



**SCIENTISTS
ENGINEERS
MANAGERS &
FACILITATORS**

Environmental Assessment

For

No Fuss Liquid Waste Pty Ltd

September 2010
Revision 05
Project No: 3439.001

REPORT ISSUE AUTHORISATION

PROJECT: Environmental Assessment

Project No: 3439.001

AUTHOR: Larissa Borysko
PhD, BSc Hons. (Environmental Science)(Chemistry)

Date	Purpose of Issue/Nature of Revision	Rev	Reviewed by	Issue Authorised by
27.09.2010	QA of whole report	0.2 - 04	Iveta Mylchreest	Iveta Mylchreest
18.11.2010	DECC comments incorporated	0.5	Iveta Mylchreest	Iveta Mylchreest

This Report has been prepared in accordance with the scope of services agreed upon between SEMF Pty Ltd (SEMF) and the Client. To the best of SEMF's knowledge, the report presented herein represents the Client's intentions at the time of printing of the report. In preparing this report, SEMF has relied upon data, surveys, analyses, plans and other information provided by the client and other individuals and organisations. No monitoring or testing of technology has been undertaken by SEMF during the course of this study. Except as otherwise stated in this report, SEMF has not verified the accuracy or completeness of such data, surveys, analyses, plans and other information.

No responsibility is accepted for use of any part of this report in any other context or for any other purpose by third parties.

This report does not purport to provide legal advice. Readers should engage professional legal advisers for this purpose.

SEMF Pty. Ltd
Level 3, 50 Berry Street, North Sydney 2060 New South Wales Australia
ACN 117 492 814 ABN 24 117 492 814

Telephone: (61 2) 9957 1112
Facsimile: (61 2) 9957 4815
Email: sydney@semf.com.au

CONTENTS

1. EXECUTIVE SUMMARY	1
1.1 SCOPE OF REPORT	1
1.2 PROJECT DESCRIPTION	1
1.3 ENVIRONMENTAL ISSUES	1
1.3.1 Waste Management.....	1
1.3.2 Traffic and Transport	2
1.3.3 Noise and Vibration	2
1.4 VISUAL IMPACTS.....	2
1.5 AIR QUALITY IMPACTS	3
1.5.1 Odour	3
1.6 WATER QUALITY/ STORMWATER	3
1.7 GREENHOUSE GASES.....	3
1.8 REQUIRED APPROVALS AND LICENCES	4
1.9 MITIGATION AND MANAGEMENT MEASURES	4
2. INTRODUCTION.....	5
2.1 PROJECT SUMMARY	5
2.2 PROJECT OBJECTIVES.....	5
2.3 SCOPE OF THIS REPORT	5
3. PROJECT DESCRIPTION.....	7
3.1 DEVELOPMENT LAYOUT	7
3.2 SITE OPERATIONS	7
3.3 OILY WATER TREATMENT PROCESS.....	8
3.4 FACILITY LAYOUT	9
3.5 HOURS OF OPERATION	12
3.6 EMPLOYEES.....	12
3.7 FACILITIES	12
3.8 SERVICING.....	12
3.9 CONSULTATION.....	12
4. LOCATION	13
4.1 SUBJECT SITE	13
4.2 SITE ACCESS	15
4.3 SURROUNDING LANDS	15
4.4 GEOLOGY AND HYDROLOGY.....	15
4.4.1 Regional Geology	15
4.4.2 Depth to Groundwater Table.....	15
4.5 METEOROLOGICAL DATA.....	16
5. IDENTIFICATION AND PRIORITISATION OF ISSUES	17
6. ENVIRONMENTAL IMPACTS	20
6.1 WASTE MANAGEMENT	20
6.1.1 General Waste Management.....	20
6.1.2 Process Waste Management.....	20
6.2 TRAFFIC AND TRANSPORT	21
6.2.1 General.....	21
6.2.2 Site Access.....	21
6.2.3 Traffic Flows and Impact.....	21
6.3 NOISE AND VIBRATION	23
6.3.1 General.....	23

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

6.3.2	Background Noise Levels and Noise Criteria	24
6.3.3	Measured and Predicted Noise from Process Equipment	24
6.3.4	Predicted Noise for Mobile Sources (Traffic).....	25
6.4	VISUAL IMPACTS.....	25
6.5	AIR QUALITY IMPACTS	25
6.5.1	General.....	25
6.5.2	Odour	26
6.6	WATER QUALITY/ STORMWATER	26
6.6.1	General.....	26
6.6.2	Site Water Balance	27
6.7	GREENHOUSE GASES.....	28
7.	PLANNING FRAMEWORK, APPROVALS AND LICENCING.....	30
7.1	STATE AND REGIONAL PLANNING FRAMEWORK.....	30
7.1.1	State Environmental Planning Policy (Major Development) 2005.....	30
7.1.2	State Environmental Planning Policy No. 33- Hazardous and Offensive Development.....	31
7.1.3	Ecological Sustainability: -	32
7.1.4	Indicative Statutory Requirements: -	33
7.1.5	State Environment Planning Policies (SEPPs).....	34
7.1.6	Sydney Regional Environmental Plans	34
7.2	LOCAL PLANNING FRAMEWORK.....	35
7.2.1	Penrith Local Environment Plan 1996 (Industrial Land).....	35
7.2.2	Draft Environmental Planning Instruments.....	36
7.3	DEVELOPMENT CONTROL PLANS.....	37
7.3.1	Penrith DCP 2006 – Section 2.1 Contaminated Land	37
7.3.2	Penrith DCP 2006 – Section 2.6 Landscape.....	37
7.3.3	Penrith DCP 2006 – Section 2.8 Register of Significant Trees and Gardens 37	
7.3.4	Penrith DCP 2006 – Section 2.9 Waste Planning.....	37
7.3.5	Penrith DCP 2006 Section – 4.1 Industrial Land	38
7.3.6	Penrith DCP 2006 – Section 6.9 Emu Plains Commercial Area	38
7.4	LICENSING REQUIREMENTS	39
7.4.1	The Protection of the Environment Operations Act 1997 (POEO Act).....	39
7.4.2	Trade Waste Permit.....	39
8.	STATEMENT OF COMMITMENTS.....	40
8.1	COMMITMENTS TO MITIGATE ENVIRONMENTAL ASPECTS	40
8.2	TIMING/ IMPLEMENTATION OF MEASURES	43
8.3	ENVIRONMENTAL MONITORING AND MANAGEMENT.....	43
9.	JUSTIFICATION FOR THE PROPOSAL.....	46
	DECLARATION.....	47

Tables

Table 1: Bore information and groundwater depth in the vicinity of the site (NSW Department of Natural Resources Groundwater Bore Database)	16
Table 2: Summary statistics for temperature and rainfall at Penrith Lakes AWS (1995-2009)	16
Table 3: Environmental Risks (without mitigating strategies).....	18
Table 4: Traffic Count Results.....	22
Table 5: Urban Road Peak Hour Flows per Direction (RTA, 2002).....	23
Table 6: Current and Future Level of Service for Roads near the Proposed Development...	23
Table 7: Development Control Table- Penrith LEP 1996 (Industrial Land)	36
Table 8: Commitments to Mitigate Environmental Risks	40
Table 9: Proposed Monitoring	45

