion of each Independent Environmental Audit, the Proponent shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations in the audit report.

8. Within 3 months of submitting a copy of the audit report to the Director-General, the Proponent shall review and if necessary revise:
(a) each of the environmental management and monitoring strategies/plans/programs in Schedules 3 and 5; and
(b) the sum of the Vegetation Offset Bond (see Schedule 3). This review shall consider:
- the effects of inflation;
- any changes to the total area of disturbance; and
- the performance of the vegetation offsets against the completion criteria of the Rehabilitation and Vegetation Offset Management Plan,

to the satisfaction of the Director-General

COMMUNITY CONSULTATIVE COMMITTEE

9. The Proponent shall establish a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General, in general accordance with the Department's *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects*.

Note: The Proponent may continue the operation of the Liaison and Review Committee established under condition 6.7 of the development consent issued by the Land and Environment Court on 14 July 1998 to fulfil this condition.

ACCESS TO INFORMATION

10. Within 1 month of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMR required under this approval, the Proponent shall:
(a) provide a copy of the relevant document/s to the relevant agencies and to members of the general public upon request; and
(b) ensure that a copy of the relevant document/s is made publicly available on its website and at the Proponent's office.

11. During the project, the Proponent shall:
(a) make a summary of monitoring results required under this approval publicly available on its website and at the site office; and

(b) update these results on a regular basis.

APPENDIX 1 SCHEDULE OF LAND

Extraction Area	• Lots 1 & 2 DP 570966 • Lots 1 & 2 DP 1063296 • Lot 1 DP 1013943 • Lot 2 DP 233818 • Lot 1 DP 1091018 • Lot 1 DP 223323 • Lots 167 & 214 DP 752039
Processing Plant	• Lot 198 DP 752025

APPENDIX 2 GENERAL LAYOUT OF PROJECT

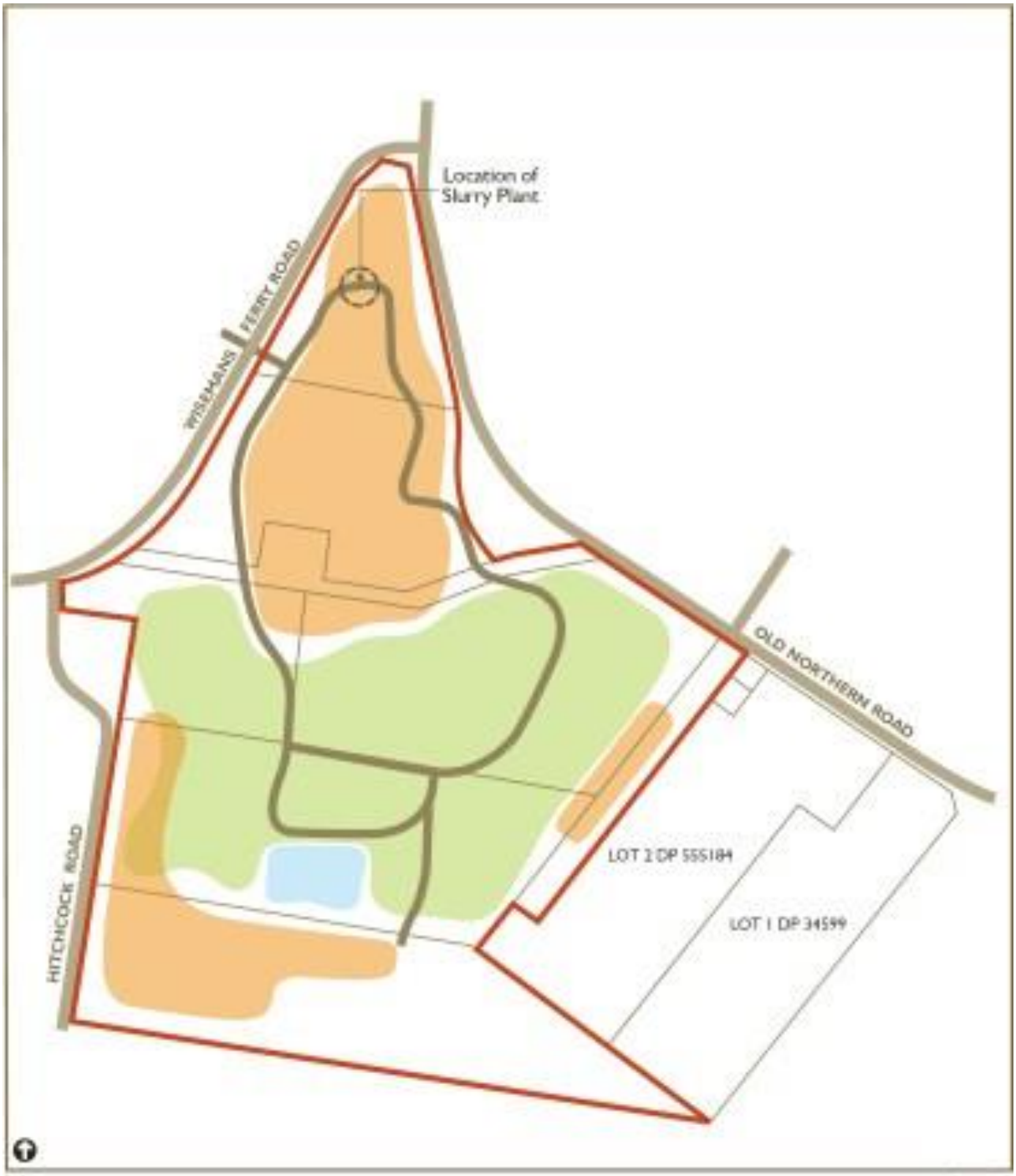


Figure 4
EXISTING TOPOGRAPHY AND DEVELOPMENT SETBACKS

APPENDIX 3 STATEMENT OF COMMITMENTS

Noise and Vibration

- Site activities will be managed so that any necessary high noise and vibration levels occur at times of least impact.

- All site activities will be undertaken incorporating noise attenuation measures such as restricting working hours for certain works required in the proximity of sensitive receptors.

- All equipment used on site will be certified in relation to noise performance.

- Panels and covers of silenced plant will be kept shut and plant and equipment switched off when not in use.

- All mechanical equipment will be silenced by the best practical means using current technology, prior to use. Noise suppression devices will be fitted according to manufacturer's instructions. Noise control kits will be fitted to noisy mobile equipment and shrouds provided around stationary equipment where necessary.

- All plant and equipment will be inspected regularly to ensure that it is well maintained to minimise noise emissions.

- The L_{10} noise level at the boundary of adjacent receivers where baseline data has been obtained will not normally exceed the background level by more than 5 dB(A).

- Compliance monitoring of noise levels will be undertaken and appropriate records of measurements kept.

- The local community will be informed of the level and duration of noise to be expected during specific activities and phases of development when necessary. Communication of concerns to the Environmental Manager will be invited.

Air Quality and Greenhouse Gas Emissions

- Ambient air quality monitoring will be conducted at identified sites.

- Dust suppression equipment will be fitted to all processing plant on the site. This will be regularly inspected and maintained in good working order at all times.

- Trafficable areas will be defined to prevent unnecessary vehicle movement into other parts of the site.

- All unsealed trafficable areas and working areas will be kept damp by spraying regularly with a water cart, water sprays or sprinklers to minimise dust emissions. Frequency of spraying to be determined based on weather conditions, soil erodibility and the observation of any visible dust.

- Speed controls will be applied to all unsealed areas (maximum speed of 20 km/h) and signposted accordingly.

- All semi-permanent stockpiles will be vegetated with suitable groundcover and regularly watered until the vegetation is well established.

- Work on any extraction activity producing dust will cease due to high winds if control cannot be achieved by watering or other means. Work will not resume until the wind velocity decreases and any dust generation can be controlled by normal means.

- All loaded trucks leaving the central processing plant on Lot 198 DP 752025 will have their payloads fully covered by a suitable material to prevent spillage.

- No fires will be permitted on-site without a permit.

- A mechanical road sweeping unit and water cart will be maintained for use as required to keep all roads including the intersection of the haul road and Wisemans Ferry Road free from deposited material.

- Exhausts from all vehicles and plant/equipment will be inspected to ensure that they are maintained at an acceptable level.

- All vehicles will be regularly serviced to ensure that exhaust emissions comply with the regulations. Appropriate service records will be maintained.

- Any opportunities to minimise machinery use and ensure that all equipment used on the site is energy efficient will be identified.

Access and Traffic

- If the sand slurry plant and transport system is unusable due to breakdown or during maintenance periods, trucks will be used for the transport of extractive material on a temporary basis. This will cease once the system is operating satisfactorily.

- The number of laden vehicle movements will not exceed a combined total of two hundred per day via the intersection of the haulage road and Wisemans Ferry Road. This is the total of laden vehicle movements allowed for PF Formation's combined extractive industry operations in Baulkham Hills Shire.

- Operations involving the transportation of material on the site will only be undertaken between 07.00 and 18.00 hours, Monday to Saturday, except a maximum of 10 laden vehicles will be allowed to enter and leave the site between 06.00 and 07.00 hours, Monday to Saturday only. Vehicles will not be allowed to arrive at the site prior to 05.45 hours on any day.

Erosion and Sediment Control

- Soil and Water Management Plan will be reviewed and revised, if required.

- Temporary erosion and sedimentation control structures such as detention basins and catch drains will be constructed as appropriate to collect runoff from cleared land including extraction areas and access roads.

- Silt traps and erosion control fencing will be erected as appropriate along extraction area boundaries and drainage lines.

- Sediment basins with a minimum storage capacity of 400 m3 per hectare of catchment will be constructed. Spillway capacity and stability will be designed as follows: – life of less than 5

years, adopt the 20 year tc event; – life between 5 and 10 years, adopt the 50 year tc event; and – life greater than 10 years, adopt the 100 year tc event.

- Stormwater control measures will be assessed and routine inspections conducted to ensure that compliance with best practice guidelines and relevant legislation is achieved.

- Locations for topsoil and material stockpiles will be selected on level ground and away from drainage lines. Diversion drains and sediment filter fences will be installed up slope as appropriate.

- Training will be provided to operational personnel on the importance of erosion control measures and drivers informed of the damage that can be caused to the environment by heavy vehicles.

- Areas of exposed land will be kept to a minimum compatible with operational requirements.

- Exposed areas not in use will be stabilized with an appropriate cover crop and watered until well established.

- Erosion and sediment controls will be monitored regularly and immediately following a rainfall event. Monitoring will take place initially on a weekly basis, then monthly once operating correctly. Sediment will be cleared when the traps have collected 60% of the capacity of the basin or where sediment build-up is less than 300 mm below the spillway crest. Sediment will be removed to a location where further pollution to downslope lands and waterways will not occur.

- Maintenance of erosion and sediment controls will be undertaken when any deterioration is identified or when replacement is necessary.

- Stored stormwater will be reused for dust control and the watering of site vegetation.

- Soil stockpiles will be seeded where these are to remain unused for a period in excess of four weeks. The area will be watered until the vegetation is well established.

Water Management

- Maximum depth of extraction will be restricted to not less than two metres above the wet weather high groundwater level. (nominally 181 m AHD).

- The groundwater will not be breached or contaminated. In the event that either should occur, operations will cease in the affected area and the Department of Environment and Climate Change consulted to determine the basis on which extraction may recommence.

- Retention basins will be designed to accommodate the 100-year tc event. The minimum basin capacities are:
  - Northern catchment 10,000 m^3
  - Southern catchment 38,000 m^3

  The volume of these basins can be varied depending on the extent of the area exposed for extraction within each catchment.

- All retention basins will be regularly inspected and an annual report prepared on their effectiveness.

- A minimum of two groundwater monitoring bores will be installed. One will be located within or near the extraction area and another at some location within the site beyond the area of any direct extraction influence. The location of these bores will meet the requirements of the Department of Environment and Conservation and Baulkham Hills Shire Council.

Flora and Fauna

- All areas which are not to be disturbed will be clearly marked.

- Topsoil will be separated and stored or use in rehabilitation works.

- An area of not less than 12 hectares will be identified, and indicated on the site survey. This will be identified as a revegetation area and access controlled.

- Seed will be collected from the existing woodland communities (Sydney Hinterland Transition Woodland), stored under controlled conditions, made available for future broadcasting and a suitable proportion propagated to provide tubestock for revegetation.

- Stored topsoil and that derived from suitable areas adjacent to the woodland communities will be spread over the defined revegetation area and seed broadcast over the site to augment the soil-borne native seed bank. Tube stock suitably protected against animal predation will also be used in appropriate locations.

- Access to bushland will be restricted to minimise the potential for damage. These areas will be marked and signs erected to ensure that this prohibition is made clear. The boundary of the site will be fenced to prevent external access.

Rehabilitation

- The Rehabilitation Plan will be reviewed and amended as necessary to reflect changing operational conditions. This will include a revised phasing plan and implementation programme.

- Setbacks to all roads and adjacent properties will be defined taking account of existing trees and other features. Programmes of mound construction and screen planting will be undertaken as required in the Rehabilitation Plan. All plant material used will reflect the species mix existing in the area.

- A staged seeding and planting programme will be undertaken as areas become available following completion of extraction and capping of sediment basins. This will be aimed at producing a dense plantation on the steeper slopes derived from the flora resources already established. The aim is to replicate as far as possible the mix and density of planting which is currently present.

- All suitable plant material will be used on the site as a seed and planting medium. Topsoil will be stored in appropriately marked low stockpiles for reuse in locations as close as possible to their source. Care will be taken to ensure that this does not become contaminated with the seeds of exotic species and weeds.

- The site will be rehabilitated in stages leaving areas exposed for as short a time as possible. This will be undertaken in conformity with the approved Rehabilitation Plan with maximum final batter grades of 4(H):1(V) on north and west facing slopes and 3(H):1(V) on those facing south and east. Final slopes will be as gentle as possible depending on the availability of fill material.

- All soil stockpiles and exposed areas will be seeded with an appropriate vegetation cover where no activity is to take place for more than four weeks.

- Revegetation of the site will be undertaken on the following basis:
  - as far as possible re-establish the Sydney Hinterland Transitional Woodland using seed and mulch collected from the area ;
  - rehabilitate other areas to native species with a light sowing of cereal and allowing natural regeneration;
  - rehabilitate the soil to achieve a full profile;
  - lime, fertilise and sow areas where improved grass cover is required; and
  - suitably turf surfaces expected to experience high surface flows leaving the site.

- A maintenance programme aimed at promoting and protecting the growth of the rehabilitated areas will be established.

Social Impact Management

- Material concerning activities at the site will be prepared and published on the company's website which will allow the community and others to be informed about current news on the site.

- Regular bi-annual meetings of community representatives will be established to discuss issues in relation to sand extraction on the site.

- A Complaints Register will be established incorporating date and time, type of communication, contact details of the complainant, nature of the complaint and response taken.

Heritage

- All work will cease in the area if an archaeological or heritage item is identified during extraction operations and the National Parks and Wildlife Service, the Deerubbin Aboriginal Land Council or the Heritage Office consulted to determine any appropriate course of action prior to recommencement of the work.

- Any additional survey work required for submittal of application to destroy artefact scatters located in the later stages of the development will be undertaken. Reasonable requirements of the National Parks and Wildlife Service (DECC), the Deerubbin Aboriginal Land Council and the Heritage Office arising out of any additional studies will be implemented.

Visual Amenity

- Peripheral bunds will be constructed within the established setbacks where necessary to screen extraction activities. These will be a minimum of three metres high with slopes ranging from 3(H):1(V) to 6(H):1(V) depending on the location using overburden stripped from the site.

- Screen planting works will be undertaken in the peripheral areas to an agreed specification using mulch to allow for native plant regeneration. This species mix will be reinforced using appropriate plantings at specified intervals.

- A tree planting programme will be undertaken within the ten metre buffer zones and in other defined parts of the site to establish a dense plantation using an appropriate mix of species reflecting that of the existing community.

- The final rehabilitated landform will be established in conformity with the Rehabilitation Plan.

- All temporary fencing will be removed when no longer required.

- Vegetation in areas suitable for agricultural/horticultural uses will be re-established.

- All site infrastructure including the slurry plant and its associated pipelines will be removed. Those areas affected by the plant will be restored and rehabilitated.

- All waste materials will be removed and disposed of in an appropriate manner.

- The final Rehabilitation Plan will be reviewed and proposals for future use of the site prepared.

Waste Management

- Waste handling areas will be clearly delineated.

- Specific areas for the collection of materials for reuse and recycling will be defined and clearly labelled.

- Cleared vegetation will be used within the landscape programme.

- All topsoil will be stored in stockpiles for later use in site rehabilitation.

- Bins or skips will be provided or the collection and storage of recyclable material and waste. General construction waste will be stored in a skip located at the workshop on Lot 198 DP752025. Waste food will be removed and stored in a vermin proof bin for collection by a waste contractor. Paper waste generated from site offices, plastics and glass will be collected separately for recycling.

- Hazardous wastes (including empty drums, rags, soil contaminated with oil) will be separated from nonhazardous wastes and manage in accordance with the relevant legislation.

- Liquid wastes (chemicals, oils and greases) will be temporarily stored in an appropriately bunded area and disposed of via a licensed contractor. Wash down water will be directed to an appropriate settlement basin if quality is acceptable.

- Copies of current licences of all waste removal contractors on site will be retained.

- All documentation relating to waste removal and disposal will be retained on file at the site. This documentation will include dockets for the removal and disposal of waste at a licensed facility.

- Waste material will be progressively separated and stockpiled in designated areas for collection. Adequately secure waste disposal areas to prevent access by wildlife.

- All waste licences will be reviewed and terms and conditions for compliance monitored.

- Any materials and waste remaining on the site following completion of extraction operations will be recycled or sent of disposal. This will be either recycled or disposed of in an appropriate manner.

Emergency Response

- All personnel on site during operations will be trained in appropriate procedures including site induction, materials handling and response procedures.

- Emergency response procedures will be developed and put in place. Appropriate individuals will be appointed as emergency services liaison officers.

- An emergency response table listing contact details of all relevant parties required in an environmental emergency will be prepared.

- A Register of Environmentally Hazardous Materials to be stored and used on site will be established.

- Appropriate safety and spill response equipment will be made available on site.

- All materials to be used and stored on site will be clearly labelled.

- Emergency response procedures will be reviewed and updated bi-annually.

- Appropriate safety and response equipment will be available at all times.

Hazard, Risk and Safety

- A licence to keep dangerous goods will be obtained from WorkCover NSW for all materials stored on site which require licensing.

- A Register of Hazardous Materials setting out details of quantities, storage and specific handling requirements for all relevant materials stored on site will be established.

- Material Safety Data Sheets for all hazardous materials stored on site will be obtained.

- Appropriate storage and secondary containment facilities for all hazardous materials stored on site will be provided. All bunded areas will be designed to contain at least 110% of the volume of materials stored within the area.

- A Safety Officer will be appointed for the development.

- All flammable material storage areas will be located at least ten metres from possible ignition sources.

- Contents of all above ground storage areas will be clearly labelled.

- All hazardous and dangerous goods storage areas will be secured and appropriate signage displayed. All incompatible material will be segregated.
- All personnel will be trained in the handling and safety procedures required for the hazardous materials stored and used on site.

- An Emergency Response Plan will be developed and put in place.

- A mobile spill control kit containing appropriate absorbent materials, neutralising chemicals and other spill containment equipment will be provided.

- Personal protective equipment will be provided and personnel instructed in its use.

- Any spills beyond the bunded area will be cleaned up immediately and the contaminated material disposed of in an appropriate manner.

- The relevant authorities will be contacted in the event of a leak or spill and any instructions followed. Any contamination will be remediated to the satisfaction of the regulatory authorities.

- Any spills or hazardous wastes that cannot be recycled will be collected and disposal by a licensed waste contractor arranged. All records of waste removal on site will be retained.

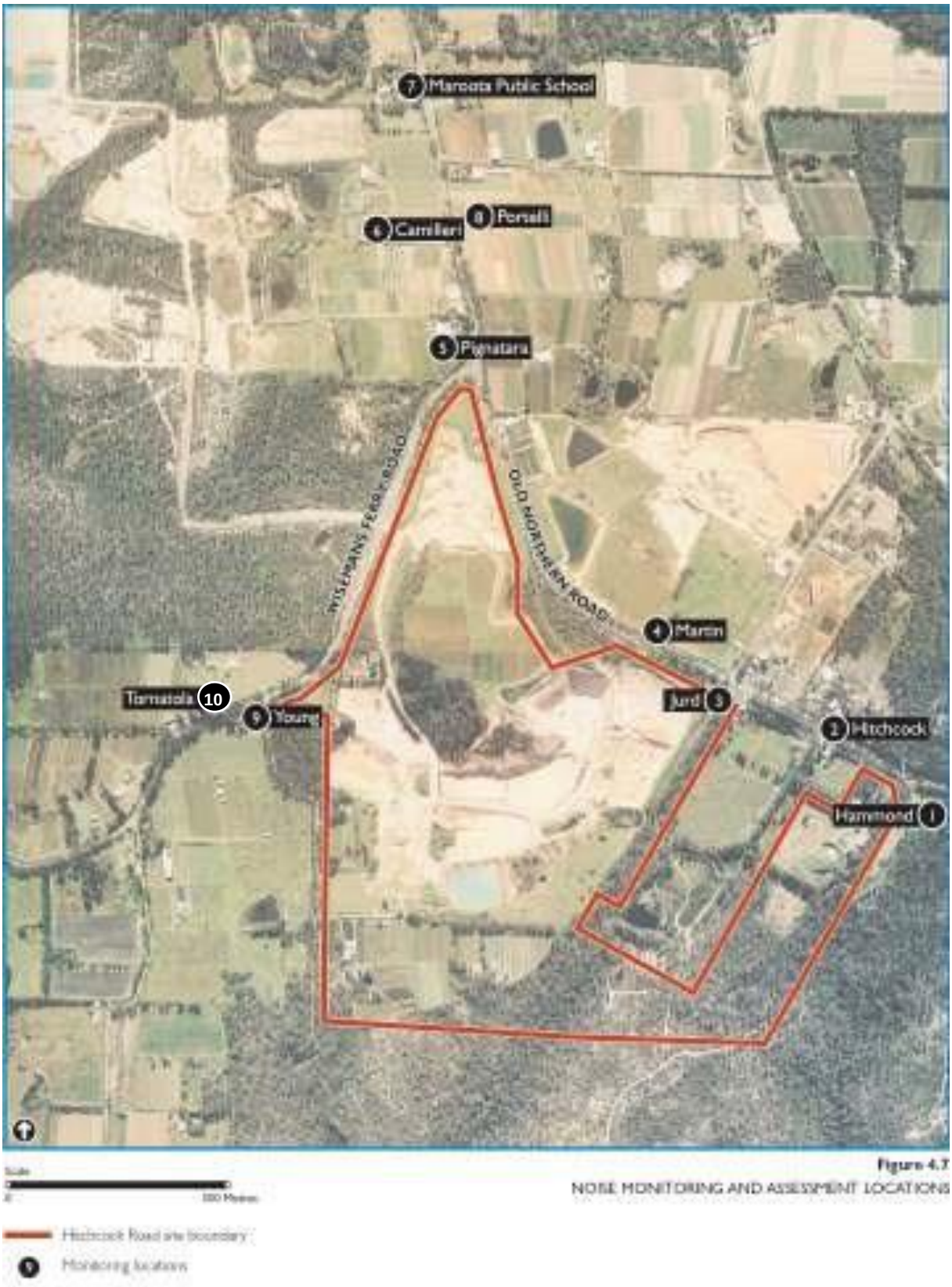


Figure 4.7
NOISE MONITORING AND ASSESSMENT LOCATIONS

APPENDIX 4
NOISE ASSESSMENT LOCATIONS

APPENDIX 5 VEGETATION OFFSET PLAN

Figure 8
AREAS TO BE CLEARED AND NEW PLANTINGS (STRATEGY A)

Hitchcock Road site
Areas for new plantings
Tetratheca glandulosa
Sydney Sandstone Gully Forest
Sydney Sandstone Ridgetop Woodland
Sydney Hinterland Transition Woodland
Areas to be cleared

Note: Sydney Hinterland Transition Woodland shown at time of photograph (2006)
Parts of this area can be cleared under the current consent

APPENDIX 6 CRITERIA TO MONITOR SUCCESS OF REVEGETATION

Table 8-1 Criteria to monitor success of revegetation

Category	Criteria	Target: 5 years	10 years	15 years	Existing condition of vegetation to be removed
Native species	Native species diversity (average number per 400m² quadrat)	[illegible]	[illegible]	40	48
	Average number of characteristic species for the site occurring within 400m²	15	[illegible]	[illegible]	34.6 + [illegible]
	Native species cover (% of vegetation cover in 400m² quadrat)	>60	>85	>95	[illegible]
Weeds	Weed abundance (% of vegetation cover in 400m² quadrat)	<10	<15	<5	[illegible]
	Invasion of Noxious weed species (e.g. Lantana, Blackberry, [illegible])	Controlled	Controlled	Controlled	Restricted
Vegetation structure	Vegetation structure	Canopy, shrub layer and groundcover species present. However structure [illegible] generally consisting of low canopy and ground cover	Canopy, shrub layer and groundcover species present. Structure beginning to develop	Well structured and includes canopy, understorey and ground cover units	Well structured and includes canopy, understorey and ground cover units
Canopy	Average canopy height (m)	4	8	12	12-16
	Native canopy cover (minimum % cover)	5	[illegible]	[illegible]	[illegible]
	[modified Braun-Blanquet scale]	[1]	[1]	[2]	[2]
Shrub layer	Native shrub cover (minimum % cover)	10	10	25	22.5 + 7.5
	[modified Braun-Blanquet scale]	[3]	[3]	[3]	[4]
	Average shrub layer height (m)	0.5	1	1	1.25
Groundcover	Native ground cover (minimum % cover)	5	10	10	35 (+/-5)
	[modified Braun-Blanquet scale]	[3]	[3]	[3]	[3]

Category	Criteria	Target			Existing condition of vegetation to be removed
		5 years	10 years	15 years	
Ecosystem function	Habitat values	Vegetation structure beginning to develop	Woodland birds recorded Habitat structure beginning to develop including groundcover such as leaf litter and fallen timber	Woodland birds recorded Habitat structure beginning to develop including groundcover such as leaf litter and fallen timber	Provides minimal habitat for fauna however many woodland birds present Well structured [illegible] includes moderate levels of leaf litter and fallen timber
	Natural regeneration indicating dispersal of seed into site and/or presence of soil seed bank	Yes	Yes	Yes	Yes

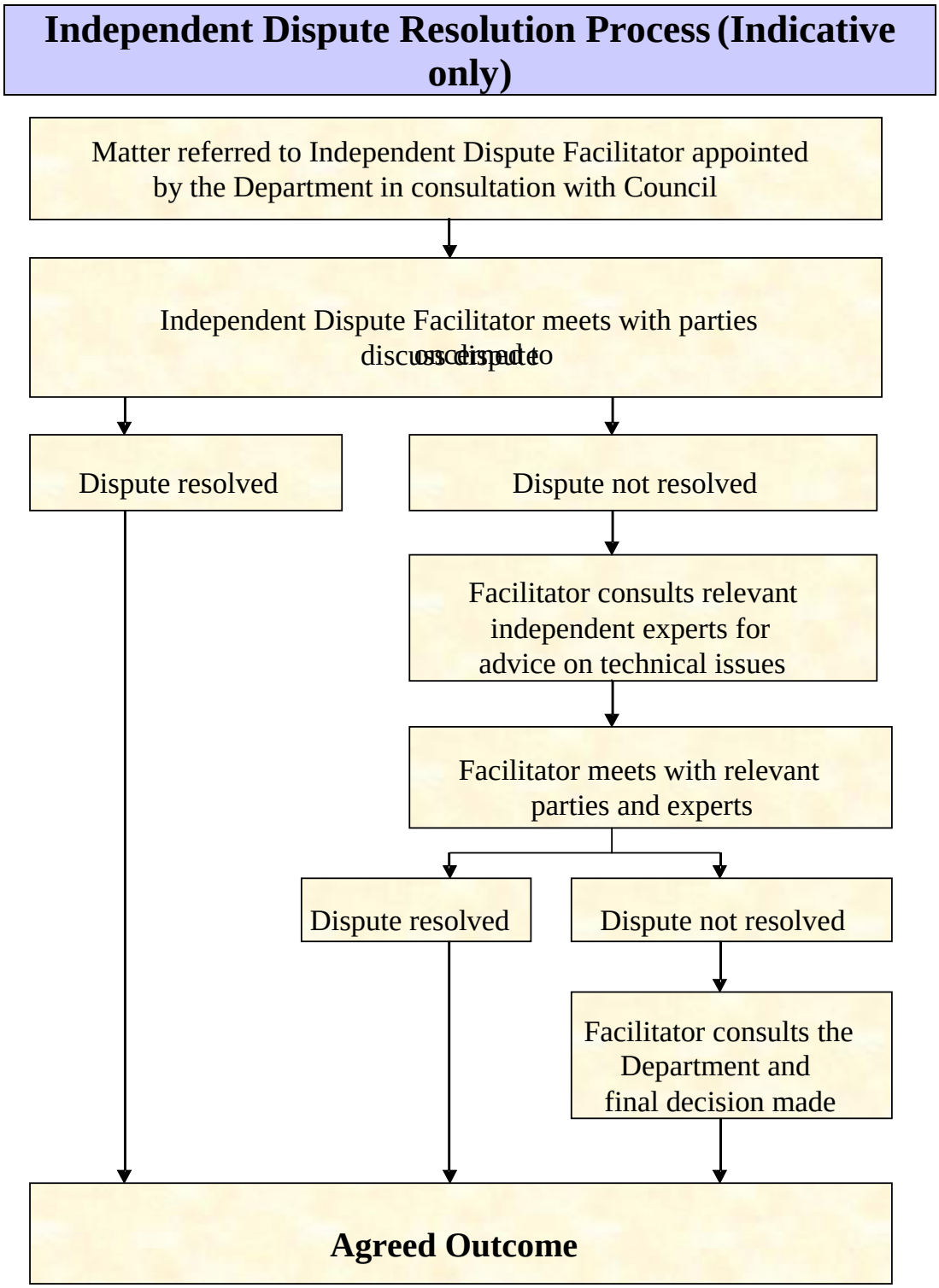
[illegible]

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]

APPENDIX 7 FINAL LANDFORM PLANS


LOT 2 DP 555184
LOT 1 DP 34597

APPENDIX 8 INDEPENDENT DISPUTE RESOLUTION PROCESS



ATTACHMENT 2

EPA LICENCE
ANNUAL RETURN

ANNUAL RETURN

LICENCE NO	**3407**
LICENCE HOLDER	ETRA PTY LTD
REPORTING PERIOD	30-Sep-2017 to 29-Sep-2018

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates above and specify the new dates to which this Annual Return relates below:

REVISED REPORTING PERIOD ____ / ____ / ____ **to** ____ / ____ / ____

(Note: the revised reporting period also needs to be entered in Section H)

THIS ANNUAL RETURN MUST BE RECEIVED BY THE EPA BEFORE 29-Nov-2018

Your Annual Return must be completed, including certification in Section H, and submitted to the EPA no later than 60 Days after the end of the reporting period for your licence.

Failure to submit this Annual Return within 60 days after the reporting period ends may result in:

- **the issue of a Penalty Notice for $1500 (individuals) or $3000 (corporations);**

OR

- **prosecution.**

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

It is an offence to supply any information in this form to the EPA that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect.

THERE IS A MAXIMUM PENALTY OF $250,000 FOR A CORPORATION OR $120,000 FOR AN INDIVIDUAL.

Details provided in this Annual Return will be available on the EPA's Public Register in accordance with section 308 of the *Protection of the Environment Operations Act 1997*.

Annual Return

ETRA PTY LTD

Use the checklist below to ensure that you have completed your Annual Return correctly.
(✓ the boxes)

CHECKLIST		
☐	Section A:	All licence details are correct
☐	Section B1:	You have entered the correct number in the complaints table
☐	Section B2 – B3:	If there are tables, you have provided the required details
☐	Section C:	You have answered question 1, and 2 if applicable
☐	Section D:	If applicable, you have completed all load calculation worksheets
☐	Section E:	You have answered question 1, 2, 3, 4, 5 and 6 if applicable
☐	Section F:	You have answered question 1, 2 and 3 if applicable
☐	Section G:	You have answered question 1 and question 2, 3 and 4 or question 5 through to 11 if applicable
☐	Section H:	The Annual Return has been signed by appropriate person(s) and, if applicable, the revised reporting period entered
☐	Make a copy of the completed Annual Return and keep it with your licence records	

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

Annual Return

ETRA PTY LTD

A Statement of Compliance - Licence Details

ALL licence holders must check that the licence details in Section A are correct

If there are changes to any of these details**you must advise the EPA and apply as soon as possible for a variation to your licence or for a licence transfer.**

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing, or from regional offices of the EPA, or by contacting us on telephone 02 9995 5700.

If you are applying to vary or transfer your licence you must still complete this Annual Return.

A1 Licence Holder

Licence Number	3407
Licence Holder	ETRA PTY LTD
Trading Name *(if applicable)*	PF FORMATION
ACN	002 662 277

A2 Premises to which Licence Applies (if applicable)

Common Name (if any)	ETRA PTY LTD
Premises	WISEMANS FERRY ROAD MAROOTA NSW 2756

A3 Activities to which Licence Applies

Extractive activities

A4 Other Activities (if applicable)

Concrete Works

A5 Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Land-based extractive activity	> 100,000.00 - 500,000.00	T annual capacity to extract, process or store

A6 Assessable Pollutants (Not Applicable)

B Monitoring and Complaints Summary

B1 Number of Pollution Complaints

Number of complaints recorded by the licensee during the reporting period. **If no complaints were received enter nil in the attached box, otherwise complete the table below.**	nil

Pollution Complaint Category	Number of Complaints
Air	
Water	
Noise	
Waste	
Other	

B2 Concentration Monitoring Summary

For each monitoring point identified in your licence complete all the details for each pollutant listed in the tables provided below.

If concentration monitoring is **not** required by your licence, **no tables** will appear below.
Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Monitoring Point 1

Dust monitoring, Dust gauge labelled "1- School" on the Map faxed to the EPA on 5 August 2002

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	12	12	1.57	2.62	4.49

Monitoring Point 2

Dust monitoring, Dust gauge labelled 2 - intersection of Hitchcock and Wisemans Ferry Road

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	12	12	1.85	2.79	4.31

Monitoring Point 3

Dust monitoring, Dust gauge labelled as "Jurds Paddock - 3 Por168" on the map faxed to the EPA on 5 August 2002

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	12	12	1.31	3.53	7.04

B3 Volume or Mass Monitoring Summary

For each monitoring point identified in your licence complete the details of the volume or mass monitoring indicated in the tables provided below.