Figures

Figure 1: Proposed Treatment for Oily Waste Water at No Fuss Liquid Waste	9
Figure 2: Site plan for Unit 2/ 10-12 Smith St, Emu Plains	10
Figure 3: Location of the proposed development, Smith Street Emu Plains	13
Figure 4: Site Location: Penrith Local Environmental Plans 2008	14
Figure 5: Potential risks and hazards of treatment process	18
Figure 6: Site Water Balance	28

Appendices

Appendix A: On Site Waste Testing Form
Appendix B: Laboratory Testing Form
Appendix C: Driving Patterns: SK1, SK2 and SK3 (SEMF, 2010)
Appendix D: Traffic Count Worksheets (SEMF, 2010)
Appendix E: Noise Assessment (BGMA Pty Ltd, 2010)
Appendix F: Odour Assessment (The Odour Unit, 2010)
Appendix G: Greenhouse Gas Assessment (SEMF, 2010)
Appendix H: Draft Trade Waste Permit
Appendix I: DECC Waste Codes
Appendix J: Odour monitoring locations
Appendix K: Process Photos

GLOSSARY OF TERMS AND ABBREVIATIONS

AADTV	Annual average daily traffic volume
CO ₂	Carbon Dioxide
DAF	Dissolved Air Flotation
DECCW	Department of Environment, Climate Change and Water
DLAWC	Department of Land and Water Conservation
EIA	Environmental impact assessment
EIS	Environmental impact statement
EPA	Environment Protection Authority
EP&A	Environmental Planning and Assessment Act
LA	Local Authority
LEP	Local Environmental Plan
LGA	Local Government Authority
MVKM	Motor vehicle kilometres
N/A	Information not available or not applicable
NO ₂	Nitrogen dioxide
NPWS	National Parks and Wildlife Service
RTA	Roads and Traffic Authority
SEPP	State Environment Planning Policy
SPA	Special protection area
TSC Act	Threatened Species Conservation Act
vpd	Vehicles per day
vph	Vehicles per hour

1. EXECUTIVE SUMMARY

1.1 Scope of Report

In compliance with the requirement for a Part 3A approval this report has been prepared following the issue of the Director General's Requirements for the project (ref: MP10_0077) as determined under Section 75F(3) of the *Environmental Planning and Assessment Act, 1979*.

The report provides project information including the following:

- A description of the activities proposed to be undertaken at the site;
- A description of the site and surrounding areas;
- The state and regional planning framework as it applies to the proposal;
- Potential environmental impacts likely to arise from the proposed development.
- Measures to mitigate and manage potential impacts; and
- Environmental monitoring and reporting.

1.2 Project Description

No Fuss Liquid Waste Pty Ltd currently operates a liquid waste removal service trading as No Fuss Liquid Waste Pump outs. The company has a facility for the collection and treatment of septic waste at Emu Plains within the Penrith Local Government Area (LGA).

To fulfil a customer demand for the collection and treatment of oily waters, No Fuss has lodged an application with the Department of Planning to operate a separate plant known as a J120 Plant. The J120 Plant will be used in the separation and treatment of oily water and organic wastes. This application relates to the use of this second unit (Unit No. 2), which is situated within the No-Fuss premises, but will be operated separately.

The current No Fuss proposal will have the capacity to treat approximately 2600 tonnes of oily waste water per year. This amount of waste to be treated triggers the need for a Part 3A Approval under Schedule 1 – Project Classes of Development - Group 9 Resource and Waste Related Industries of the *Environmental Planning and Assessment Act, 1979*.

1.3 Environmental Issues

1.3.1 Waste Management

Various waste streams specific to the running of J120 Plant will be generated during the operational phase of the proposed development. These include - small amounts of general liquid and solid waste materials such as lubricating oils used for equipment maintenance, some paints and detergents used for building maintenance and minor additional amounts of domestic wastes (including office waste).

In order to ensure environmental risks are mitigated waste will be managed in accordance with the recognised hierarchy of wastes which essentially is the inverted waste pyramid - once the facility is operational. This waste hierarchy will reflect the NSW government waste

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

strategies thus wastes will be avoided as much as possible, reduced wherever opportunities allow, re-used, recycled and waste disposal will be the final option.

Specific waste management requirements for the site and waste management procedures will be outlined in the EMP.

1.3.2 Traffic and Transport

In order to provide information on existing traffic flows in the immediate area of the site a traffic volume count was undertaken. The estimated traffic generated by the proposed development will not alter the level of service of Smith Street or Old Bathurst Road.

The estimated peak hour traffic generation rate of 2 vehicle trips per hour is considered to be insignificant compared to the current 35 vehicles per hour on Smith Street and 311 vehicles per hour on Old Bathurst Road. Traffic flow impact from the proposed development is therefore considered to be negligible.

In addition vehicles exiting the site will not cause any delays to traffic as there is sufficient space for trucks to enter and leave the site in a forward direction (Section 6.2.2) and good sight distance is available at the site entrance on Smith Street.

1.3.3 Noise and Vibration

A noise assessment of the proposed development was undertaken by BGMA Pty Ltd acoustical consultants to determine the likely impact of noise from the proposed waste treatment facility on nearby residential and commercial premises.

Noise measurements were carried out within Suite 2, with the equipment operating briefly. These measurements were then used to predict the likely noise impacting on adjacent premises. The predicted levels were based on the process equipment plus an air compressor.

Due to the proximity of nearby premises, noise breakout via the walls and roof area was assessed. Where buildings immediately adjoin the proposed facility, the noise intrusion into the adjoining premises was assessed. These levels are unlikely to adversely affect these businesses.

Mobile noise sources are limited to trucks entering the property to unload waste. Trucks associated with the operation of Unit 2 should be no louder than those currently successfully servicing the existing operation in Unit 1, when operating at the front of the property. Given the short duration of these noise events and the limited number of times per day that they will occur, these levels are unlikely to adversely affect adjacent businesses.

1.4 Visual impacts

The proposed development will be located within the confines of Unit 2 which already exists on site. The proposal therefore will not result in any negative visual impact to the area.

1.5 Air Quality Impacts

Air pollutants from the proposed facility will include those associated with combustion engines, exhausts and pumps and will be released in very limited concentrations during the operation of vehicles and mobile equipment. Due to the low levels of emissions these are not considered to be significant.

1.5.1 Odour

An assessment of potential odour impacts from the proposed facility was undertaken by The Odour Unit in July 2010. A qualitative assessment was conducted as the plant is not able to begin operation until project approval is obtained (refer Appendix F). The holding tank is considered to be the predominant odour source.

Some odour may be generated by the treatment of oily waste, this is not considered significant as it is confined to the No Fuss site. Potentially the odor could be a problem migrating from the neighboring property which treats septic wastes. From discussions with neighbouring operations and other stakeholders it is understood that the existing No Fuss operation does not cause any adverse odour impacts beyond the industrial area.

1.6 Water Quality/ Stormwater

Water from the roof and paved forecourt areas will be directed to the existing stormwater collection system installed during the development of the units. This water is generally considered to be clean and will be re-used on site for non-potable purposes.