If volume or mass monitoring is not required by your licence, **no tables** will appear below.

Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

C Statement of Compliance - Licence Conditions

C1 Compliance with Licence Conditions

(☑ the boxes)

1 Were all conditions of the licence complied with (including monitoring and reporting requirements)? ☑ Yes ☐ No

(✓ a box)

2 If you answered 'No' to question 1, please supply the following details for each non -compliance in the format, or similar format , provided on the following page.

Please use a separate page for each licence condition that has not been complied with.

a) What was the specific licence condition that was not complied with?

b) What were the particulars of the non -compliance?

c) What were the date(s) when the non -compliance occurred, if applicable?

d) If relevant, what was the precise location where the non -compliance occurred?

Attach a map or diagram to the Statement to show the precise location.

e) What were the registrati on numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance?

f) What was the cause of the non -compliance?

g) What action has been, or will be, taken to mitigate any adverse effects of the non -compliance?

h) What action has been, or will be, taken to prevent a recurrence of the non -compliance?

3. How many pages have you attached?

Each attached page must be initialled by the person(s) who signs Section G of this Annual Return

C2 Details of Non-Compliance with Licence

Licence condition number not complied with
Summary of particulars of the non-compliance **(NO MORE THAN 50 WORDS)**
If required, further details on particulars of non-compliance
Date(s) when the non-compliance occurred, if applicable
If relevant, precise location where the non-compliance occurred (attach a map or diagram)
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
Cause of non-compliance
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
Action taken or that will be taken to prevent a recurrence of the non-compliance

D Statement of Compliance - Load-Based Fee Calculation Worksheets

If you are not required to monitor assessable pollutants by your licence, no worksheets will appear below. Please go to Section E.

If assessable pollutants have been identified on your licence (see licence condition L2), complete the following worksheets for each assessable pollutant to determine your load-based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in the EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been sent to you with your licence. If you require additional copies you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

PENALTIES APPLY FOR SUPPLYING FALSE OR MISLEADING INFORMATION

D1 - D8 (Not Applicable)

E Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan (PIRMP) Under Section 153A of the POEO Act 1997

1 Have you prepared a PIRMP as required under s153A of the Protection of the Environment Operations Act 1997?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Is the PIRMP available at the premises?

(✓ a box) ☑ Yes ☐ No

3 Is the PIRMP available in a prominent position on a publicly accessible web site?

(✓ a box) ☑ Yes ☐ No

If the PIRMP is available on a publicly accessible web site please indicate clearly below the address of the web site where the PIRMP can be accessed:

Web site Address: www.pformation.com.au

4 Has the PIRMP been tested in the last 12 months?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 4 please indicate clearly below the date that the PIRMP was last tested:

The PIRMP was last tested on: 30/10/2018

5 Has the PIRMP been updated?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 5 please indicate clearly below the date that the PIRMP was last updated:

The PIRMP was last updated on: 26/11/2018

6 How many times has the PIRMP been activated in this reporting period? Nil

If the PIRMP has been activated, please indicate clearly below the date/s when the PIRMP was activated:

The PIRMP was activated on: __/__/____

The EPA's guidelines for preparation of pollution incident response management plans are available at

http://www.epa.nsw.gov.au/legislation/20120227epreppirmp.htm

F Statement of Compliance - Requirement to Publish Pollution Monitoring Data Under Section 66(6) of the POEO Act 1997

1 Are there any conditions attached to your licence that require pollution monitoring to be undertaken?

(✓ a box) ☑Yes ☐No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Do you operate a web site?

(✓ a box) ☑Yes ☐No

3 Is the pollution monitoring data published on your web site in accordance with the EPA's written requirements for publishing pollution monitoring data?

(✓ a box) ☑Yes ☐No

If you publish pollution monitoring data on a web site please indicate clearly below the address of the web site where the pollution monitoring data can be accessed:

Web site address www.pformation.com.au

The EPA's written requirements for publishing pollution monitoring data are available at http://www.epa.nsw.gov.au/legislation/20120263reqpubpmdata.htm

Note - if you do not maintain a web site, you must provide a copy of any monitoring data that relates to pollution, to any person requests a copy of the data at no charge to the person requesting the data.

Annual Return

ETRA PTY LTD

G Statement of Compliance - Environmental Management Systems and Practices

1 Do you have an environmental management system (EMS) certified to ISO 14001 or any other demonstrated equivalent system[1]? (see note below on demonstrated equivalent)

(✓ a box) ☐ Yes ☑ No

If your answer to question 1 is 'No', please proceed to question 5. If your answer to question 1 is 'Yes', please proceed to question 2.

2 When was the last check of the EMS[2] completed (see note below on check of EMS)? __/__/____

3 Were there any non-conformances related to environmental issues identified in the last check of the EMS?

(✓ a box) ☐ Yes ☐ No

4 If there were non-conformances identified, were these non-conformances rectified?

(✓ a box) ☐ Yes ☐ No

If you answered 'No' to question 1, please answer questions 5 - 11. If you answered 'Yes' to question 1 please proceed to section H. Questions 5-11 relate to any documented environmental practices, procedures and systems in place. Refer to http://www.epa.nsw.gov.au/licensing/EMCP.htm for guidance on how to complete questions 5 to 11. If unsure of the answer, tick No.

5 Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?

(✓ a box) ☑ Yes ☐ No

6 Have you established and implemented an operational maintenance program, including preventative maintenance?

(✓ a box) ☑ Yes ☐ No

7 Do you keep records of regular inspections and maintenance of plant and equipment?

(✓ a box) ☑ Yes ☐ No

8 Do you conduct regular site audits to assess compliance with environmental legal requirements and assess conformance to the requirements of any documented environmental practices, procedures and systems in place?

(✓ a box) ☑ Yes ☐ No

9 Are the audits of documented environmental practices, procedures and systems undertaken by a third party?

(✓ a box) ☑ Yes ☐ No

10 Have you established and implemented an environmental improvement or management plan?

(✓ a box) ☑ Yes ☐ No

11 Do you train staff in environmental issues that may arise from your activities and operations and keep records of this

(✓ a box) ☑ Yes ☐ No

[1] Demonstrated equivalent refers to an environmental management system that the EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 system. For further information go to:
http://www.epa.nsw.gov.au/resources/licensing/150402-environmental-management-systems-guidelines.pdf

[2] Undertaking a 'check of an EMS' refers to the ISO 14001 requirements that an organisation demonstrates conformity to the requirements of its EMS and to the standard, these checks require third-party certification that requirements have been met.

Annual Return

ETRA PTY LTD

H Signature and Certification

This Annual Return may only be signed by a person(s) with legal authority to sign it as set out in the categories below. **Please tick (✓) the box** next to the category that describes how this Annual Return is being signed.

If you are uncertain about who is entitled to sign or which category to tick, please contact us on telephone 02 9995 5700.

If the licence holder is:	the Annual Return must be signed and certified by one of the following:
an individual	☐ the individual licence holder, or ☐ a person acting on behalf of the individual licence holder in accordance with a power of attorney for the individual. A copy of the power of attorney must be submitted with the Annual Return.
a company	☑ by two directors, or ☐ by a director and a company secretary, or ☐ if a proprietary company that has a sole director who is also the sole company secretary - by that director, or ☐ by a person delegated to sign a copy of the Annual Return on the company's behalf in accordance with the Corporations Act 2001. Delegation of authority must be submitted with the Annual Return, or, ☐ by affixing the common seal, in accordance with the Corporations Act 2001
a public authority other than a Council	☐ by the Chief Executive Officer of the public authority, or ☐ by a person delegated to sign on the public authority's behalf in accordance with its legislation.
a local Council	☐ by the General Manager in accordance with s377 of the Local Government Act 1993 , or ☐ by affixing the seal of the Council in a manner authorised under the Local Government Act 1993.

It is an offence to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of $250,000 for a corporation or $120,000 for an individual.

I/We

- *declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and*
- *certify that the information in the Statement of Compliance in sections A, C, D, E, F and G and any pages attached to Section C is correct and not false or misleading in a material respect.*

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates below and specify the new dates to which this Annual Return relates below:

For the reporting period 30-Sep-2017 to 29-Sep-2018 or ___/___/___ to ___/___/___

SIGNATURE:	SIGNATURE:
NAME: (printed) Joshua Graham	NAME: (printed) Luke Graham
POSITION: Director	POSITION: Director
DATE: 26 / 11 / 2018	DATE: 26 / 11 / 2018

SEAL(if signing under seal)

PLEASE ENSURE THAT ALL APPROPRIATE BOXES HAVE BEEN COMPLETED AND THAT THE CHECKLIST ON PAGE 2 OF THE ANNUAL RETURN HAS BEEN COMPLETED

ANNUAL RETURN

LICENCE NO	**3407**
LICENCE HOLDER	ETRA PTY LTD
REPORTING PERIOD	30-Sep-2018 to 29-Oct-2018

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates above and specify the new dates to which this Annual Return relates below:

REVISED REPORTING PERIOD _____ / _____ / _____ **to** _____ / _____ / _____

(Note: the revised reporting period also needs to be entered in Section H)

THIS ANNUAL RETURN MUST BE RECEIVED BY THE EPA BEFORE 29-Dec-2018

Your Annual Return must be completed, including certification in Section H, and submitted to the EPA no later than 60 Days after the end of the reporting period for your licence.

Failure to submit this Annual Return within 60 days after the reporting period ends may result in:

- **the issue of a Penalty Notice for $1500 (individuals) or $3000 (corporations);**

OR

- **prosecution.**

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

It is an offence to supply any information in this form to the EPA that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect.

THERE IS A MAXIMUM PENALTY OF $250,000 FOR A CORPORATION OR $120,000 FOR AN INDIVIDUAL.

Details provided in this Annual Return will be available on the EPA's Public Register in accordance with section 308 of the *Protection of the Environment Operations Act 1997*.

Annual Return

ETRA PTY LTD

Use the checklist below to ensure that you have completed your Annual Return correctly.

(✓ the boxes)

CHECKLIST		
☐	Section A:	All licence details are correct
☐	Section B1:	You have entered the correct number in the complaints table
☐	Section B2 – B3:	If there are tables, you have provided the required details
☐	Section C:	You have answered question 1, and 2 if applicable
☐	Section D:	If applicable, you have completed all load calculation worksheets
☐	Section E:	You have answered question 1, 2, 3, 4, 5 and 6 if applicable
☐	Section F:	You have answered question 1, 2 and 3 if applicable
☐	Section G:	You have answered question 1 and question 2, 3 and 4 or question 5 through to 11 if applicable
☐	Section H:	The Annual Return has been signed by appropriate person(s) and, if applicable, the revised reporting period entered
☐	Make a copy of the completed Annual Return and keep it with your licence records	

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

Annual Return

ETRA PTY LTD

A Statement of Compliance - Licence Details

ALL licence holders must check that the licence details in Section A are correct

If there are changes to any of these details you must advise the EPA and apply as soon as possible for a variation to your licence or for a licence transfer.

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing, or from regional offices of the EPA, or by contacting us on telephone 02 9995 5700.

If you are applying to vary or transfer your licence you must still complete this Annual Return.

A1 Licence Holder

Licence Number	3407
Licence Holder	ETRA PTY LTD
Trading Name *(if applicable)*	PF FORMATION
ACN	002 662 277

A2 Premises to which Licence Applies (if applicable)

Common Name (if any)	ETRA PTY LTD
Premises	WISEMANS FERRY ROAD MAROOTA NSW 2756

A3 Activities to which Licence Applies

Extractive activities

A4 Other Activities (if applicable)

Concrete Works

A5 Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Land-based extractive activity	> 100,000.00 - 500,000.00	T annual capacity to extract, process or store

A6 Assessable Pollutants (Not Applicable)

B Monitoring and Complaints Summary

B1 Number of Pollution Complaints

Number of complaints recorded by the licensee during the reporting period. **If no complaints were received enter nil in the attached box, otherwise complete the table below.**	Nil

Pollution Complaint Category	Number of Complaints
Air	
Water	
Noise	
Waste	
Other	

B2 Concentration Monitoring Summary

For each monitoring point identified in your licence complete all the details for each pollutant listed in the tables provided below.

If concentration monitoring is **not** required by your licence, **no tables** will appear below.
Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Monitoring Point 1

Dust monitoring, Dust gauge labelled "1- School" on the Map faxed to the EPA on 5 August 2002

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	1	1		1.68	

Monitoring Point 2

Dust monitoring, Dust gauge labelled 2 - intersection of Hitchcock and Wisemans Ferry Road

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	1	1		1.90	

Monitoring Point 3

Dust monitoring, Dust gauge labelled as "Jurds Paddock - 3 Por168" on the map faxed to the EPA on 5 August 2002

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	1	1		2.87	

B3 Volume or Mass Monitoring Summary

For each monitoring point identified in your licence complete the details of the volume or mass monitoring indicated in the tables provided below.

If volume or mass monitoring is not required by your licence, **no tables** will appear below.

Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

C Statement of Compliance - Licence Conditions

C1 Compliance with Licence Conditions

(☑ the boxes)

1 Were all conditions of the licence complied with (including monitoring and reporting requirements)? ☑ Yes ☐ No

(✓ a box)

2 If you answered 'No' to question 1, please supply the following details for each non -compliance in the format, or similar format , provided on the following page.

Please use a separate page for each licence condition that has not been complied with.

a) What was the specific licence condition that was not complied with?

b) What were the particulars of the non -compliance?

c) What were the date(s) when the non -compliance occurred, if applicable?

d) If relevant, what was the precise location where the non -compliance occurred?

Attach a map or diagram to the Statement to show the precise location.

e) What were the registrati on numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance?

f) What was the cause of the non-compliance?

g) What action has been, or will be, taken to mitigate any adverse effects of the non -compliance?

h) What action has been, or will be, taken to prevent a recurrence of the non -compliance?

3. How many pages have you attached?

Each attached page must be initialled by the person(s) who signs Section G of this Annual Return

C2 Details of Non-Compliance with Licence

Licence condition number not complied with
Summary of particulars of the non-compliance **(NO MORE THAN 50 WORDS)**
If required, further details on particulars of non-compliance
Date(s) when the non-compliance occurred, if applicable
If relevant, precise location where the non-compliance occurred (attach a map or diagram)
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
Cause of non-compliance
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
Action taken or that will be taken to prevent a recurrence of the non-compliance

D Statement of Compliance - Load-Based Fee Calculation Worksheets

If you are not required to monitor assessable pollutants by your licence, no worksheets will appear below. Please go to Section E.

If assessable pollutants have been identified on your licence (see licence condition L2), complete the following worksheets for each assessable pollutant to determine your load-based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in the EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been sent to you with your licence. If you require additional copies you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

PENALTIES APPLY FOR SUPPLYING FALSE OR MISLEADING INFORMATION

D1 - D8 (Not Applicable)

E Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan (PIRMP) Under Section 153A of the POEO Act 1997

1 Have you prepared a PIRMP as required under s153A of the Protection of the Environment Operations Act 1997?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Is the PIRMP available at the premises?

(✓ a box) ☑ Yes ☐ No

3 Is the PIRMP available in a prominent position on a publicly accessible web site?

(✓ a box) ☑ Yes ☐ No

If the PIRMP is available on a publicly accessible web site please indicate clearly below the address of the web site where the PIRMP can be accessed.

Web site Address: www.pffformation.com.au

4 Has the PIRMP been tested in the last 12 months?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 4 please indicate clearly below the date that the PIRMP was last tested:

The PIRMP was last tested on: 30/10/2018

5 Has the PIRMP been updated?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 5 please indicate clearly below the date that the PIRMP was last updated:

The PIRMP was last updated on: 26/11/2018

6 How many times has the PIRMP been activated in this reporting period? Nil

If the PIRMP has been activated, please indicate clearly below the date/s when the PIRMP was activated:

The PIRMP was activated on: __/__/____

The EPA's guidelines for preparation of pollution incident response management plans are available at

http://www.epa.nsw.gov.au/legislation/20120227egpreppirmp.htm

F Statement of Compliance - Requirement to Publish Pollution Monitoring Data Under Section 66(6) of the POEO Act 1997

1 Are there any conditions attached to your licence that require pollution monitoring to be undertaken?

(✓ a box) ☑Yes ☐No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Do you operate a web site?

(✓ a box) ☑Yes ☐No

3 Is the pollution monitoring data published on your web site in accordance with the EPA's written requirements for publishing pollution monitoring data?

(✓ a box) ☑Yes ☐No

If you publish pollution monitoring data on a web site please indicate clearly below the address of the web site where the pollution monitoring data can be accessed:

Web site address www.ptformation.com.au

The EPA's written requirements for publishing pollution monitoring data are available at http://www.epa.nsw.gov.au/legislation/20120263regpubpmdata.htm

Note - if you do not maintain a web site, you must provide a copy of any monitoring data that relates to pollution, to any person requests a copy of the data at no charge to the person requesting the data.

G Statement of Compliance - Environmental Management Systems and Practices

1 Do you have an environmental management system (EMS) certified to ISO 14001 or any other demonstrated equivalent system[1]? (see note below on demonstrated equivalent)

(✓ a box) ☐ Yes ☑ No

If your answer to question 1 is 'No', please proceed to question 5. If your answer to question 1 is 'Yes', please proceed to question 2.

2 When was the last check of the EMS[2] completed (see note below on check of EMS)? __/__/____

3 Were there any non-conformances related to environmental issues identified in the last check of the EMS?

(✓ a box) ☐ Yes ☐ No

4 If there were non-conformances identified, were these non-conformances rectified?

(✓ a box) ☐ Yes ☐ No

If you answered 'No' to question 1, please answer questions 5 - 11. If you answered 'Yes' to question 1 please proceed to section H. Questions 5-11 relate to any documented environmental practices, procedures and systems in place. Refer to http://www.epa.nsw.gov.au/licensing/EMCP.htm for guidance on how to complete questions 5 to 11. If unsure of the answer, tick No.

5 Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?

(✓ a box) ☑ Yes ☐ No

6 Have you established and implemented an operational maintenance program, including preventative maintenance?

(✓ a box) ☑ Yes ☐ No

7 Do you keep records of regular inspections and maintenance of plant and equipment?

(✓ a box) ☑ Yes ☐ No

8 Do you conduct regular site audits to assess compliance with environmental legal requirements and assess conformance to the requirements of any documented environmental practices, procedures and systems in place?

(✓ a box) ☑ Yes ☐ No

9 Are the audits of documented environmental practices, procedures and systems undertaken by a third party?

(✓ a box) ☑ Yes ☐ No

10 Have you established and implemented an environmental improvement or management plan?

(✓ a box) ☑ Yes ☐ No

11 Do you train staff in environmental issues that may arise from your activities and operations and keep records of this

(✓ a box) ☑ Yes ☐ No

[1] Demonstrated equivalent refers to an environmental management system that the EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 system. For further information go to:
http://www.epa.nsw.gov.au/resources/licensing/150402-environmental-management-systems-guidelines.pdf

[2] Undertaking a 'check of an EMS' refers to the ISO 14001 requirements that an organisation demonstrates conformity to the requirements of its EMS and to the standard, these checks require third-party certification that requirements have been met.

Annual Return

ETRA PTY LTD

H Signature and Certification

This Annual Return may only be signed by a person(s) with legal authority to sign it as set out in the categories below. **Please tick (✓) the box** next to the category that describes how this Annual Return is being signed.

If you are uncertain about who is entitled to sign or which category to tick, please contact us on telephone 02 9995 5700.

If the licence holder is:	the Annual Return must be signed and certified by one of the following:
an individual	☐ the individual licence holder, or ☐ a person acting on behalf of the individual licence holder in accordance with a power of attorney for the individual. A copy of the power of attorney must be submitted with the Annual Return.
a company	☑ by two directors, or ☐ by a director and a company secretary, or ☐ if a proprietary company that has a sole director who is also the sole company secretary - by that director, or ☐ by a person delegated to sign a copy of the Annual Return on the company's behalf in accordance with the Corporations Act 2001. Delegation of authority must be submitted with the Annual Return, or. ☐ by affixing the common seal, in accordance with the Corporations Act 2001
a public authority other than a Council	☐ by the Chief Executive Officer of the public authority, or ☐ by a person delegated to sign on the public authority's behalf in accordance with its legislation.
a local Council	☐ by the General Manager in accordance with s377 of the Local Government Act 1993 , or ☐ by affixing the seal of the Council in a manner authorised under the Local Government Act 1993.

It is an offence to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of $250,000 for a corporation or $120,000 for an individual.

I/We

- *declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and*
- *certify that the information in the Statement of Compliance in sections A, C, D, E, F and G and any pages attached to Section C is correct and not false or misleading in a material respect.*

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates below and specify the new dates to which this Annual Return relates below:

For the reporting period 30-Sep-2018 to 29-Oct-2018 or ___/___/___ to ___/___/___

SIGNATURE: _____ SIGNATURE: _____

NAME: (printed) Joshua Graham NAME: (printed) Luke Graham

POSITION: Director POSITION: Director

DATE: 26 / 11 / 2018 DATE: 26 / 11 / 2018

SEAL(if signing under seal)

PLEASE ENSURE THAT ALL APPROPRIATE BOXES HAVE BEEN COMPLETED AND THAT THE CHECKLIST ON PAGE 2 OF THE ANNUAL RETURN HAS BEEN COMPLETED

ATTACHMENT 3

MONTHLY ENVIRONMENTAL OPERATIONAL PROCEDURES CHECKLIST

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for July 2018 showed low levels at all locations.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	
A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	

A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/7/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES
Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota
The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for August 2018 showed low levels at all locations.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	

A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	
A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/8/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for September 2018 showed low levels at all but one location. High reading most likely due to recent lawn mowing in dry conditions.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 30/9/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for October 2018 showed low levels at all locations.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/10/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

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CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for November 2018 showed higher than normal levels at all locations. BOM recorded dust storm occurred on the 22/11/2018.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 30/11/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for December 2018 showed low levels at all locations.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	Rehabilitation work undertaken. Weed removal and habitat enhancement.
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/12/2018

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results for January 2019 showed low levels at all locations.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/01/2019

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust level higher than normal at Jurd's house. All other locations levels were low.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 28/02/2019

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Dust monitoring station moved to 2735 Old Northern Road. Deposited dust results were higher than normal at the new location. All other locations levels were low.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/03/2019

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	Deposited dust results were higher than normal at 4735 ONR. All other locations levels were low.
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8	8.1	Social Impact Management	✓	Nil	

55-56					
A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 30/04/2019

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 31/05/2019

PF FORMATION – ENVIRONMENTAL OPERATIONAL PROCEDURES

Hitchcock Road Sand Extraction and Rehabilitation Project, Maroota

The chapter, page number and strategy point number are references to the approved Environmental Strategy Appendix A – Environmental Operational Procedures.

CHAPTER Page No.	STRATEGY Point No.	MANAGEMENT CONTROLS	STATUS ✓ or ×	COMPLAINTS RECEIVED	COMMENTS
A2 33-35	2.1	Noise Management	✓	Nil	
A3 36-39	3.1, 3.2	Air Quality Management	✓	Nil	
A4 40-41	4.1	Access and Traffic	✓	Nil	Truck movements were not exceeded. Weighbridge records were reviewed.
A5 42-45	5.1, 5.2, 5.3	Erosion & Sediment Control	✓	Nil	
A6 46-49	6.1	Water Management	✓	Nil	
A7 50-54	7.1, 7.2	Rehabilitation & Vegetation Offset Management	✓	Nil	
A8 55-56	8.1	Social Impact Management	✓	Nil	

A9 57-58	9.1	Heritage Management	✓	Nil	
A10 59-61	10.1	Visual Amenity Management	✓	Nil	
A11 62-64	11.1	Waste Management	✓	Nil	
A12 65-66	12.1	Emergency Response Management	✓	Nil	
A13 67-71	13.1, 13.2	Hazard, Risk and Safety Management	✓	Nil	
Completed by Environmental Contractor (South East Environmental)				Signed: *Melissa Mass*	Date: 30/06/2019

A2.3 Management controls

PHASE

ATTACHMENT 4

ANNUAL ENVIRONMENTAL OPERATIONAL PROCEDURES CHECKLIST

A2.3 Management controls

PHASE

OPERATIONAL

Strategy 2.1: Ensure that the site operations are undertaken in a manner that minimises the impacts of noise and vibration.

Actions		Responsibility
2. 1 . 1	Manage site activities so that any necessary high noise vibration levels occur at times of least impact.	Quarry Manager and
2. 1 .2	Advise neighbouring properties at least 24 hours in advance of the extent and expected duration of Environmental especially noisy activities. poi ù•...Qd,	Quarry Manager/ Manager
2.1 .3	Undertake all site activities incorporating noise attenuation measures such as restricting working hours for certain works required close to sensitive receptors	Quarry Manager
1.4	Ensure that panels and covers of silenced plant are kept shut and plant and equipment switched off when not in use.	Quarry Manager
1.5	Ensure that mechanical equipment is silenced by the best practical means using current technology, prior to use. Noise suppression devices should be fitted according to manufacturer's instructions. Residential class mufflers should be Used where possible. Noise control kits should be fitted to noisy mobile equipment and shrouds provided around stationary equipment where necessary.	Quarry Manager
21.6	Working hours will be limited to 7.00am to 6.00pm, Monday to Saturday and at no time on Sundays and public holidays. A maximum of ten laden vehicles will be permitted to enter and leave the site between the hours of 6.00am and 7.00am, Monday to Saturday, excluding Sundays and public holidays.	Quarry Manager
2. 1 .7	Arrange for all plant and equipment to be inspected regularly to ensure that it is well maintained to minimise noise emissions.	Quarry Manager

A2.3 Management controls

	PHASE	
2.1.8	Conduct compliance monitoring of noise levels at the defined locations and keep records of measurements. Noise monitoring carried out by South East Environmental	Environmental Manager

2. **1 .8 monifor'h04**

Performance indicator Noise from operational activities does not exceed the guideline limits.

Number of complaints received NIl

Monitoring	Long term monitoring of noise levels during site operations at nominated receptors. Monitoring periods should be planned to OCCU during predicted noisy activities and at random. Results will be measured against baseline and OEH criteria and any exceedances noted.
Reporting	Annual reporting of noise levels, exceedances and complaints in the appropriate AEMR. Reports will include measures adopted to ensure that future exceedances/complaints do not OCCUr. Monitoring results will be suitably summarised for posting on the PF Formation website.

4ĐílVOJ report by Koikas Acoustics.

A2.4 Monitoring and reporting

The Environmental Manager will be responsible for conducting and arranging noise monitoring for the assessment of impacts and determination of compliance. The Environmental Manager will compile the results and findings of the monitoring together with all complaints, responses and remedial action in relation to noise and vibration emissions from the site for inclusion in the AEMR.

A2.3 Management controls

PHASE

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OPERA TIONAL

Strategy 3.1: Ensure that the site operations are undertaken in a manner that minimises and controls dust and vehicle emissions.

Actions		Responsibility
3.1.1	Conduct ambient air quality monitoring at identified sites	Environmental Manager
3.1 .2	Fit dust suppression equipment to all processing plant on site as required. This is to be regularly inspected and maintained in good working order at all times.	Quarry Manager/ Environmental Manager
3.1 .3	Define haul road areas to prevent unnecessary vehicle movement into others	Quarry Manager
3.1.4	Keep all unsealed trafficable areas and working areas dust emissions by spraying regularly with a water cart, water sprays or sprinklers. Frequency of spraying to be determined based on weather conditions, soil erodibility and the observation of any visible dust.	Quarry Manager/ Environmental Manager
3.1 .5	Apply speed controls to all unsealed areas (maximum 20 km/h) and signpost accordingly.	Quarry Manager
3.1 .6	Vegetate all semi-permanent stockpiles with suitable groundcover and water where necessary until the vegetation is well established.	Quarry Manager
	due to high winds that cannot be controlled by watering or other means. Work will not resume until the wind velocity decreases and any dust generation can be controlled by normal means.	

A2.3 Management controls

		PHASE	
3.1 .8	Ensure that all loaded trucks leaving the site on Lot 1 98 DP595538 have their payloads fully covered by a suitable material to prevent spillage.	Quarry Manager	3.1 .7 Cease
3.19	Construct dust screens such as earth bunds and vegetated barriers.	Quarry Manager	
1.10	A mechanical road sweeping unit and water cart will be maintained for use as required to keep all roads including the intersection of the haul road and Wisemans Ferry	Quarry Manager	work on any
extraction activity producing dustQuarry Manager			
	Road free from deposited material.		
1.11	No fires to be permitted on-site.	Quarry Manager	

Performance indicator	Ambient air quality data compiled.
	Dust generated from site activities to comply at all times with EPA specified air quality criteria. Results average below 4g/m²
Monitoring	Dust monitoring at identified locations. Compilation of a complaints register. No complaints received
Reporting	Annual reporting in the AEMR. Monitoring results will be suitably summarised for posting on the PF Formation website.

times with EPA specified air quality criteri

Strategy 3.2: Minimise and control vehicle and plant exhaust emissions.

Actions	Responsibility

A2.3 Management controls

	PHASE	
3.2.	Inspect all exhausts from vehicles and plant/equipment to ensure that they are maintained at an acceptable level.	Quarry Manager
3.2.2	Regularly service all vehicles to ensure that exhaust emissions comply with the regulations. Maintain appropriate service records.	Quarry Manager
3.2.3	Identify any opportunities to minimise machinery use and ensure that all equipment used on the site is energy efficient.	Quarry Manager
Performance Indicator	Vehicle and plant emissions comply with the regulations.	
Monitoring	Regular vehicle and plant inspections.	
Reporting	Annual reporting of inspection results in the AEMR.	

OPERA TIONAL

Strategy 4.1: Minimise the impact of operational traffic on the local community.

Actions		Responsibility
4.1 . I	Ensure that the number of laden vehicle movements does not exceed a combined total of two hundred per day via the intersection of the haulage road and Ferry Road. This is the total of laden vehicle movements allowed for PF Formation's combined in The Hills Shire. ewce•t/ extractive industry operations	Quarry Manager/ Environmental Manager

movements did not exceed 200 per day

Quarry Manager/ Environmental Manager

A2.3 Management controls

	PHASE	
4.1 .2	Undertake operations involving the transportation of material on the site only between 6.00am and 6.00pm, Monday to Saturday.	
1.3	Allow a maximum of ten laden vehicles to enter and leave the site between 6.00am and 7.00am, Monday to Saturday only. Ensure that vehicles do not arrive at the site prior to 6.45am on any day.	Quarry Manager/ Environmental Manager
4.1.4	Ensure that all vehicle loads leaving the site are suitably covered.	Quarry Manager/ Environmental Manager

7.00am, Monday to Saturday only. Ensure do not arrive at the
Complied with

Performance Indicator	Minimum of complaints from the community.
Monitoring	Number and type of complaints received. 1 unrelated traffic complaint received
	Weighbridge records of arrival and departure times.
Reporting	Annual report on complaints received.

A4.4 Monitoring and reporting

The Environmental Manager will be responsible for the monitoring of complaints on traffic issues from the community. Annual reports will be compiled on community complaints and reported in the AEMR.

A5.3 Management controls

OPERA TIONAL PHASE

Strategy 5.1: Provide for treatment of stormwater runoff from extraction areas, stockpiles and access roads.

Actions		Responsibility
5.1 .]	Construct temporary erosion and sedimentation control structures such as detention basins and catch drains as appropriate to collect runoff from cleared land in luding Mana er extraction areas and access roads. 'e	Quarry Manager/ Environmental
5.1 .2	Erect silt traps and erosion control fencing as appropriate extraction area boundaries and drainage lines.	Quarry Manager/ along Environmenta

Performance indicator	Stormwater control measures are in place prior to commencement of extraction in the particular phase of development and are effective in reducing sedimentation to acceptable levels.
Monitoring	Review effectiveness of the stormwater basins and treatment methods during and following major rainfall events.

Reporting	Report on effectiveness of control measures once sedimentation works completed and then on an annual basis.	Manager

5.1 .3 Design sediment basins with a minimum storage capacity Quarry Manager of 400 rn^3 per hectare of catchment. Spillway capacity and stability will be designed as follows:

- life of less than 5 years, adopt the 20 year tc event • life between 5 and 1 0 years, adopt thê 50 year tc
- life greater than 10 years. adopt the 1 00 year tc

5.1 .4	Undertake regular inspections to assess stormwater control measures and conduct routine inspections to ensure that compliance with best practice guidelines and relevant legislation is achieved.	Quarry Manager/ Environmental Manager

Strategy 5.2: Plan site operations to minimise opportunities for soil erosion and sedimentation.

Actions		Responsibility
5.2. I	Select locations for topsoil and material stockpiles on level ground and away from drainage lines. Install diversion drains up slope and sediment filter fences as appropriate	Quarry Manager/ En vironmen tal Manager
5.2.2	Provide training to operational personnel on the importance of erosion control measures and inform drivers of the damage that can be caused by to the environment by heavy vehicles	Quarry Manager/ Environmental Manager

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Performance indicator	Soil erosion control measures are incorporated in the operational activities on the site and are effective in reducing soil erosion.
Monitoring	Monitor suspended solid concentrations in stormwater runoff from the undisturbed parts of the site.
Reporting	Report on the effectiveness of soil erosion control measures prior to extraction.

Strategy 5.3: Ensure that suspended solid levels in stormwater discharging from the site meets the guidelines for the protection of aquatic ecosystems (ANZECC 2000) ()Uuf—

Actions	Responsibility
5.3. Keep areas of exposed land to a minimum compatible with operational requirements.	Quarry Manager
5.3.2 Where practicable, provide silt fences to minimise erosion and sedimentation from exposed areas.	Quarry Manager/ Environment Manager
5.3.3 Stabilise exposed areas that are not in use with an appropriate cover crop and water until well established.	Quarry Manager/ Environmenta Manager
5.3.4 Construct sediment retention basins with a capacity of at least 300m^3 per hectare of catchment, which will necessitate regular cleaning out, and a minimum freeboard of one metre.	Quarry Manager

Performance indicator	Acceptable control of sedimentation and erosion is achieved so that suspended solids levels in any stormwater leaving the site does not exceed ANZECC guidelines or other regulatory requirements.
Monitoring	Monitor suspended solids levels in stormwater following rainfall events. Compare results with other appropriate locations.
Reporting	Report on suspended solid levels and performance of erosion and sedimentation control measures for inclusion in the relevant AEMR.