Process water including any spills and hose down water utilised to hose down the facility/ washing equipment and floors will be contained and directed to the holding tank for treatment through the facility. Process water will be contained via the sealed walls of the unit and a speed hump at the entrance to the unit which will act as a bund.

A site water balance was undertaken for the facility by SEMF in 2010. Discussions with the site owners and existing infrastructure constraints provided an indication of water inputs and outputs. The site water balance indicates that a total of 59.8kL/day will be discharged from the site. It should be noted that although fresh water may be used for plant washdown, a stormwater collection system is operational on site and stormwater will be used for washdown where possible.

1.7 Greenhouse Gases

A greenhouse gas assessment was undertaken for the proposed development. The assessment used predictive modelling and included a quantitative analysis of scope 1 and scope 2 emissions.

The greenhouse gas assessment indicates that the construction and operation of the proposed facility will result in an increase in Scope 1 and 2 GHG emissions. The Scope 1 emissions associated with the construction phase are estimated to be 106.99 t CO₂-e / yr, which is approximately equal to 36.7% of the emissions of a large articulated truck traveling 200,000 km per annum and using 53.9 L of diesel per 100 km. The Scope 1 emissions

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

associated with operation are estimated to be 10.793 t CO₂-e / yr, which is approximately equal to 3.7% of the emissions of a large articulated truck traveling 200,000 km per annum and using 53.9 L of diesel per 100 km.

The Scope 2 emissions of 81.42 t CO₂-e / yr will be equivalent to the emissions from approximately 9 average Australian households (where it is assumed that an average Australian household consumes 25 kWh of electricity per day).

The proposed facility is not therefore expected to be a significant contributor to GHG emissions.

1.8 Required Approvals and Licences

A range of approvals and licensing at a state and local level are required for the proposed facility. These range from State Environment Protection Policies to the Penrith Local Environment Plan 1996 (Industrial Land). These regulating policies and documents are extensively addressed in Section 6 - Planning Framework, Approvals and Licencing.

1.9 Mitigation and Management Measures

A range of strategies are to be implemented to manage the potential environmental impacts that could result from the operation. These strategies make up the environmental management plan for the site and include practical pollution control measures as well as quality systems and accompanying procedures and check lists. Mitigation strategies will be implemented from the commencement of work onsite and throughout the operation period as appropriate.

All environmental management procedural strategies will be established prior to operation. All strategies and management measures will be detailed in an Environmental Management Plan to be prepared prior to commencement of operations.

An Environmental Management Plan for the proposal will be drafted once project approvals are in place. This will enable any changes in treatment processes or management of the site as a result of the approvals process to be included.

As a minimum the EMP will include the following:

- Environmental Aspects and Impacts
- Relevant Legislation and Licensing
- The Environment Management plan Process (including daily housekeeping inspection registers, maintenance and log sheets to record plant performance)
- Roles and Responsibilities
- Operational control
- Emergency preparedness
- Monitoring and measurement
- Incident management and corrective actions
- Review periods

2. INTRODUCTION

2.1 Project Summary

No Fuss Liquid Waste Pty Ltd is a family owned and operated company that currently operates a liquid waste removal service trading as No Fuss Liquid Waste Pump outs. The company has a facility for the collection and treatment of septic waste at Emu Plains within the Penrith Local Government Area (LGA). The company also offers grease trap pump out at their existing facility although grease is transferred to an appropriate facility for treatment and is not treated on site. No Fuss Liquid Waste currently treats wastes from their operations site at 10-12 Smith Street, Emu Plains to areas as far as Bondi, Lithgow, Newcastle and Wollongong.

To fulfil a customer demand for the collection and treatment of oily waters, No Fuss has lodged an application with the Department of Planning to operate a separate plant known as a J120 Plant. The J120 Plant will be used in the separation and treatment of oily water and organic wastes. This application relates to the use of this second unit (Unit No. 2), which is situated within the No-Fuss premises, but will be operated separately.

The current No Fuss proposal will have the capacity to treat approximately 2600 tonnes of oily waste water per year. The amount of waste to be treated triggers the need for a Part 3A Approval under Schedule 1 – Project Classes of Development - Group 9 Resource and Waste Related Industries of the *Environmental Planning and Assessment Act, 1979*.

The proposed facility is identified as designated development under Part 1 of Schedule 3 of the Environmental Planning and Assessment Regulations.

2.2 Project Objectives

The proponents of the proposal, No Fuss Liquid Waste Pump outs, have been an active and trail blazing company involved in the treatment and separation of the liquid waste management industry for a number of years. They understand at first hand the issues that arise in the management of liquid wastes.

To this end, there are 4 main stated objectives of the project:

- To fulfil a demand for the collection and treatment of non-hazardous liquid waste products;
- To provide a service to the community (residential and commercial), through the collection and treatment of liquid waste products;
- To ensure liquid wastes are disposed of in an environmentally responsible manner; and
- To operate as a viable and robust business providing revenue in the Penrith region.

2.3 Scope of this Report

The No Fuss proposal once operational will have the capacity to treat approximately 2,600 tonnes of oily waste water per annum. In compliance with the requirement for a Part 3A approval this report has been prepared following the issue of the Director General's Requirements for the project (ref: MP10_0077) as determined under Section 75F(3) of the *Environmental Planning and Assessment Act, 1979*.

The report provides project information including the following:

- A description of the activities proposed to be undertaken at the site;
- A description of the site and surrounding areas;
- The state and regional planning framework as it applies to the proposal;
- Potential environmental impacts likely to arise from the proposed development.
- Measures to mitigate and manage potential impacts; and
- Environmental monitoring and reporting.

At the time of this reports preparation the equipment required to operate the oily waste treatment facility had been installed. The receipt and treatment of oily waste however is not able to commence until project approval is given by the Department of Planning.

3. PROJECT DESCRIPTION

3.1 Development layout

The layout of the proposed development can be summarised as follows:

- Facilities are to be located within an existing L-shaped industrial unit measuring approximately 234.6 sq metres.
- Office space will be provided in an existing office which is internal to the unit located on a mezzanine level.
- A wastewater holding pit, oily water separator, water storage tank, DAF plant, sludge tank and centrifuge will be installed within the unit. These items will be located against the eastern wall of the unit.
- All external areas will be concreted to allow stormwater to be directed to an existing drain.
- One driveway provides access to the site from Smith Street. Hardstand areas for vehicle movement will be located at the site entry point and within designated vehicle manoeuvring areas;
- Car parking spaces for visitor and employee parking will be located in an existing car park adjacent to the entrance of the site (this car park comprises part of the No Fuss waste operations in the adjacent unit).
- Bunding will be provided surrounding the process areas within in the unit.
- Chemicals including caustic, acid and polymer will be stored on site. (no more than 250L of each on-site).

The layout and aerial photograph of the site are depicted in the associated drawings, Figure 2a and 2b respectively in section 3.4 (below). The process photographs are depicted at Appendix K.

3.2 Site operations

The proposed development includes the operation of an oily liquid waste treatment facility which will eventually have the capacity to treat 100,000 litres of liquid waste per day. Initially, however, it is estimated that only around 10,000 litres per day will be treated. Hours of operation and other details are outlined in sections 3.5 – 3.7 below.

No Fuss has undertaken market research and identified potential clients and the types of businesses that require their services. On review of these clients and businesses it may be expected that approximately 50% of the oily waste water received and treated by No Fuss may be classified as 'industrial' in origin. Some of the business types No Fuss may deal with, as identified in the Australian and New Zealand Standard Industrial Classification Business Code, include:

- 115 - Oil and fat manufacturing;
- 185 - Cleaning compound and toiletry preparation manufacturing;
- 189 - Other basic chemical product manufacturing;
- 231 - Motor vehicle and motor vehicle part manufacturing;
- 239 - Other transport equipment manufacturing;
- 259 - Other manufacturing; and
- 760 – Defence bases

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

In addition, No Fuss has identified potential clientele which include cleaning services, car wash companies and colleges/schools. The facility will only be available for the use of EPA registered waste transporters and will not be available to the general public.

All residual liquid waste, once treated, will be removed from the site either to the sewer through a Trade Waste Licence or to a suitably licensed oily waste recycling contractor.

The proposed process is outlined in Section 4.3 (Below).

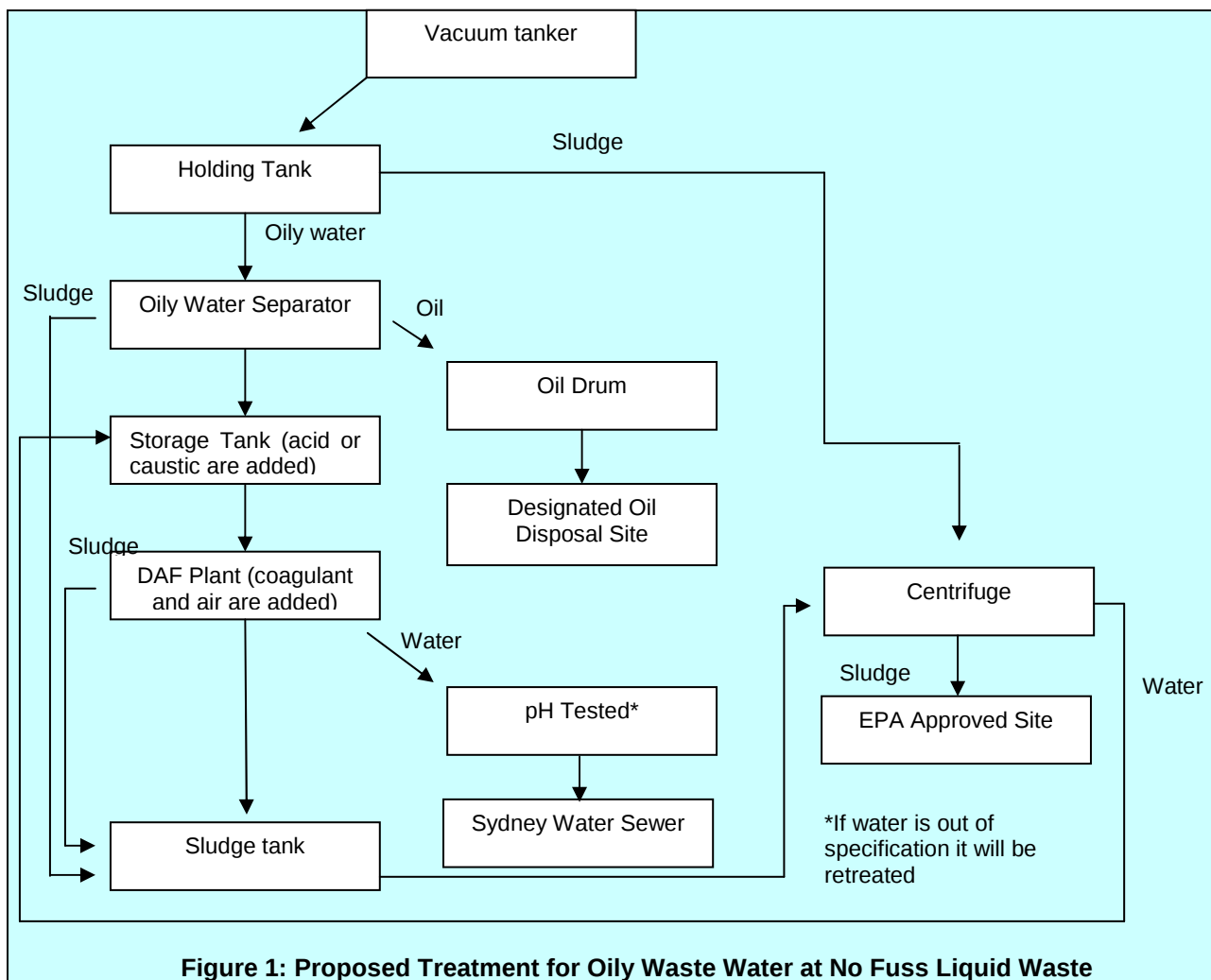
3.3 Oily Water Treatment Process

The following process is proposed for the treatment of oily waste water at the site:

1. Prior to oily waste being accepted at the site, samples are tested (before delivery) to ensure the material is acceptable for treatment. If the waste is being accepted from an existing client testing is conducted on site. A form outlining test parameters is included in Appendix A. If the waste is being accepted from a new client additional testing will be undertaken at an off site NATA accredited laboratory to determine waste composition. Forms outlining parameters for off site testing of composite and discrete samples are included in Appendix B. Wastes that do not meet criteria (as listed in these test forms) will not be permitted to be treated at the site*.
2. Vacuum tankers from various locations will arrive at the site and discharge into a holding tank (capacity 20 000 L). Loads will be scheduled such that similar oily waters will be received and therefore treated as one batch. Distinct and similar oily waters will be treated as individual batches;
3. From the holding tank the waste water will be passed through an oily water separator;
4. Any sludge left in the holding tank will be passed through a centrifuge where it will be spun until dried. This waste will then be disposed at an approved EPA site;
5. From the oily water separator all water will be sent to a storage tank and all oil reticulated to an oil collection system and stored in drums.
6. Once full, the oil drums will be disposed at a designated oil disposal site. However, some of the oil will be recycled;
7. The water in the storage tank will be added with acid or caustic to obtain stable pH levels. The water will then be pumped through the dosing line where polymer is added.
8. After the dosing line, the water is pumped through the DAF unit where coagulant and air are added.
9. The water from the DAF plant will be pH tested at the completion of this treatment step (after coagulant and air are added). Should it not comply with the Sydney Water Trade Waste Licence requirements, the water will be re-treated. Should the pH be in compliance, the water will be discharged to the Sydney Water Sewer;
10. Any sludge from the storage tank or DAF treatment will be sent to the sludge tank;
11. All sludge from the tank will be sent through the centrifuge where it will be spun until dried. Waste will then be removed from site by an appropriately licensed contractor for disposal at an approved EPA site.

*Note that this facility is only seeking approval to operate a J120 Plant and as such will only accept waste classified under this section of the waste classification code.

The process is outlined in Figure 21 below.