5.3.5	Monitor erosion and sediment controls regularly and immediately following a rainfall event. Clear sediment when the traps have collected 60% of the capacity of the basin or where sediment build-up is less than 300mm below the spillway crest. Remove sediment to a location where further pollution to downslope lands and wateways will not OCCUr.	Quarry Manager/ Environmental Manager
5.3.6	Undertake maintenance of erosion and sediment controls when any deterioration is identified or when replacement is necessary.	Quarry Manager/ Environmental Manager
5.37	Reuse stored stormwater for dust control and the watering of site vegetation.	Quarry Manager/ Environmental Manager
5.3.8	Seed material stockpiles where these are to remain unused for a period in excess of four weeks. Water the area when required until the vegetation is well established.	Quarry Manager/ Environmental Manager
5.39	Control vehicle movement on the site by the identification of the haul road and current working areas.	Quarry Manager

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A5.4 Monitoring and reporting

The Environmental Manager will be responsible for the monitoring of the effectiveness of the sediment and soil erosion control measures installed on-site, suspended solids levels in stormwater runoff and any off-site discharges. An annual report will be included in the AEMR.

A6.3 Management controls OPERATIONAL

PHASE

Strategy 6.1: Plan site operations to minimise potential impacts on groundwater

Actions	Responsibility
6. 1 .] Restrict maximum depth of extraction to 2 metres above the wet weather high groundwater level as determined following at least 12 months site specific groundwater monitoring data.	Quarry Manager
6. 1 .2 Ensure that the groundwater is not breached or contaminated. In the event that either should OCCUr, operations are to cease and the Department of Water and the Department of Planning consulted to determine the basis on which extraction may recommence.	Quarry Manager
6. 1 .3 The sediment retention basins are to accommodate the 100-year tc event with the minimum basin capacities as follows: • Southern catchment (Basin l) 1 9.400 r-n^3 • Northern catchment (Basin 2) 7,800 ,-n^3 The volume of these basins can be varied depending on the extent of the area exposed for extraction within each catchment.	Quarry Manager
6. 1.4Arrange for regular inspection of the capacity and stability of all retention basins and report on their effectiveness.	Quarry Manager/ Environmental Manager
6. 1 .5 Install a minimum of two groundwater monitoring bores. One should be located within or near the extraction area and another at some location within the site beyond the direct extraction influence. The location of these bores is to meet the requirements of the Department of Water and the Department of Pla ni9g.	Quarry Manager/ Environmental

Existing groundwater bores utilised

Performance indicator	Maintenance of groundwater quality. Existing water levels and groundwater quality will be determined from data derived from the bores on the site. Groundwater quality testing carried out
Monitoring	Regular monitoring of water levels and water quality data from the on-site bores. Groundwater bores are dipped monthly by South East Environmental

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Reporting Annual reporting of groundwater quality issues and assessment of impacts of site operations for inclusion in the AEMR. Earth 2 Water Groundwater Report included in AEMR

the AEMR.

A6.4 Monitoring and reporting

The Environmental Manager will be responsible for the monitoring of the effectiveness of the water management measures installed on-site. Annual reports will be prepared by consultants using information gathered throughout the reporting period by the Environmental manager. This report will be included in the AEMR.

A7.3 Management controls

OPERA TIONAL PHASE

Strategy 7.1: Implement measures to ensure the protection of native vegetation, including threatened species.

Actions		Responsibility
7.1.1	Clearly identify and mark out all areas which are not to be disturbed. Starpickets and signs in place	Quarry Manager/ Environmental Manager
7.1 .2	Assess areas where trees are to be removed to determine the commercial value of any which are too large to mulch. Any with commercial value are to be marked and arrangements made for removal.	Environmental Manager -Z
7.1 .3	Prepare an assessment of the species mix of the Sydney Hinterland Transition Woodland and arrange for purchase or collection of seeds. Mulch vegetation removed from the area and stockpile for later I-JSe. This will initially be used on the peripheral bunds followed by other areas of the site where the regrowth of the species mix js to be undertaken. Protect young plants from predation b feral pests. Not required this reporting (20M b.	Manager or
7.1 .5	Restrict access to bushland to minimise the potential for damage. Suitably identify and mark out these areas to ensure that this prohibition is made clear.	Quarry Manager/ Environmental Manager
7.1 .6	Separate topsoil for use in rehabilitation works.	Quarry Manager/ Environmental Manager
7.1 .7	Incorporate flora and fauna issues (to the extent it is relevant) in the education program so that the site operatives are aware of the requirements of this EMP.	Environmenta Manager
7.1 .8	Once each extraction phase is complete, initiate the rehabilitation and revegetation program as set out in the Environmental Landscape management Plan.	Quarry Manager/ Environmental Manager

Performance indicator	Al areas of significant flora and fauna habitat are protected prior to the start of extraction.

Monitoring	Ensure that the above are implemented prior to the commencement of extraction activities in the area. Monitor condition of flora and fauna habitats on a regular basis.

Reporting	A report with appropriate maps identifying the areas under rehabilitation and extraction activity is to be prepared. Prepare an annual report on the status of the flora of the site for inclusion in the AEMR.

the site for inclusion in the AEMR.

Strategy 7.2: Undertake the rehabilitation of the site to achieve an agreed and acceptable landform with appropriate planting.

Actions	Responsibility

Management controls

PHASE

7.2. I	Mulch all suitable plant material for reuse on the site as a seed and planting medium. Store all topsoil in appropriately marked low stockpiles for reuse in locations as close as possible to their source. Care should be taken to ensure that this does not become contaminated with the seeds of exotic species and weeds.	Environmental Manager
7.2.2	Rehabilitate the site in stages leaving areas exposed for as short a time as possible. This should be undertaken in conformity with the approved Rehabilitation Plan with maximum final batter grades of 4(H):l (V) on north and west facing slopes and 3(H):l (V) on those facing south and east. Final slopes should be as gentle as possible depending on the availability of fill material.	Quarry Manager/ Environmental Manager
7.2.3	Sow all stockpiles and exposed areas where no activity is to take place tor more than four weeks with an appropriate vegetation cover.	Quarry Manager/ Environmental Manager
7.2.4	Undertake revegetation of the site on the following basis: • re-establish the Sydney Hinterland Transition Woodland using seed and mulch collected from the area • rehabilitate other areas to native species with a light sowing of cereal and allowing natural regeneration • lime, fertilise and sow areas where improved grass cover is required - ,4Œ/ • suitably turf surfaces expected to experience high surface flows leaving the site... Not required	Environmental Manager
7.2.5	Establish a maintenance program aimed at promoting and protecting the growth of the rehabilitated areas. Rehabilitated areas maintained by South East Environmental	Quarry Manager/ Environmental Manager

Performance Indicator Completion of site rehabilitation in conformity with the approved Landscape Management Plan.

Management controls

	PHASE
Monitoring	Regular site inspections to ensure that the following is achieved: • rate of rehabilitation is in conformity with the staging program • conservation zones and rehabilitated areas are being appropriately maintained • vegetative covers are being established • site works such as bunding and the establishment of re-vegetated areas are progressing in accordance with the Landscape Management Plan • all sensitive flora and fauna habitat is being adequately protected from damage
Reporting	Reports of site inspections and annual reviews in the AEMR.

A7.4 Monitoring and reporting

The Environmental Manager will be responsible for monitoring the effectiveness of the measures included for the protection of native vegetation on the site and the progress of site rehabilitation. Annual reports will be prepared by the Environmental Manager for inclusion in the AEMR.

A8.3

OPERATIONAL

Strategy 8.1: Consider community feedback in determining operating procedures to minimise negative impacts.

Actions	Responsibility
8. 1 . 1 Maintain an open door policy. Widely publish contact number and provide an early response to all Environmental queries, comments and requests for information.	Quarry Manager/ Manager
8. 1 .2 Provide access to atl relevant environmental documentation and monitoring results on the PF Formation web site.	Environmental Manager

Management controls

PHASE

8.1 .3 Organise and manage bi-annual meetings of the Environmenta Community Consultative Committee to discuss iSSUeS in Manager relation to environmental management of sand extraction on the site

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8.1 .4 Establish a complaints register incorporating date and Quarry Manager/ time, type of communication, contact details of the Environmental complainant, nature of the complaint and response Manager taken.

Performance indicator	Minimal one complaints vnNlakŽfr m traffic complaint the community.
Monitoring	Number and type of responses and complaints raised by the community and improved performance.
Reporting	Annual reporting of community responses and complaints together with an assessment of any changes put in place to minimise any future difficulties for inclusion in the AEMR. C meeting minutes on PF Formation website

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A8.4 Monitoring and repoáing

The Environmental Manager will be responsible for the monitoring of the effectiveness of the measures included in response to community concerns. Annual reports will be prepared by the Environmental Manager for the AEMR.

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

A9.3 Management controls

OPERA TIONAL PHASE

Strategy 9.1: Protect items of heritage value during site operations.

Actions	Responsibility
9.1 . I Cease all work if an archaeological or heritage item is identified during extraction operations and consult the Environmental National Parks and Wildlife Service, the Deerubbin Manager Aboriginal Land Council or the Heritage Office to determine any appropriate course of action prior to no recommencement of the work. Obtain any required permits and submit together with supporting information. Notify the Hilts Shire Council to ensure compliance with the conditions of approval.	Quarry Manager/ Environmental
9. 1 .2 Undertake additional survey work required for submittal of Environmental application to destroy artefact scatters located in the later stages of the development. Comply with the reasonable requirements of the National Parks and Wildlife Service, the Deerubbin Aboriginal Land Council and the Heritage Office arising out of any additional studies and notify the Hills Shire Council to ensure compliance with the conditions of the approval.	Manager

Performance Indicator	Any item of heritage significance is protected during site operations.
Monitoring	The protection of any heritage items identified during site operations is to be monitored.
Reporting	Any heritage item identified during site operations is to be documented.

A9.4 Monitoring and reporting

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

The Environmental Manager will be responsible for the reporting of any heritage items identified during the course of site activities. Annual reports will be prepared by the Environmental Manager.

10.1: Ensure that impacts on visual amenity are minimised during site activities and following completion.

Actions	Responsibility
.1.1 Clearly mark all vegetation to be retained.	Quarry Manager/ Environmental Manager
1 0. 1 .2 Construct peripheral bunding within the established setbacks. These should be a minimum of three metres high with slopes ranging from 3(H):l (V) to 6(H):l (V) depending on the location using overburden stripped from the site	Quarry Manager/ Environmental Manager
.1.3 Undertake screen planting works to the peripheral areas of the site using mulch to allow for native plant regeneration. Reinforce this species mix using appropriate plantings at specified intervals.	Quarry Manager/ Environmental Manager
.1.4 Undertake a tree planting program within areas defined in the Landscape Management Plan to establish a dense plantation using an appropriate mix of species reflecting that of the existing community.	Quarry Manager/ Environmental Manager
.1.5 Re-establish the landform of the extraction areas to that shown in the Landscape Management Plan.	Quarry Manager
1 0. 1 .6 Complete the rehabilitation of the site in conformity with the proposals set out in the Landscape Management	Quarry Manager/ Environmental Manager

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

.1.7	Remove all temporary fencing when no longer required.	Quarry Manager
.1.8	Re-establish vegetation in areas suitable for agricultural/horticultural uses.	Quarry Manager
.1.9	Remove all site infrastructure including the slurry plant and its associated pipelines. Restore those areas affected by the plant and rehabilitate.	Quarry Manager
.1.10	Remove all waste materials and dispose of in an appropriate manner.	Quarry Manager
.1.11	Review Quarry Closure Plan and prepare proposals for future use of the area.	Quarry Manager

Performance Indicator	No complaints received regarding visual amenity during site operations and following completion. Completion of the development in conformity with the requirements of the Rehabilitation Plan.
Monitoring	Ensure that the above actions are undertaken.
Reporting	Complaints from the community regarding vi ual amenity. /t./o complaints. Compliance with the requirements of the Landscape Management Plan.

AIO.4 Monitoring and reporting

The Quarry Manager and the Environmental Manager will be responsible for ensuring that the various environmental protection measures are installed and maintained in good condition. Annual reports will be prepared by the Quarry Manager on progress with the

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

completion of their installation. The Environmental Manager is responsible for monitoring and reporting complaints regarding aesthetics and amenity received from the local community.

11.1: Appropriate management and disposal of wastes generated during site operations.

Actions		Responsibility
11.1.1	Clearly delineate waste handling areas.	Quarry Manager
.1.2	Define specific areas for the collection of materials for reuse and recycling and clearly label.	Quarry Manager
.1.4	Store all topsoil in stockpiles for later use in site	Environmenta

required.

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Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

tal	rehabilitation.	Manager
.1.5	Provide bins or skips for the collection and storage of recyclable material and waste. General construction waste will be stored in a skip located at the workshop on Lot 1 98 DP595538. Waste food will be removed on a daily basis and stored in a vermin proof bin for collection by waste contractor. Paper waste generated from site offices, plastics and glass are to be collected separately for recycling.	Quarry Manager
.1.6	Separate hazardous wastes (including empty drums, rags, soil contaminated with oil) from non-hazardous wastes and manage in accordance with the relevant legislation.	Quarry Manager
.1.7	Temporarily store liquid wastes (chemicals, oils and greases) in an appropriately bunded area and dispose of via a licensed contractor. Direct washdown water to an appropriate settlement basin if quality is acceptable. Otherwise, store and dispose as a liquid waste.	Quarry Manager
.1.8	Retain copies of current licences of all waste removal contractors on site.	Quarry Manager
.1.9	Keep all documentation relating to waste removal and disposal on file at the site. This documentation includes dockets for the removal and disposal of waste at a licensed facility.	Quarry Manager
.1.10	Progressively separate and stockpile waste material in	Quarry Manager
.1.3	Process cleared vegetation on site for use a mulch within Environment the landscape program. /1&/	Manager

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

designated areas for collection. Adequately secure waste disposal areas to prevent access by wildlife.

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1 1 . 1 . 1 1 Review all waste licences and monitor terms and Environmental conditions for compliance. Manager

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.1.12 Recycle or dispose of any materials and waste remaining Environmental on the site following completion of extraction operations. Manager All should be disposed of in an appropriate manner.

Performance Indicator	Effective use of waste recycling area and maximisation of material reuse. Appropriate removal of all waste from the site on completion.
Monitoring	Regular review of recycling opportunities, quantities and cost savings.
Reporting	Annual report on waste management, reuse and recycling on the site.

Al 1.4 Monitoring and reporting

The Quarry Manager will be responsible for conducting regular waste audits, monitoring the currency of any waste disposal contracts and documentation relating to transport and disposal of wastes. The Quarry Manager will also monitor the quantities and costs/savings associated with the effective management of waste materials.

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

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12.1: Ensure that procedures and controls are implemented to prevent, or if necessary, control any potential environmental emergency

Actions		Responsibility
	Ensure that all personnel on site during operations have been trained in appropriate procedures including site induction, materials handling and response procedures.	
.1.2	Develop and put in place emergency response procedures. Appoint appropriate individuals as emergency services liaison officers.	Quarry Manager
.1.3	Establish an emergency response table listing contact details of all relevant parties required in an environmental emergency •	Quarry Manager
.1.4	Establish a Register of Environmentally Hazardous Materials to be stored and used on site.	Quarry Manager
.1.5	Ensure that appropriate safety and spill response equipment has been made available.	Quarry Manager
1 2.1 .6	Clearly label all materials to be used and stored on site.	Quarry Manager
	annually.	.1.7
.1.8	Ensure that appropriate safety and response equipment is available at all times.	Quarry Manager
Review and update emergency response procedures bi-		Quarry Manager

Performance indicator	Emergency response procedures, controls and training adequate for potential emergencies.
Monitoring	Regular monitoring of response procedures and equipment.

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

Reporting	Annual report on incidents.

A12.4 Monitoring and reporting

The Quarry Manager will be responsible for maintaining the currency of the emergency procedures and reporting on incidents.

Al 3.3 Management controls

OPERA TIONAL PHASE

Strategy 13.1: Minimise the risks associated with the storage and handling of hazardous materials.

Actions	Responsibility
require licensing	
.1.2 Establish a Register of Hazardous Materials setting out	Quarry Manager/
13.1 .] Obtain a licence to keep dangerous goods from WorkCover NSW for all materials stored on site which details of quantities, storage and specific handling requirements for all relevant materials stored on sit	Quarry Manager Environmental Manager
1 3. 1 .3 Obtain Material Safety Data Sheets for all hazardous materials	Quarry Manager/ Environmental Manager
.1.4 Provide appropriate storage and secondary containment facilities for all hazardous materials stored on site. Afl bunded areas must be designed to contain at least 1 of the volume of materials permanently stored within the area. Temporary facilities should have drip	Quarry Manager
.1.5 Appoint a Safety Officer for the development.	Quarry Manager

Safety data sheets kept in site office. stored on site.

Al 0.3 Management controls

OPERA TIONAL PHASE

Strategy

.1.6	Locate all flammable material storage areas at least ten possible ignition sources.	Quarry Manager/ W) metres from Environmental Manager
1 4. 1 .7	Clearly label the contents of all above ground storage areas.	Quarry Manager/ Environmental Manager
.1.8	Secure all hazardous and dangerous goods storage areas and display appropriate signage. Segregate atl incompatible material.	Quarry Manager/ Environmental Manager
.1.9	Train all personnel in the handling and safety procedures required for the hazardous materials stored and used on site during Staff Safety Meetings.	Quarry Manager/ Environmental Manager

Performance Indicator	Storage and handling of hazardous materials complies with legislative requirements and demonstrates due diligence.

Monitoring	Regular review of compliance with legislative requirements for the storage and handling of hazardous materials.
Reporting	AE-MR.

Strategy 13.2: Ensure that procedures are implemented and facilities made available for clean up in the event of a pollution incident.

Actions		Responsibility
	Emergency Response Plan in place (see Chapter 12).	Quarry Manager
	Provide a mobile spill control kit containing appropriate absorbent materials, neutralising chemicals and other spilt containment equipment.	Quarry Manager
	Provide personal protective equipment and instruct personnel on its use.	Quarry Manager
	Clean up any spills beyond the bunded area immediately and dispose of the contaminated material in an appropriate manner.	Quarry Manager
1 3.2.4	Contact the relevant authorities in the event of a leak or spill. Follow any instructions provided. Remediate any contamination to the satisfaction of the regulatory authorities.	Quarry Manager
13.2.5	Collect any spills or hazardous wastes that cannot be recycled and arrange for disposal by a licensed waste contractor. Maintain all records of waste removaf on	Quarry Manager
13.26	site.	
Performance Indicator	Al pollution incidents contained and cleaned up without impact on the environment or injury to personnel. All incidents recorded.	
Monitoring	Stormwater and soil contamination monitoring undertaken following any spill and subsequent clean up.	
Reporting	Report on all pollution events and the results of any clean up.	

ATTACHMENT 5

LOCATION WEATHER CHART

DATE	WS LOW	WS HIGH	WD 9AM	WD 4PM	R-FALL	temp Min	temp Max
1/07/2018	0.016	1.676	NE	W	0	2.8	15.8
2/07/2018	0	1.758	SSW	S	1	8.3	13.3
3/07/2018	0	1.764	N	SW	0.2	6.4	16.7
4/07/2018	0.074	2.69	NNW	NNW	0.2	6.8	17.8
5/07/2018	0.022	3.333	N	NW	0.2	9.2	22.8
6/07/2018	0.209	5.333	NNW	W	0	9.9	22.8
7/07/2018	0.117	4.2	NW	W	0	6.2	15.8
8/07/2018	0.094	3.463	NW	W	0	6.3	16.3
9/07/2018	0.039	3.251	NNE	S	0	5.2	16.2
10/07/2018	0.028	2.561	N	NNW	0	2.8	16.2
11/07/2018	0	1.585	NNW	NNE	0	3.4	16.4
12/07/2018	0.025	2.661	N	WSW	0.2	3.5	16.9
13/07/2018	0.058	2.492	N	S	0	2.8	16
14/07/2018	0.074	2.153		NNE	0	1.8	15.4
15/07/2018	0.059	2.269	N	NNW	0	0.2	17.1
16/07/2018	0.075	2.451	NNW	WNW	0	3.2	16.4
17/07/2018	0.398	4.634	NNW	NW	0	8.3	20.5
18/07/2018	0.14	3.052	SW	WNW	0	8.4	20.8
19/07/2018	0.138	3.444	NNW	NW	0	6.6	20.9
20/07/2018	0.466	4.418	N	W	0	9.1	18.5
21/07/2018	0.15	2.185	NNE	SW	0	4.2	15.8
22/07/2018	0.091	2.443	NNW	NW	0	1.6	15.7
23/07/2018	0.046	3.464	NNW	NW	0	2	18
24/07/2018	0.174	3.403	NNW	NW	0	11.8	22.6
25/07/2018	0.104	3.293	NW	WSW	0	8.6	21.3
26/07/2018	0.086	2.038	N	NNW	0	6.7	19.4
27/07/2018	0.07	1.928	N	SW	0	4.2	18.8
28/07/2018	0.072	2.131	N	N	0	6.9	20.2
29/07/2018	0.275	4.81	NNW	NW	1	11.5	22.6
30/07/2018	0.041	2.424	NNW	W	0	7.9	18.4
31/07/2018	0.166	3.117	NW	WNW	0	6.2	20
Ave or total	0.106677	2.916903			2.8	5.896774	18.23871

DATE	WS LOW	WS HIGH	WD 9AM	WD 4PM	R-FALL	temp Min	temp Max
1/08/2018	0.152	2.559	NNW	W	0	7.6	20
2/08/2018	0.008	2.351	N	SSE	0	4.7	17.5
3/08/2018	0	4.01	N	NNW	0	6.3	21.5
4/08/2018	0.078	3.701	NW	NW	0.2	7.1	17.7
5/08/2018	0.129	3.387	N	NNW	0	5.3	20.5
6/08/2018	0.198	4.876	NNW	NW	0.4	9.9	17.2
7/08/2018	0.147	4.294	NNW	WSW	0	8.1	16.2
8/08/2018	0.135	3.312	NNW	WNW	0	6	18.2
9/08/2018	0.008	1.956	NNW	WNW	0	6.4	19.2
10/08/2018	0.002	4.053	N	NNW	0	4.3	22.1
11/08/2018	0.32	5.229	NNW	NNW	0	10.8	23.8
12/08/2018	0.098	3.099	WNW	SW	0	5.2	15.6
13/08/2018	0.024	2.79	NNW	SSW	0	3	18.6
14/08/2018	0.117	2.285	NNW	NNW	0	5.3	21.8
15/08/2018	0.509	4.19	NNW	NW	0	11.5	23.4
16/08/2018	0.087	3.48	W	WSW	0	8.6	21.3
17/08/2018	0.02	2.656	NNW	SW	0	4.1	17
18/08/2018	0.174	5.053	NW	WNW	0	6.5	20.9
19/08/2018	0.233	4.018	W	WSW	0	7.2	15
20/08/2018	0.07	3.856	SW	W	0	4.6	14.8
21/08/2018	0.063	3.402	NW	W	0	4.1	16.5
22/08/2018	0	2.133	N	E	0	5.2	16.8
23/08/2018	0	1.951	NNW	SSE	0	5.5	15.6
24/08/2018	0	1.372	NNW	NE	0	9.1	17.7
25/08/2018	0	1.666	NNW	N	1.6	7.6	14.5
26/08/2018	0.005	1.61	N	N	1.2	8.4	14.7
27/08/2018	0	2.775	NNW	SSE	0.8	7.4	12.7
28/08/2018	0.023	2.242	SSW	WSW	0	4.2	14.2
29/08/2018	0.055	2.634	NNW	SSW	0	0.8	15.8
30/08/2018	0.016	2.007	N	NW	0	0.8	17.6
31/08/2018	0.053	3.394	NNW	NNW	1.2	6.1	15.3
Ave or total	0.087871	3.107774			5.4	6.183871	17.86129

DATE	WS LOW	WS HIGH	WD 9AM	WD 4PM	R-FALL	temp Min	temp Max
1/09/2018	0.202	3.794	NW	NW	0	9.5	19.3
2/09/2018	0.014	2.791	SSW	SSE	0.6	6.4	15.2
3/09/2018	0.011	3.579	S	SSE	4.8	7.3	14
4/09/2018	0.046	1.993	WNW	SSE	3.2	8.8	16.9
5/09/2018	0.002	1.411	SSW	NNE	3.2	7.8	15.7
6/09/2018	0.002	1.891	NNW	NNE	0.2	6.4	20.1
7/09/2018	0.212	3.453	NNW	N	5.8	12.4	19.4
8/09/2018	0	2.202	SSW	SSW	0.6	8.7	12.9
9/09/2018	0.01	3.003	NW	W	0.2	5.1	21.7
10/09/2018	0.083	3.059	SSE	E	0	9.2	21.4
11/09/2018	0.005	3.371	NNW	NNW	0	8	23.8
12/09/2018	0.352	4.041	NNW	NW	0	13.3	28.9
13/09/2018	0.012	1.628	NW	E	0	9.8	22.9
14/09/2018	0.002	3.759	NNW	NNW	0	12.5	27.7
15/09/2018	0.137	6.019	NW	WNW	0	11.3	31
16/09/2018	0.103	3.246	SW	ENE	0	6.2	16.7
17/09/2018	0.006	2.618	NNW	NNW	0	3.5	18.1
18/09/2018	0.263	3.417	NNW	NW	0	8.4	25.1
19/09/2018	0.193	5.762	NNW	NW	0	12.2	26.6
20/09/2018	0.042	3.367	SSW	NE	3.6	6.8	15.9
21/09/2018	0.053	1.761	NNW	NNW	0	4.9	21.3
22/09/2018	0	2.862	NW	N	0	6.2	24.9
23/09/2018	0.012	2.679	SSW	SE	0.2	8.3	22.1
24/09/2018	0.115	3.486	S	SSE	3.6	8.7	13.9
25/09/2018	0.034	1.661	NW	E	0.8	7.9	17.3
26/09/2018	0.04	2.591	SSE	NW	8.6	7.2	14.7
27/09/2018	0.034	2.796	NNW	NNW	0.2	5.2	21.9
28/09/2018	0.331	4.302	NNW	NW	0.2	10.2	29.1
29/09/2018	0.053	3.292	NW	SSE	0.6	8.2	21
30/09/2018	0.011	2.654	S	SSE	0	5.4	19.4
Ave or total	0.079333	3.082933			36.4	8.1933333	20.63

DATE	WS LOW	WS HIGH	WD 9AM	WD 4PM	R-FALL	temp Min	temp Max
1/10/2018	0.037	2.019	NW	NNE	0	6.6	21.8
2/10/2018	0.092	1.517	WSW	SSE	0	8.4	25.3
3/10/2018	0.054	3.04	NNW	WNW	0	10	25.6
4/10/2018	0.003	2.28	WSW	SSE	16.2	13.2	16
5/10/2018	1.017	4.204	SSW	S	62	10.8	13.7
6/10/2018	0.607	3.707	S	SSE	1	10.4	17.7
7/10/2018	0.049	3.348	SSW	WSW	8.8	8.5	16.7
8/10/2018	0.114	3.135	SW	S	0.2	12.5	20.8
9/10/2018	0.013	2.279	NNW	NW	0.2	11.1	25.1
10/10/2018	0.435	3.24	SSE	S	29.8	10.7	17.9
11/10/2018	0.084	3.046	SSE	SSE	6.6	9.8	15.5
12/10/2018	0.086	2.474	S	NE	14.4	10.5	16
13/10/2018	0.271	1.479	SW	SE	5.4	10.2	18.3
14/10/2018	0.03	1.55	NNE	SSE	9.6	12.6	20.3
15/10/2018	0.028	1.865	NNE	NE	3	11.3	20.5
16/10/2018	0.199	1.756	NNW	NNE	0	15.7	23.7
17/10/2018	0.101	3	NNE	NNW	39.4	15.2	23.7
18/10/2018	0.113	2.827	NNW	NNE	0.4	14.9	24.3
19/10/2018	0.168	1.891	NNW	SE	0.2	15.4	31
20/10/2018	0.215	3.263	NNW	NNW	11	16.2	30.1
21/10/2018	0.054	2.229	SSE	SSE	0	14.1	18.6
22/10/2018	0.097	2.251		NE	0	14.2	23.8
23/10/2018	0.008	3.592	NNW	NNW	0	12.7	31.7
24/10/2018	0.058	3.128	S	SSE	0	12.7	21.9
25/10/2018	0.114	2.223	SW	NNE	0	12.5	23.2
26/10/2018	0.039	2.733	SSW	ENE	0.2	11.8	23.4
27/10/2018	0.024	2.765	NW	ESE	0.4	13.2	27.1
28/10/2018	0.072	2.499	SSE	NNE	0.4	12.1	17.8
29/10/2018	0	2.453	N	ENE	0	13.1	21.1
30/10/2018	0	2.843	NW	N	0	10.6	30.5
31/10/2018	0.117	1.696	SSW	SSE	1.6	13.8	30.9
Ave or total	0.138677	2.591355			210.8	12.09032	22.3871

DATE	WS LOW	WS HIGH	WD 9AM	WD 4PM	R-FALL	temp Min	temp Max
1/11/2018	0.013	3.908	NNW	NNW	0	15.2	34
2/11/2018	0.256	5.304	NNW	NW	5	19.2	35.5
3/11/2018	0.501	4.088	NW	SW	0	18.4	34
4/11/2018	0.071	2.511	NNW	NNE	0	15.5	26.9
5/11/2018	0.038	2.287	NNW	N	0.2	14.9	29.5
6/11/2018	0.107	3.234	NNW	WSW	0	20.9	31.8
7/11/2018	0.15	4.12	NW	NNW	7.8	10.9	24.9
8/11/2018	0.056	3.294	SSW	SSE	4.4	9.6	19.6
9/11/2018	0	2.507	NW	E	0	8.4	21.9
10/11/2018	0.02	2.661	SSW	ESE	0	9.6	23.5
11/11/2018	0	1.898	NW	SSE	0	10.3	25.2
12/11/2018	0.011	1.649	SSW	SSE	0	11.3	24.7
13/11/2018	0.068	2.663	NNW	SSE	0	13.6	27.3
14/11/2018	0.084	1.452	NW	N	0.2	15.3	22.1
15/11/2018	0.031	3.545	SE	SSE	8.2	13.7	25.6
16/11/2018	0.065	2.518	S	ENE	0.2	12.9	17.8
17/11/2018	0.021	2.749	S	SSE	0	12.4	21.3
18/11/2018	0.063	2.183	NW	SE	2	11.3	20.5
19/11/2018	0.017	1.694	SSW	SE	0	9.9	23.1
20/11/2018	0.063	3.078		SSE	1.2	13	28.1
21/11/2018	1.072	3.71	NW	NNW	0.6	19	26
22/11/2018	0.317	5.907	NW	NW	0.6	15.4	23.1
23/11/2018	1.404	5.053	NW	W	0	13.4	21.6
24/11/2018	0.141	3.659	WSW	WSW	0	13.2	24.3
25/11/2018	0.03	2.788	NW	S	0	10.9	24.2
26/11/2018	0.068	3.85	SSW	SSE	0	11.2	24.3
27/11/2018	0.008	1.883	NNW	SSE	3	13.8	25.4
28/11/2018	0.283	3.648	SSE	SSE	46	14.5	18.1
29/11/2018	0.036	4.079	SSW	SSE	1.2	13.1	21.6
30/11/2018	0.089	2.028	SW	NW	0	11.6	26
Ave or total	0.169433	3.1316			80.6	13.41333	25.06333

Date	Min Temp	Av Temp	Max Temp	RAIN mm	Min WS	Av WS	Max WS
1/12/2018	14.1	20.7	30.3	0	0	4.7	20.8
2/12/2018	16.9	23.7	33.4	0	0.4	6.8	37.4
3/12/2018	14.8	21.9	29.4	0	0.2	3.6	20
4/12/2018	15.5	20	24.7	0	0	6.2	23.2
5/12/2018	15.3	17.4	20.5	0	0.4	5.1	18.7
6/12/2018	14.8	19.4	24.7	0	0.1	5.2	25.7
7/12/2018	14.3	20.3	27.1	0	0.1	5.1	24.5
8/12/2018	15	21.8	30.6	0	0.2	4.7	22.2
9/12/2018	16.3	23	31.3	0	0.2	4.7	19.9
10/12/2018	18.2	22.3	27.9	0.2	0.2	3.9	17.3
11/12/2018	17.3	19.1	22.2	0.2	0.1	3.3	17.6
12/12/2018	16.3	18.6	21	0.2	0.1	3.2	13.1
13/12/2018	18.1	21.6	28	3.2	0.1	4.3	16.7
14/12/2018	18.2	19.7	21.8	3.6	0	2.3	17.7
15/12/2018	19.6	22.6	30.8	0	0.1	3.8	17.6
16/12/2018	18.7	24.3	32	0	0	5.7	23
17/12/2018	20.2	25.2	31.4	0	0.1	5.2	29.7
18/12/2018	20.2	22.3	27.8	0	0.1	3.4	9.8
19/12/2018	18.4	20	22.1	4.4	0.4	3.3	31.9
20/12/2018	17.5	24	36	0	0.4	4.6	17.6
21/12/2018							
22/12/2018	14.7	17.6	21.2	0	0.1	4.4	16.5
23/12/2018	13.4	17.4	23.1	0.2	0.1	4.9	17.4
24/12/2018	13.1	19.3	26.7	0	0.1	4.3	20.2
25/12/2018	15.5	23.7	33.2	0	0.1	4.7	19.4
26/12/2018	18	25.4	33.3	0	0.1	4.4	18.2
27/12/2018	18.5	26.8	37.1	0	0.4	4.8	18.7
28/12/2018	20.6	29	38.9	0	0.3	5.6	19.8
29/12/2018	18.8	27.7	38.7	0	0.5	5.2	22.9
30/12/2018	19.1	27	37.7	0	0	4	28.4
31/12/2018	19.9	25.7	35.3	1	0.2	3.5	12
Monthly	13.1	22.3	38.9	13	0	4.5	37.4