3.4 Facility Layout

The proposed oily water waste treatment facility will be installed along the full length of the eastern wall of unit 2. Stage 1 of the process (receiving of oily water to the holding tank) will occur at the southern end of the unit). From here, water will be processed in a northerly direction as the waste is directed through the separator, storage tank and DAF tank. The layout is shown in Figure 2.

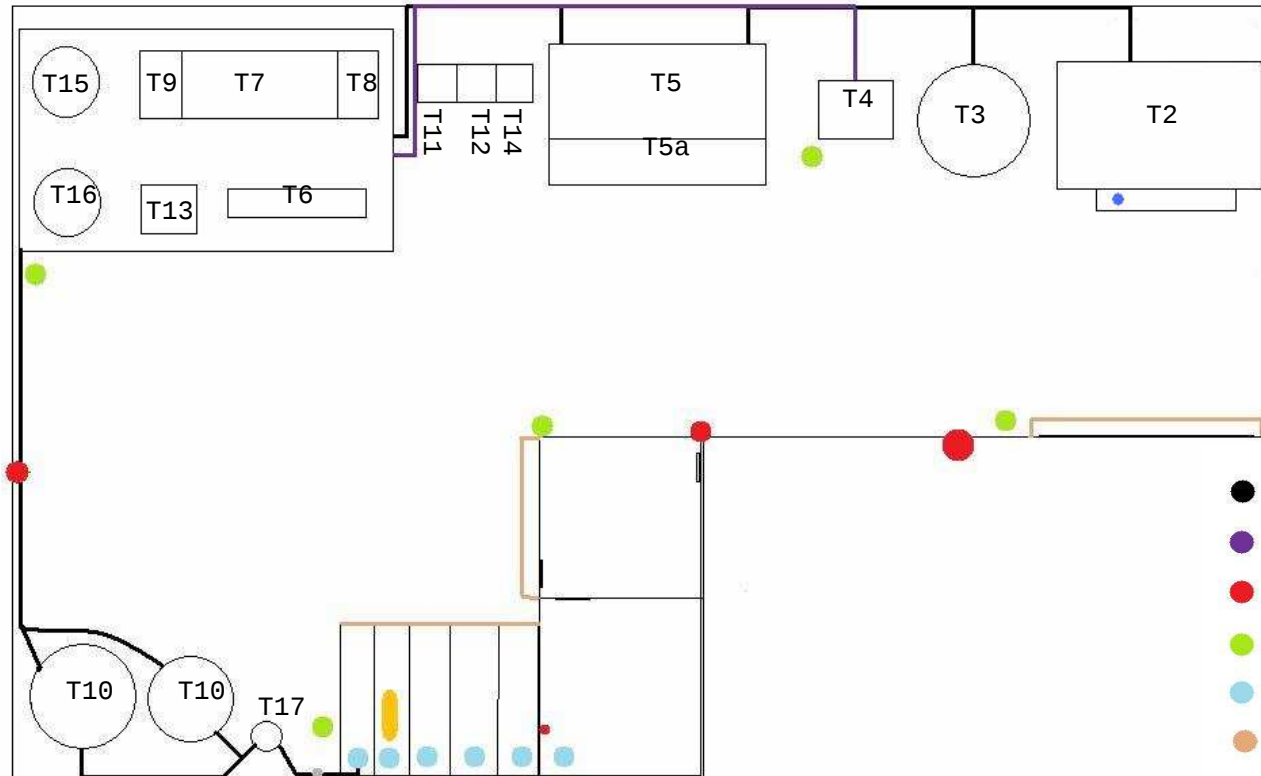


Figure 2a: Site plan for Unit 2/ 10-12 Smith St, Emu Plains

- Main Piping
- Centrifuge Piping
- Fire Safety Equipment
- Spill Kit
- Sewer Access
- Bunding
- Mag-Flow Metre
- Air Compressor
- Sump Pumps
- T2 - Settlement Tank(s)
- T3 - Sludge Tank
- T4 - Centrifuge
- T5 - Oil Separator
- T5a - Waste Oil Tank
- T6 - DAF Reaction Tank
- T7 - DAF Unit
- T8 - DAF Sludge Tank
- T9 - DAF Neutralisation Tank
- T10 - Reuse Tank (s)
- T11 - Chemical Tote
- T12 - Chemical Tote
- T13 - Polymer Tank
- T14 - Chemical Tank
- T15 - Acid Tank
- T16 - Caustic Tank
- T17 - Sample/Site Tank



Figure 2b: Aerial photograph of plant

3.5 Hours of operation

The facility will be able to receive waste between 6.00 am to 6.00 pm, 7 days per week according to demand. The processing of waste will occur between 8:00 am and 6 pm Monday to Friday. Waste delivered before 2.00 pm Monday to Friday would go straight to the treatment facility to allow the treatment process to be completed within the day (i.e. by 6.00 pm). In the case of an emergency call out after hours or on days when the treatment facility is not operating, such as at weekends, the trucks will collect the liquid waste and park at the facility overnight in the designated car park, with the liquid being removed and processed the following work day.

3.6 Employees

There will be a total of three (3) employees working at the site at any one time - a discharge officer, a sales manager and a director. The director' will be responsible for ensuring that all aspects of the plant are running smoothly.

3.7 Facilities

A 234.6 sq metre L-shaped industrial unit is already available onsite. There are no accessible toilet facilities located within the unit; however, as No Fuss rents the property next door (Unit 1) the toilet in this unit will be made accessible to staff. Office space will also be shared with Unit 1. The office is located on the mezzanine floor level within unit 1. No new amenities or restroom facilities are proposed as part of this proposal.

3.8 Servicing

Services to the site currently include power supplied by Integral Energy, telephone, sewerage and water. No upgrades to existing service or new services are required. No gas is used or stored at the premises.

3.9 Consultation

The following stakeholders were consulted as part of this process.

Agency	Contact	Description
Sydney Water	Bob Stoll, Suchitha Sindhe (Commercial and Industrial Customer Services)	Site visit and discussions regarding permitting for tradewaste.
Penrith City Council	Greg Hall	Liaison regarding requirements for development consent. Liaison with respect to the availability of traffic data.
EPA	Tony Hodgson	Site visit and liaison regarding environmental aspects.
Department of Environment and Climate Change	Noel Wriggly	Site visit and liaison regarding Greenhouse gas and carbon environmental aspects.
Department of Planning	Chris Ritchie Ann-Maree Carruthers Emma Barnet Haley Rich	Requirements with regards to assessment process and Director General's requirements.
Roads and Transport Authority		Liaison with regards to the availability of traffic data. This information is presented in section 6.2

4. LOCATION

4.1 Subject site

The subject site is identified as Lot 330 DP 575290, 10-12 Smith Street, Emu Plains and is zoned 4(a) General Industrial under Penrith LEP 1996 (Industrial Land).

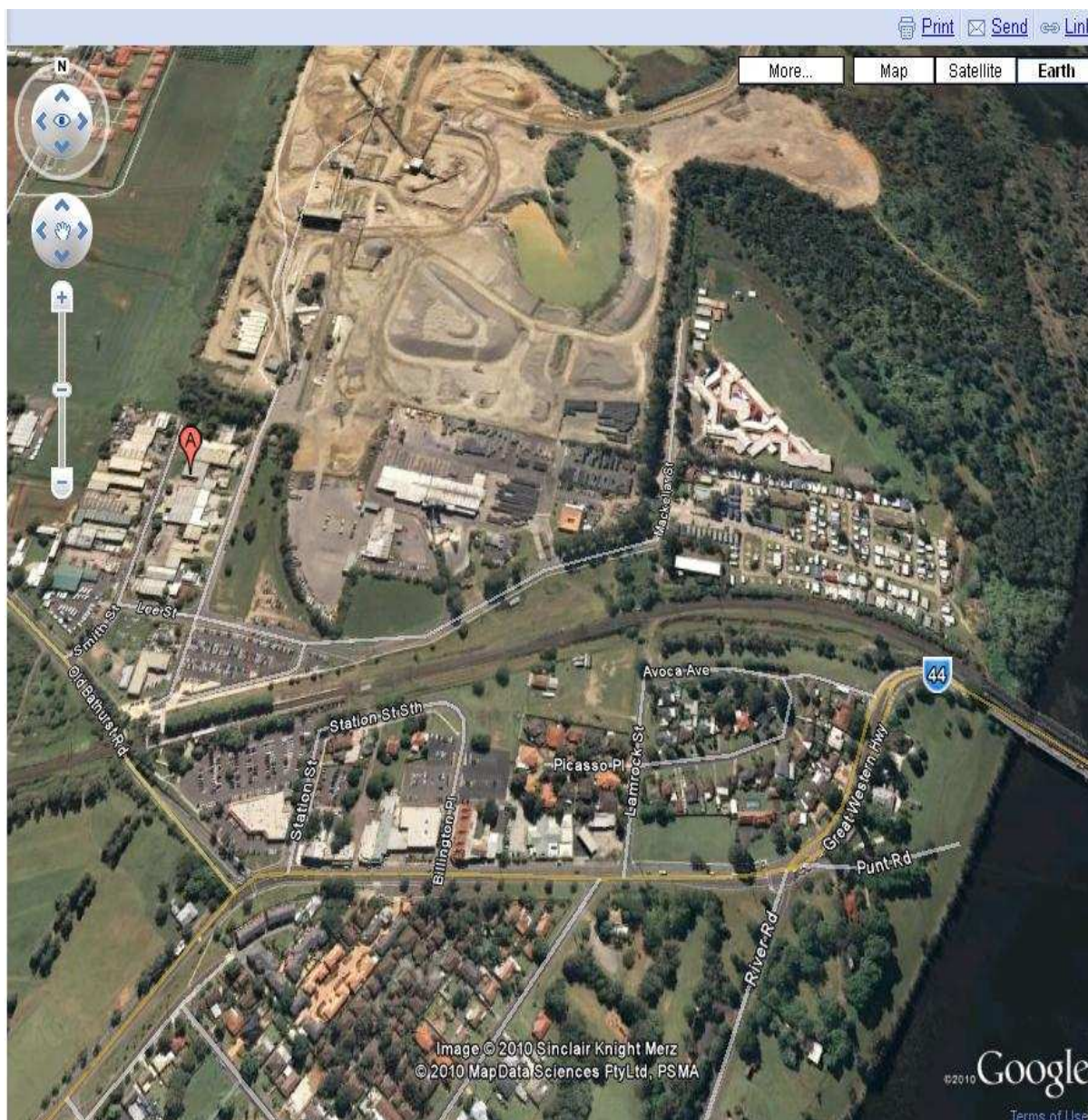


Figure 3: Location of the proposed development, Smith Street Emu Plains

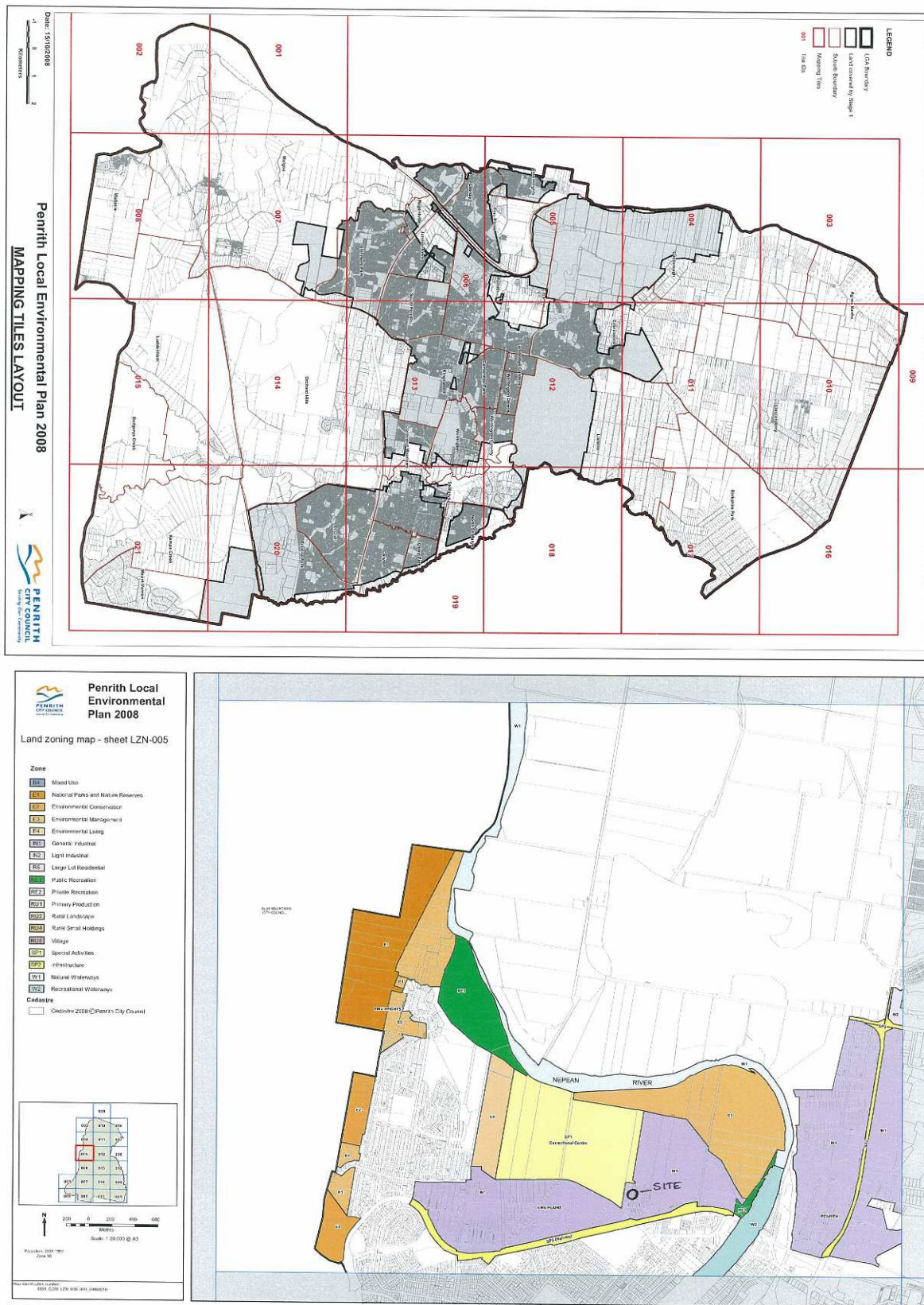


Figure 4: Site Location: Penrith Local Environmental Plans 2008

4.2 Site access

The site is accessible by a wide, sealed road with provision for street parking. Smith Street runs off of Old Bathurst Road and is located within an industrial area of Emu Plains.