Date	Min Temp	Av Temp	Max Temp	RAIN mm	Min WS	Av WS	Max WS
1/01/2019	21.7	27.3	33.6	0	0.1	5.5	25.9
2/01/2019	19.1	25.1	33.6	0	0	4.2	29.9
3/01/2019	20	23.5	30.9	0	0.1	4.9	21.5
4/01/2019	19.2	25.8	34.6	0	0	4.2	21.4
5/01/2019	18.4	27.6	39.7	6	0.4	6.4	29.4
6/01/2019	16.3	17.5	18.7	0.8	0	3.6	11.6
7/01/2019	16.2	18.7	21.5	0.2	0.1	3.2	10.4
8/01/2019	19.6	23.1	29.9	1.8	0	3.8	17.4
9/01/2019	18.8	23.4	32.4	1.2	0.2	4.9	24.9
10/01/2019	19.1	20.4	23.6	0.2	0.2	2.5	8.2
11/01/2019	18.9	21.9	28.9	1.8	0	3.7	18
12/01/2019	19.3	25.9	35.9	0	0.1	4.1	17.9
13/01/2019	20.3	23	27	0	0.1	4.2	16.8
14/01/2019	19.1	23.8	31	0	0	4.2	17.5
15/01/2019	19.9	27.2	37	0	0.1	4.9	21.7
16/01/2019	21.1	27.5	37.4	0	0.3	4.2	16.6
17/01/2019	21	27.3	38.8	0	0.3	5.3	21.9
18/01/2019	21.3	28.1	39.2	0	0.4	4.9	16.4
19/01/2019	19.3	23.8	29.7	0	0.1	2.8	10.6
20/01/2019	18.5	20.4	22.5	0	0.1	3.4	12.7
21/01/2019	19.7	23	27	1	0.4	3.7	16.7
22/01/2019	21.3	25.7	33.1	0	0.2	3.8	16.5
23/01/2019	21.5	25.2	33.9	0.2	0.1	4	21.7
24/01/2019	20.8	22.8	27.4	0	0.2	4.2	12.6
25/01/2019	21.3	26.5	35.2	0	0.3	4.5	16.3
26/01/2019	22.9	29.4	40.7	0	0.2	5.4	19.5
27/01/2019	21.2	26.1	38.5	2.8	0.1	4.5	26.8
28/01/2019	21.2	23.7	28.5	0	0	4.4	24.8
29/01/2019	20.9	26.3	34	0	0.3	5	22.4
30/01/2019	21.4	26.5	32.6	0	0	3.4	11.6
31/01/2019	19.5	27.8	37.4	0	1.1	6	26
Monthly	16.2	24.7	40.7	16	0	4.3	29.9

Date	Min Temp	Av Temp	Max Temp	RAIN mm	Min WS	Av WS	Max WS
1/02/2019	16.4	17.5	19.9	0	0.3	5.3	12.8
2/02/2019	17.2	20.7	23.4	0	0	4.2	20.7
3/02/2019	19.2	23.9	30.6	0	0	4.4	18.8
4/02/2019	19.4	25.7	34.1	0	0	3.2	12.9
5/02/2019	22	24.3	28.4	0	0.2	4.8	18.8
6/02/2019	20.1	24	28.8	0	0.1	5.8	24.7
7/02/2019	19.1	24.3	30.1	0	0.2	5.1	22.9
8/02/2019	19.3	23.9	32.5	2.6	0.3	3.7	21.2
9/02/2019	19.2	24.5	30.9	0	0.3	5.6	24.6
10/02/2019	15.4	19.8	26.3	0	0	4.2	24.6
11/02/2019	14.2	22.2	33.3	0	0.1	3.9	15.6
12/02/2019	18.7	27.5	35	0	0.2	6.1	27.2
13/02/2019	18.1	21.6	29.2	0	0.4	5	21.8
14/02/2019	15.6	19.4	24.5	0	0.1	4.2	15.7
15/02/2019	14.3	20	25.8	0	0.1	4.5	21.4
16/02/2019	15.9	20.9	27.1	0	0	3.6	19.1
17/02/2019	17.7	23.7	32.3	0	0.1	4.3	24.7
18/02/2019	17.8	26.1	36.4	0	0.2	4.9	23.9
19/02/2019	18.2	24.4	33.8	0	0.2	4.7	22.8
20/02/2019	17.1	18.6	21.5	0	0.1	4.1	13.5
21/02/2019	18.2	20.1	23.2	0.8	0.2	3	9.4
22/02/2019	16.5	18.3	22.2	1.4	0.6	5.2	17.7
23/02/2019	14.8	17.8	21.4	0.8	0.1	4.6	16.3
24/02/2019	15.4	19	24.2	0	0.1	4.3	15.7
25/02/2019	15	18.9	24.7	0.2	0	4	17.4
26/02/2019	14.8	20.7	27.7	0	0	3.6	14.7
27/02/2019	16.1	21.1	27.1	0.2	0	3	16.4
28/02/2019	18	21.9	27.7	0	0	3.8	18.6
Monthly	14.2	21.8	36.4	6	0	4.4	27.2

DATE	MEAN TEMP	HIGH TEMP	TIME	LOW TEMP	TIME	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1/03/2019	22.5	28.6	2:30p	16.8	7:00a	0	1.8	10.7	5:00p	NW
2/03/2019	21.8	27.4	2:00p	17.1	7:00a	0	1.6	9.4	5:00p	NNW
3/03/2019	22.4	29.7	2:00p	16.4	7:00a	0	1.6	10.3	7:00p	NW
4/03/2019	23.7	32.7	3:00p	17.9	7:00a	0	1.6	8.9	5:00p	NW
5/03/2019	23.1	31.9	2:30p	17.4	6:30a	0	1.4	8.5	5:00p	NW
6/03/2019	25.4	36.6	2:30p	17.8	12:00m	2.4	2.3	14.8	3:00p	SW
7/03/2019	17.3	19.8	12:00p	14.3	6:30a	0	1.3	6.7	2:00p	NE
8/03/2019	22.4	30.2	3:00p	16	12:30a	0	1.4	8.9	4:30p	NW
9/03/2019	21.1	23.1	1:30p	19	7:30a	2.6	0.7	6.3	3:00p	NE
10/03/2019	24.8	33.6	6:30p	18	5:00a	0	1.2	9.4	12:30p	SW
11/03/2019	24.3	29.2	2:30p	21.1	6:00a	0	1.8	9.8	4:30p	NW
12/03/2019	25.8	34.9	3:30p	19.3	6:00a	0	1.8	10.7	12:00m	SSE
13/03/2019	19.7	22	3:30p	17.6	8:30a	2.2	1.1	8.5	1:00a	NE
14/03/2019	21.9	29	2:00p	17.8	12:00m	0.4	1.5	9.8	5:30p	SSW
15/03/2019	18.9	22.9	4:30p	16.1	12:00m	0.4	1.5	8.5	6:30p	ENE
16/03/2019	18.2	21.4	3:00p	15.6	2:00a	25.6	1.2	5.8	7:30p	ENE
17/03/2019	18.6	21.7	5:00p	17.2	9:30a	38.4	1.3	7.2	8:30a	E
18/03/2019	18.6	21.6	3:00p	16.8	3:00a	11.2	1.3	7.6	12:30p	SW
19/03/2019	19.7	25.1	3:30p	17.2	1:30a	3.4	0.8	5.8	6:00p	N
20/03/2019	20.9	26.3	1:30p	17.1	6:30a	0.2	1	7.2	3:30p	E
21/03/2019	20.8	25.5	4:30p	16.9	7:00a	0	1.2	7.2	1:30p	NNW
22/03/2019	20.4	26.6	2:30p	16.9	12:00m	0	0.6	7.6	5:30p	NE
23/03/2019	20.4	29.3	3:30p	14.3	6:30a	8	1.3	7.6	3:30p	SW
24/03/2019	24.2	33.4	2:00p	19.7	3:00a	0.2	1.2	6.7	4:30p	SW
25/03/2019	21.7	24.8	4:30p	18.2	9:30a	9.2	1.9	9.8	4:30p	SW
26/03/2019	19.9	25.4	4:30p	14.1	12:00m	0.2	1.3	8	3:00p	S
27/03/2019	17.2	22.1	3:30p	11.3	6:00a	0	1	7.2	4:00p	NNW
28/03/2019	19.3	26.9	3:30p	13.2	7:30a	0	1.1	6.7	12:00p	NNW
29/03/2019	20.8	26.6	2:30p	15.1	7:00a	0	1	6.3	7:30p	WSW
30/03/2019	18.2	25.1	2:30p	12.1	12:00m	24.6	2.4	18.3	6:00p	SSE
31/03/2019	15.2	22.2	3:00p	10.5	6:30a	0	1.7	11.2	5:30a	SSE

Ave or total	20.9	26.9		16.4		129	1.4	8.7		

DATE	MEAN TEMP	HIGH TEMP	TIME	LOW TEMP	TIME	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1/04/2019	14.9	21.3	1:00p	9.1	5:30a	0.4	0.9	8.5	3:30p	ENE
2/04/2019	17.2	22.7	12:30p	14	6:30a	1.8	0.8	6.3	2:00p	NNW
3/04/2019	19.2	25.8	2:30p	15.1	7:30a	0	1.2	6.7	12:00p	SW
4/04/2019	17.3	23.3	11:30a	13.6	7:00a	3.2	0.8	8.9	2:00p	NNW
5/04/2019	17.1	19.8	11:00a	15.5	3:30a	11.2	0.7	4	6:00a	E
6/04/2019	21.6	28.8	3:30p	15.7	4:00a	0	1.3	7.6	10:30a	SW
7/04/2019	23.2	32.1	3:00p	16.2	6:30a	0	1.1	8.5	12:00p	SW
8/04/2019	24.8	33	2:30p	18.4	5:00a	0	1.3	10.7	3:00p	SW
9/04/2019	21.7	29.8	11:30a	13.2	12:00m	0	1.8	10.3	2:00p	SW
10/04/2019	14.3	19.5	12:30p	10.5	11:30p	0	1.1	7.2	1:30p	N
11/04/2019	14.6	21.2	2:30p	9.2	4:30a	0	0.9	5.8	3:30p	NE
12/04/2019	16.1	20.6	2:00p	11.9	2:30a	0	0.9	5.8	3:00p	N
13/04/2019	18.2	26.7	1:30p	12.5	7:00a	0	0.9	4.5	5:30p	SW
14/04/2019	16.6	21.8	12:00p	13.3	10:00p	1.8	0.8	6.7	4:00p	N
15/04/2019	16.5	23.4	2:00p	12.2	6:30a	0	1	5.8	1:30p	N
16/04/2019	17.1	24.1	1:30p	12.7	4:30a	0	1.1	6.3	3:30p	N
17/04/2019	17.9	24.3	1:30p	13.8	3:00a	0	0.8	5.8	4:30p	NW
18/04/2019	19.2	26.9	2:30p	13.7	6:00a	0	1.2	6.3	11:00a	NW
19/04/2019	19.3	25.1	3:00p	15.9	6:30a	0	0.7	4.5	5:30p	NW
20/04/2019	19.1	25.3	1:00p	14.4	7:00a	0	1.1	6.7	3:30p	WNW
21/04/2019	19.7	26	2:30p	15.1	5:30a	0	1	5.8	4:00p	NW
22/04/2019	19.6	25.7	3:30p	14.9	7:00a	0	1.1	5.8	1:00p	NW
23/04/2019	18.5	24	1:00p	13.9	6:00a	0	1.1	7.6	2:00p	NNW
24/04/2019	19	25.1	3:30p	14.6	7:00a	0.2	0.8	5.8	4:30p	N
25/04/2019	20.3	27.8	4:00p	13.4	7:00a	0	0.9	4.9	7:30p	SW
26/04/2019	20.9	28.2	1:00p	14.5	12:00m	0	1.7	13	2:30p	SW
27/04/2019	14.9	20.2	2:30p	10.3	12:00m	0	1.2	5.4	10:00a	NW
28/04/2019	14.9	23.5	2:30p	7.3	7:00a	0	1	5.4	6:30p	SW
29/04/2019	14.9	21.1	2:30p	9.2	6:00a	0	0.8	7.2	1:30p	NNW
30/04/2019	17.6	23.4	2:00p	12.1	6:30a	0	1.1	6.7	12:30p	NNW

Ave and tot	18.2	24.6		13.2		18.6	1	6.8		

DATE	MEAN TEMP	HIGH TEMP	TIME	LOW TEMP	TIME	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1/05/2019	18.2	23.7	3:00p	14.3	7:00a	0	1	6.7	1:30p	SW
2/05/2019	19.7	24.3	1:00p	16	7:00a	0	1.1	4.9	9:00p	NW
3/05/2019	18.7	22	11:00a	17.4	6:30a	3.4	1.6	8	10:30a	SW
4/05/2019	16.9	21.3	2:30p	12	12:00m	0.2	1.3	7.2	1:00p	ENE
5/05/2019	13.2	19.3	1:30p	8.4	6:30a	0.2	1	9.4	2:30p	E
6/05/2019	14.2	20.4	3:30p	10.1	12:00m	0	1	6.3	11:30a	E
7/05/2019	15	22.8	3:30p	7.7	7:00a	0	1.1	6.7	3:30p	SW
8/05/2019	15.1	20.3	2:00p	9.1	11:30p	0	2.1	13.4	2:30p	SW
9/05/2019	13.7	19.8	2:30p	8.3	7:00a	0	1.2	6.3	12:30p	SW
10/05/2019	13.1	18.3	1:00p	8.8	7:00a	0	1.5	12.5	5:30p	SW
11/05/2019	13.5	20.7	2:00p	8.1	12:00m	0	1.7	11.2	10:30a	SSE
12/05/2019	12.8	20.7	3:30p	6.4	7:00a	0	0.8	4.9	12:00p	NW
13/05/2019	14.7	22.2	3:00p	7.8	7:00a	0	0.9	6.3	2:00p	NNW
14/05/2019	16.2	23.3	2:00p	11.3	12:00m	0	0.8	5.8	4:30p	NE
15/05/2019	14.8	22.2	2:00p	9.2	6:30a	0	0.8	4	2:00p	NE
16/05/2019	14.8	21.2	2:00p	10	7:00a	0	0.7	4	6:00p	WNW
17/05/2019	15.4	21.8	2:30p	9.6	6:30a	0	0.8	4.5	6:30p	NW
18/05/2019	15.3	22.2	3:00p	10.2	7:30a	0	0.7	4.5	2:30p	NNE
19/05/2019	16.3	22.5	1:00p	11.9	7:00a	0.2	0.7	5.4	4:00p	ENE
20/05/2019	16.2	22.6	3:00p	11.3	6:00a	0	0.6	4.5	12:00p	WSW
21/05/2019	18.3	26.2	2:30p	13.1	3:30a	0	0.8	4.5	1:00p	SW
22/05/2019	17.7	25.4	1:00p	13.1	7:00a	0	0.9	7.2	5:00p	NE
23/05/2019	17.2	22.7	2:30p	13.4	4:00a	0	0.6	4.9	4:30p	NE
24/05/2019	16.5	24.1	2:30p	10.6	7:30a	0	0.6	4.5	2:00p	SW
25/05/2019	17.2	25.7	2:00p	11.2	7:30a	0	0.8	5.4	3:30p	SW
26/05/2019	16.6	22.8	2:00p	10.3	12:00m	0	1.6	7.6	5:30a	SW
27/05/2019	12.1	18.5	12:30p	9.4	3:30a	0	2.7	14.8	2:00p	SSE
28/05/2019	11.8	18	1:30p	6.1	7:00a	0	2	9.8	1:00p	S
29/05/2019	13.7	17.6	11:30a	10	12:00m	0	3.3	15.6	2:30p	S
30/05/2019	9.5	16.2	1:30p	4	12:00m	0	1.3	8	1:30p	SSE
31/05/2019	10.7	19.3	3:00p	3.6	2:00a	0	1	6.3	2:00p	SW

Ave and tot	15.1	21.5		10		4	1.2	7.2		

DATE	MEAN TEMP	HIGH TEMP	TIME	LOW TEMP	TIME	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1/06/2019	12.3	17.8	2:30p	7	4:00a	0	0.9	6.3	2:30p	ENE
2/06/2019	12.3	17.1	4:00p	7.1	5:00a	0	0.7	4.9	11:00p	NE
3/06/2019	12.2	17.8	11:30a	4.9	11:00p	1.2	1.2	10.3	12:00p	SW
4/06/2019	9.1	13.3	3:00p	4.6	1:30a	12.4	2.4	15.6	1:30p	ENE
5/06/2019	10.7	14.7	2:30p	7.6	12:00m	0	1.4	8.5	2:00a	ENE
6/06/2019	10.4	17.9	2:00p	4.6	7:30a	0	0.8	6.3	4:30p	N
7/06/2019	11.6	16	1:00p	7.6	6:30a	0.8	0.5	4	11:00a	ENE
8/06/2019	11.5	13.7	3:00p	8.8	6:00a	0	0.6	4	9:00p	SW
9/06/2019	15.3	20.8	1:30p	11.5	7:30a	0	1.1	4.5	6:30a	SW
10/06/2019	15.9	21.4	3:30p	11.1	7:30a	0	1.6	8.9	12:00p	SW
11/06/2019	15.9	22.5	12:30p	11.9	12:00m	0	1.1	6.3	4:00p	NW
12/06/2019	15.9	22.3	3:30p	10.1	3:30a	0	1.3	7.2	10:30a	SW
13/06/2019	17.3	21.1	11:00a	12.8	12:00m	0	1.7	10.3	1:30p	SW
14/06/2019	11.7	18.4	4:00p	7	7:30a	0	0.7	4.5	12:30p	NE
15/06/2019	10.8	17.6	2:30p	5.2	7:00a	0	0.7	4	12:00p	NE
16/06/2019	11.2	13.8	3:00p	9.2	12:30a	0	0.7	3.6	3:00a	E
17/06/2019	11.7	14.4	1:00p	9.8	6:30a	1.8	1	5.8	11:00a	ENE
18/06/2019	12.9	17.6	1:00p	9.4	7:30a	0.2	0.7	3.6	2:00a	NE
19/06/2019	9.6	15.3	2:30p	5.2	12:00m	0	0.8	6.3	1:00p	ENE
20/06/2019	8.1	14.4	2:00p	3.5	6:00a	0	0.5	4.9	10:00a	NNE
21/06/2019	7.9	13.6	3:00p	4.7	7:00a	0	0.8	5.8	10:30a	ENE
22/06/2019	8.7	13.8	3:30p	2.3	3:00a	0	1.1	8.5	12:00p	ENE
23/06/2019	9.4	14.8	3:00p	5.4	7:30a	6.8	1.1	5.8	12:00p	ENE
24/06/2019	10.3	15.1	2:30p	7.8	6:30a	5.8	1.1	5.8	12:00p	ENE
25/06/2019	12.2	17	2:30p	9.6	1:00a	1.8	1.3	6.3	3:30p	ENE
26/06/2019	12.3	16.1	3:30p	10.3	11:30p	3.6	0.8	4.5	12:30a	ENE
27/06/2019	12.7	17.6	4:00p	10.6	3:00a	0.2	0.6	5.4	4:00p	NNW
28/06/2019	13.2	19.2	3:30p	8.6	3:30a	0.2	0.7	5.4	3:30p	WNW
29/06/2019	13.6	19.9	3:30p	7.1	6:00a	0	1.9	9.4	3:30p	SW
30/06/2019	12.9	17.7	2:00p	6.4	12:00m	0	1.4	10.3	12:30a	SSE