4.3 Surrounding lands

The land surrounding the site is generally industrial in nature, with nearby businesses comprising mechanics, smash repairers, diesel spare parts dealers and motorcycle repairers. There is a dwelling at the end of Smith Street, however, this house is used for storage purposes and is not used as residential housing. The Emu Plains Correctional Centre is located on land to the north-west of the site, while land to the north-east is used for quarrying.

4.4 Geology and hydrology

4.4.1 Regional Geology

The geology of the area comprises Quaternary aged Cox's River alluvial deposits of an approximate thickness of 4-5 metres. The alluvial deposits overlie Bringelly Shale.

4.4.2 Depth to Groundwater Table

Information on the depth to groundwater in the vicinity of the site was obtained from the NSW Department of Natural Resources Groundwater Bore Database. A review of the database noted there were a number of registered bores within a 2 km radius of the site (Table 1). The Standing Water Level (i.e. Depth to groundwater (m) below a datum point or reference point, usually from the top of a casing or natural surface) indicated that groundwater in the area is usually encountered at depths greater than 7 metres.

The proposed development and operations, however, are not expected to impact on the groundwater as all processes are completed within a fully enclosed facility which is completely bunded in accordance with Australian Standards. The bund capacity is estimated to contain 100% of any potential major spill.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Table 1: Bore information and groundwater depth in the vicinity of the site (NSW Department of Natural Resources Groundwater Bore Database)

Groundwater No.	Latitude	Longitude	Water Bearing Zones		
			Standing water level (depth from, m)	Standing water level (depth to, m)	Thickness (m)
GW102286	33 44' 31"	150 40' 19"	12.80	15.20	2.40
GW017621	33 44' 37"	150 39' 59"	7.60	9.10	1.50
GW065927	33 44' 31"	150 40' 40"	14.00	15.00	1.00
GW109862	33 44' 48"	150 40' 33"	9.29	-	-
GW109864	33 44' 47"	150 40' 34"	9.63	-	-
GW109863	33 44' 48"	150 40' 34"	9.29	-	-

4.5 Meteorological data

The Bureau of Meteorology has a weather station located at Penrith Lakes (No. 067113), which has been operational since 1995. This is the closest weather to Emu Plains (approximately 3.5 km). Data from this station is considered to be representative for the general rainfall and temperature conditions that could be expected at the site.

Data collected from this station indicates that the mean minimum annual temperature is 12.3 °C and the mean maximum annual temperature 24.5 °C. On average, the mean hottest month is January, and the mean coldest month is July (Table 2). Mean annual rainfall data indicates February is the wettest month (mean: 122.8 mm) and August the driest (mean: 29.4 mm). The mean yearly annual rainfall at the weather station is 699.0 mm (Table 2).

Table 2: Summary statistics for temperature and rainfall at Penrith Lakes AWS (1995-2009)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Temperature													
Mean maximum temperature (°C)	30.7	29.4	27.5	24.5	21.0	18.2	17.7	19.9	23.1	25.8	26.8	29.3	24.5
Mean minimum temperature (°C)	18.3	18.4	16.6	13.0	9.6	6.7	5.4	6.2	9.5	12.1	14.6	16.8	12.3
Rainfall													
Mean rainfall (mm)	91.6	122.8	65.8	38.9	44.5	48.7	31.6	29.4	32.1	58.9	78.6	58.1	699.0

The proposed development and operations are not expected to be impacted by weather conditions as all processes are completed within a fully enclosed building.

5. IDENTIFICATION AND PRIORITISATION OF ISSUES

As part of this EA a qualitative environmental risk assessment was undertaken for the proposed operations.

The assessment was conducted by reviewing the nature of the process and identifying the potential for any environmental impact regardless of the possible frequency of the event. In this way, management strategies to reduce any possible impact can be implemented. Potential impacts are discussed in detail in Section 6 and strategies to mitigate identified impacts are discussed in Section 8.

In order for a practical risk assessment to be formulated SEMF has undertaken a review of other similar operations, environmental licences.

The flowchart generated for the qualitative risk assessment is included below, followed by a more detailed table of potential environmental impacts and related operations.