Ave or total	12	17		7.7		34.8	1	6.5		

ATTACHMENT 6

SITE CURRENT PHOTOS

Current extraction area (south)

Current extraction area (east)

Current extraction area (north)

Tailings pond 12 ready for capping

Tailings pond 14 in use

Tailings pond 11 being spelled

Fresh water dam

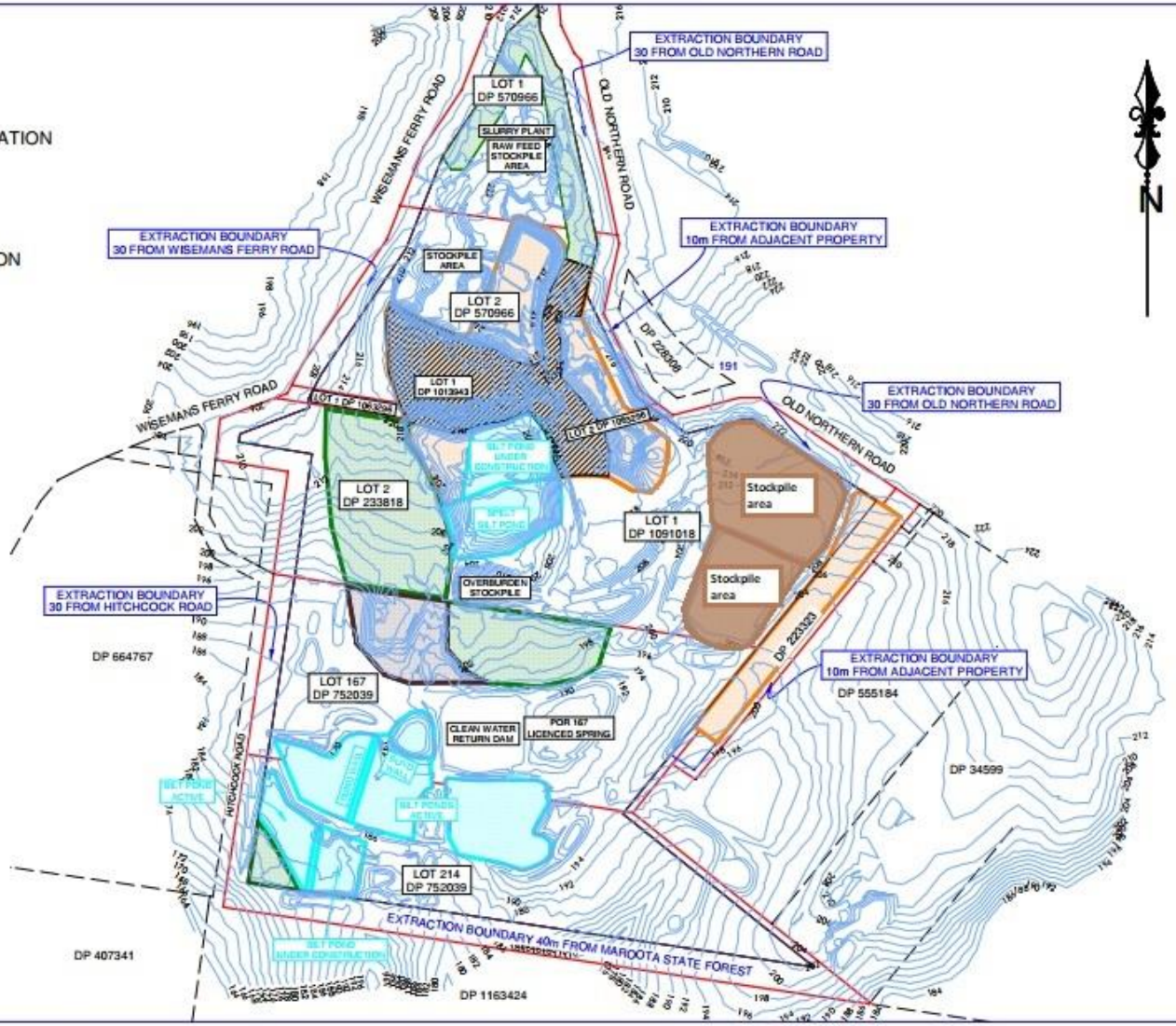
Stockpile and processing area

Rehabilitation area along east haul road

ATTACHMENT 7

CURRENT SITE SURVEY PLAN

- LAND UNDER ACTIVE REHABILITATION
- LAND BEING PREPARED FOR REHABILITATION
- EXTRACTION AREAS
- AREA BEING PREPARED FOR EXTRACTION
- SILT PONDS
- STOCKPILE AREA (Updated 2019)



NOTES:

* Boundaires have been provided to Matthew Freeburn Surveyors from Landair Survey and are approximate only. No boundary investigation has been carried out for the purpose of this survey.
* Contours shown in blue have been provided to Matthew Freeburn Surveyors from Landair Surveys. Contours depict the general topography. They do not represent exact levels other than at spot levels shown. Survey date was 29/5/2017.
* The position of features are indicative only.
* 101.50 indicates natural surface level.
* No trees have been shown.

PROJECT: "PF FORMATION - SITE PLAN FOR HITCHCOCK ROAD SAND PROJECT 06_0104".

Client: PF FORMATION	FREEBURN W E SURVEYING	MATTHEW FREEBURN LAND, ENGINEERING & MINING SURVEYOR SUITE 2, 1st FLOOR, "SURVEYOR HOUSE" 2 CASTLEREAGH STREET PENRITH 2750	Telephone 02 4721 2289 Fax 02 4721 5646 email matthew@freeburnsurveyors.com	Date: 4/10/2018	Ref: 34279	Sheet 1 of 1
				Scale 1: 6000	Datum: AHD	Contour: 1m
				Surveyor: N/A	Drawn By: CD	Checked: MF
				Stored: 34279 SITE PLAN 18-10-04 A3		A3 SHEET

ATTACHMENT 8

WEIGHBRIDGE VERIFICATION CERTIFICATE

Weighbridge Verification Form

Company Name:	PF Formation	Date:	9/1/2019	Ref No:	C3R482
Site Name:	pf for-6 : PF Formation - Breakdown - Maroota			Permit to work requirement:	Yes ☐ No ☐
Contractor:	AWS (Aussie Weighbridge Systems) Pty Ltd- T/A: Weigh-More Solutions	Approved By:	Prime Mover Rego CJ13VF		
Job/Task:	Weighbridge 1 : 1774 Wisemans Ferry Road	Asset:	Weighbridge 1		

Equipment Details

Manufactures/s	Model	Serial nr	
Mettler Toledo	7560	IN0054217	
NSC Number(s)	**Min and Max**	**VSI e=d=**	**Class**
6/10B/46	0.40t/60.00t	0.02t	III
Calibration Date	**Calibration Due**		
9/1/19	JAN 2019		

Traceable Test masses used. 1 Tonne 1 to 1 Tonne 20

Visual Inspection	Y/N
Does the instrument comply with its certificate/s of approval?	Y [X] N [ ]
Is the instrument being used in an appropriate manner?	Y [X] N [ ]
Are all mandatory descriptive markings clearly and permanently marked on the data plate?	Y [X] N [ ]
Is the data plate fixed on the instrument?	Y [X] N [ ]
Is the instrument complete?	Y [X] N [ ]
Is the instrument clean?	Y [X] N [ ]
Is the Instrument Operational?	Y [X] N [ ]
Is the level-indicating device (if fitted) secured and functional?	Y [ ] N [X]
Mounted on a firm base?	Y [X] N [ ]
Are there any apparent obstructions to the operation of the instrument?	Y [ ] N [X]
Does the operator have a clear view of the indicating device?	Y [X] N [ ]
Does additional devices repeat what is on indicator and comply with certificates	Y [X] N [ ]

NA ☐

Test Details

Available test masse	MPE Change Points
18t	10.00t/40.00t

Performance Testing

Repeatability Test Mass	Pass	Fail
41.56t	☒	☐

First Reading	Second Reading	Third Reading	Difference
41.56t	41.56t	41.56t	0t

Eccentricity Test

Eccentricity: Number of Supports	Mass	g	kg	t
6	6.18t	☐	☒	☐

Position 1	Position 2	Position 3	Position 4
6.18t	6.18t	6.18t	6.18t

Position 5	Position 6	Position 7	Position 8
6.18t	6.18t		

Eccentricity Test Results — Pass ☒ Fail ☐

Weighing Performance Up Test

Load	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	Fail
1t test mass	1.00t	0.01t	1.00t	0.01t	0.008t	+0.002t	NA	NA	☒	☐
Load applied	Reading	MPE	IND	1/2e	DL	E (error)	L Sub	L sub round	Pass	Fail
10t test mass	10.00t	0.01t	10.00t	0.01t	0.010t	0.000t	NA	NA	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L Sub	L sub round	Pass	Fail
18t test mass	18.00t	0.02t	18.00t	0.01t	0.010t	0.000t	NA	NA	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	Fail
Sub 1	17.22t		17.22t	0.01t	0.016	0.000t	17.214t	17.22t	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	Fail
Sub1+ 18t test mass	35.22t	0.02t	35.22t	0.01t	0.012t	-0.002t	NA	NA	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	Fail
Sub 2	25.88t		25.88t	0.01t	0.010t	0.000t	25.878t	25.88t	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	Fail
Sub2+18t test mass	43.88t	0.03t	43.88t	0.01t	0.012	-0.002t	NA	NA	☒	☐
Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	Pass	
Sub1+2+16t test mass	59.10t	0.03t	59.10t	0.01t	0.014t	-0.004t	NA	NA	☒	

Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	L sub	L sub round	
									Fail ☐
									Pass ☐ Fail ☐
									Pass ☐ Fail ☐
									Pass ☐ Fail ☐

Weighing Performance Down Test

Load Applied	Reading	MPE	IND	1/2e	DL	E (error)	
Sub1+18t test mass	35.22t	0.02t	35.22t	0.01	0.012t	-0.002t	Pass ☒ Fail ☐
10t test mass	10.00t	0.01t	10.00t	0.01t	0.010t	0.000t	Pass ☒ Fail ☐
1t test mass	1.00t	0.01t	1.00t	0.01t	0.008t	+0.002t	Pass ☒ Fail ☐
							Pass ☐ Fail ☐
							Pass ☐ Fail ☐

Zero Setting (clause 5.3)	Pass ☒	Fail ☐	
Over-range blanking	Pass ☒	Fail ☐	
Discrimination (clause 5.5)	Pass ☒	Fail ☐	
Sensitivity (clause 5.6)	Pass ☐	Fail ☐	NA ☒
Accuracy of tare setting (clause 5.7)	Pass ☒	Fail ☐	NA ☐
Price computation (clause 5.8)	Pass ☐	Fail ☐	NA ☒
Overall Result	Pass ☒	Fail ☐	

All scales are tested using uniform testing procedures as per NITP 6.1 to 6.4 National Instrument Test Procedures for Non-automatic Weighing Instruments Reg 13 traceable masses

Technician name	Identification Number
Tim Major	AUS-3506

Comments

Verified weighbridge using certified test masses and testing procedures

Checklist Item	Date Actioned	Actioned By

Tim Major 9/1/2019 @ 12:19PM
Employee

ATTACHMENT 9

COMMUNITY CONSULTATIVE COMMITTEE

MEETING MINUTES

Community Consultative Committee
Hitchcock Road and Lot 198 Maroota
Sand Extraction and Rehabilitation Projects

Minutes
13 November 2018

Attendance

Kristine McKenzie – The Hills Shire Council (THSC) – Chairperson

Danial Giffney – The Hills Shire Council (THSC)

Shaunagh Hitchcock – Resident

Melissa Mass – South Eastern Environmental

Peter Cummins – PF Formation (PF)

Joshua Graham – PF Formation (PF)

Luke Graham – PF Formation (PF)

Apology

Lisa Aylward – Resident

Marianne Sheumack – Resident

Minutes of Previous Meeting

- Accepted

Matters Arising from Minutes

- None

Report on Current Status of Operations by Joshua Graham (PF)

- An updated Pollution Incident Response Management Plan has been developed. This deals with spill kits, safety issues and diesel tanks.
- The diesel fuel tank in the workshop area has been replaced by a smaller, 25,000 litre tank that is under cover and is compliant with the updated bund storage capacity rules.
- New offices building plans are awaiting final approval from Hills Shire.
- Amendments to the existing Project Approval 06-0104 are being prepared including a revised offset strategy and the removal of the commitments appended to the Approval. The Approval calls for long-term security of the offset which means 'in perpetuity' according to the Planning Department. PF Formation do not agree with this interpretation but are proposing alternative options in order to reach agreement with the Department. The proposed amendments will be given to the Department early next year.

- There have been no community complaints in the last 6 months
- Operations have been routine with less tertiary sand and more sandstone being sold.
- The Maroota Lodge development at the end of Roberts Road has been approved by Hornsby Council in 2017. The pre-commencement conditions have been achieved by PF Formation but are still waiting for Hornsby Council's acknowledgement. The operation will involve the transfer of up to 20 trucks per day to the Hitchcock Road site.

- PF Formation has recently acquired the Arkzeal property. Extraction will have 30 metre setbacks.

Reporting

- No significant reporting matters have occurred in the period.

Environmental Matters

- The monthly dust deposit results were reviewed and discussed. The Jurd dust deposit gauge was high in September due to mowing around the dust gauge whilst the area was still dry (a gumnut was in the gauge). Given the dry conditions the overall dust results have been good.
- Mine safety health monitoring is conducted including lung screening. Now that there is base line data this testing will be done every 2 years. Personal testing has been done and the bulldozer now has a pressurized cabin.
- PF received no notification of high TEOM results in the period.
- The rehabilitation area is self-establishing and does not require any more planting. Some weed removal will be conducted.
- Groundwater at the monitoring locations has been starting to come up since the rain in October. The monitoring bore on the crown road near Old Northern Road was vandalized during the period.

Site Visit

- A site inspection was conducted.

Next Meeting

- 10.00 am Tuesday 7 May 2019

Community Consultative Committee
Hitchcock Road and Lot 198 Maroota
Sand Extraction and Rehabilitation Projects

Minutes
7 May 2019

Attendance

Kristine McKenzie – The Hills Shire Council (THSC) – Chairperson

Robert Buckham – The Hills Shire Council (THSC)

Melissa Mass – South East Environmental

Peter Cummins – PF Formation (PF)

Joshua Graham – PF Formation (PF)

Luke Graham – PF Formation (PF)

Gemma Chedid – by invitation

Apology

Lisa Aylward – Resident

Marianne Sheumack – Resident

Shaunagh Hitchcock – Resident

Minutes of Previous Meeting

- Accepted

Matters Arising from Minutes

- None

Report on Current Status of Operations by Joshua Graham (PF)

- Business has been noticeably quieter with the housing market slow down. The focus has been on rehabilitation and movement of overburden.
- On the planning side the Office of Water has issued a report on Maroota groundwater. They recommend conditions to be incorporated in all new development approvals. The identification

of the Maroota sand and sandstone groundwater tables and the identification of perched aquifers are discussed in the report.

- The Water Management Plan submitted over a year ago is still awaiting Department of Planning approval.
- Modifications PF Formation would like to the Approval conditions have been discussed with the Department of Planning and PF Formation's planners RW Corkery. This matter is proceeding slowly.
- No complaints were received in the period.

Reporting

- No significant reporting matters have occurred in the period.

Environmental Matters

- The monthly dust deposit results were reviewed and discussed.
- The Jurd dust deposit gauge has been moved to a site agreed by the EPA.
- Given the dry conditions the overall dust results have been good other than the recent Site 3 (Jurd) results. This site will be closely monitored.
- Groundwater at the monitoring locations has been stable with very little recent rain.
- Plant rehabilitation has mainly involved the removal of annual weed growth in the previously rehabilitated area. Further maintenance of this area will continue in the next few months.

Site Visit

- No site inspection was conducted.

Next Meeting

- The timing of the next meeting was discussed to try and have a more suitable time to enable the residents on the committee to attend.
- The next meeting will be held 2.30 pm Tuesday 12 November 2019