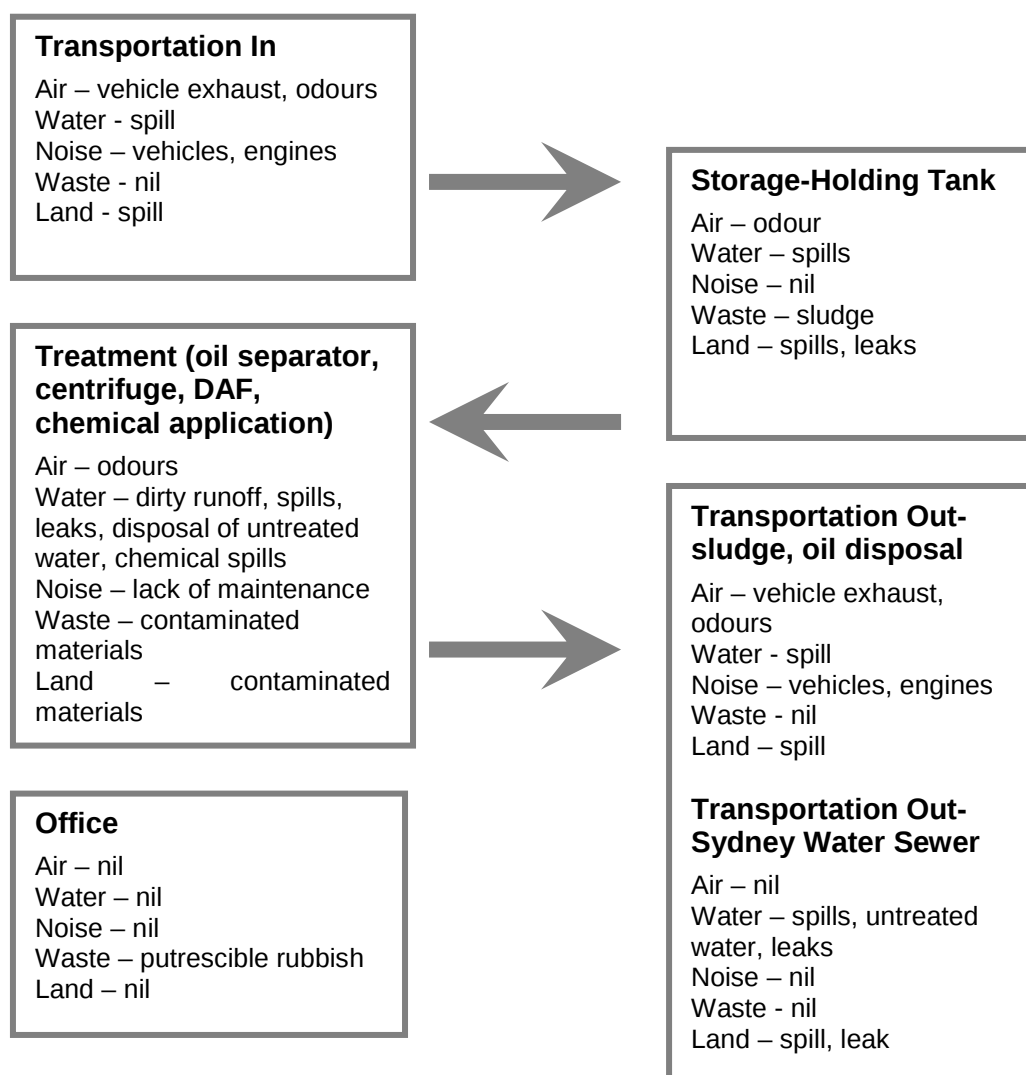


Figure 5: Potential risks and hazards of treatment process

Table 3 below depicts a qualitative risk assessment of environmental impacts of current and proposed No Fuss operations. The environmental risks scenarios are outlined and presented without controls. Mitigation measures are then presented in Section 8.

Table 3: Environmental Risks (without mitigating strategies)

Nature of environmental aspects	Operation	Nature of possible impact
During operation – air	Transportation of waste materials to site	Generation of emissions & odours from vehicles including greenhouse gases
	Treatment process	Generation of odours from waste water and treatment chemicals including greenhouse gases
	Transportation of waste materials from site	Generation of emissions & odours from vehicles including greenhouse gases
During operation – water	Transportation of waste materials to site	Spills of oil or fuel resulting in contaminated stormwater Spill during accident – pollution of soils and water ways Health hazards
	Transportation of waste materials to site	Spills/ leaks of waste from tanker resulting in contaminated stormwater Spill during accident – pollution of soils and water ways Health hazards
	Storage- Holding Tank	Spills or leaks of waste from holding tank resulting in contaminated stormwater or groundwater
	Treatment process	Spills or leaks of waste resulting in contaminated stormwater
	Treatment process	Discharge/ disposal of untreated or incorrectly treated water into sewage system
	Treatment process	Chemical spills resulting in contaminated stormwater
	Transportation of waste materials from site	Spills of oil or fuel resulting in contaminated stormwater
	Transportation of waste materials from site	Spills of waste from tanker resulting in contaminated stormwater
	Transportation of waste materials from site	Incorrect disposal resulting in water pollution
	Offices	Ablutions discharge
During operation – noise	Transportation of waste materials to site	Noise impact on neighbours due to reversing beepers, engine noise
	Treatment process	Noise generated from treatment process, machinery etc.
	Transportation of waste from site	Noise impact on neighbours due to reversing beepers, engine noise

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Nature of environmental aspects	Operation	Nature of possible impact
During operation – waste	Storage/ holding tanks	Generation of waste product, potential contaminated material (sludges/ oil/ water)
	Treatment process	Generation of waste product, potential contaminated material (sludges/ oil/ water)
	Treatment process	Generation of waste from chemical containers
	Offices	Generation of putrescible waste
During operation – land	Transportation of waste materials to site	Spills of waste from tanker resulting in contaminated land
	Transportation of waste materials to site	Spills of oil or fuel resulting in contaminated land
	Storage- Holding Tank	Spills or leaks of waste from holding tank resulting in contaminated land
	Treatment Process	Generation of waste product, potential contaminated material
	Transportation of waste materials from site	Spills of oil or fuel resulting in contaminated land
	Transportation of waste materials from site	Spills of waste from tanker resulting in contaminated land
	Transportation of waste materials from site	Incorrect disposal resulting in contamination

6. ENVIRONMENTAL IMPACTS

6.1 Waste Management

6.1.1 General Waste Management

This EA determined that the No Fuss site is not listed on the contaminated sites register for NSW, there is no history of contamination or previous waste treatment.

There are no further construction activities planned or required to facilitate operation of the site. During the operational phase of the proposed development, small amounts of general liquid and solid waste materials will be generated (process waste is addressed specifically in Section 6.1.2). These may include oils used for equipment maintenance, paints and detergents used for building maintenance and minor amounts of domestic wastes (including office waste).

The company is cognisant that a potential lack of waste classification and segregation on site may result in inappropriate storage and larger landfill areas being required, furthermore, inappropriate waste management may result in impacts to soil and water quality.

Therefore in order to ensure potential environmental risks are mitigated and managed waste will be managed in accordance with the following hierarchy once the facility is operational:

- avoid – prevent the generation of waste;
- reuse – reuse wastes for a productive purpose;
- recovery of energy - use wastes as fuel or energy source where possible;
- treat - prevent or minimise environmental risks before disposal; and
- dispose – deposit wastes to an approved landfill.

Specific waste management requirements for the site will be outlined in the EMP. The following principles will guide development of specific requirements for site waste management:

- selection of products generating the least amount of waste (e.g. packaging);
- segregation of wastes;
- integration of waste minimization into site management and induction processes; and
- recycling of waste where possible.

6.1.2 Process Waste Management

Details of the types of oily waste proposed to be accepted and the oily water treatment process is given in Section 3.3. The treatment process will result in the generation of wastes including water from the DAF plant, oil from the oil/ water separator and sludge from the separator and storage tank.

No Fuss is very conscious that the inappropriate disposal of these wastes may result in impacts on water and soil quality.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

In order to mitigate the potential environmental risks and minimise any soil and water impacts from the disposal of process wastes they will be subject to the following:

- pH testing of all tradewaste water to ensure that parameters are suitable for disposal to Sydney Water.
- Collection and centrifuge of all sludge prior to disposal to an EPA approved site via an appropriately licensed contractor.
- Collection of separated oil in drums for disposal at a licensed oil disposal site by an appropriately licensed contractor.

6.2 Traffic and transport

6.2.1 General

Liquid waste management services are already undertaken at the site and the trucks that will be used for the new facility are those already in use on the adjoining premises. No Fuss currently has four (4) trucks that are used for various pump outs. They range in capacity from 6,000 L to 24,000 L, with each truck designated to a particular waste. At the commencement of operations No Fuss estimate that 1-2 trucks will access the property three times per day to unload (i.e. 3 – 6 truck movements). It takes approximately 15 - 20 minutes to empty a load of liquid waste.

A similar number of trucks visit the adjoining unit. If the operation reaches full capacity of 100,000 litres of liquid waste per day, 3-4 trucks will access the property three times per day to unload.

The three types of trucks accessing the site are as follows:

- an 8.6m Isuzu truck;
- an 8.8m service vehicle; and
- an 11m truck.

6.2.2 Site Access

Access to the site is via Smith Street. Trucks will enter the site from Smith Street after either a left or right hand turn from Old Bathurst Road.

Trucks will enter and exit the property in a forward facing direction. Trucks enter the driveway, turning sharply to the left where there is a grassed area. From there the trucks reverse up to the roller door of unit 2 and proceed inside. Once the truck has finished unloading it will drive forward and exit the property onto Smith Street. Driving patterns for each of the three truck types is provided in Appendix C.

No parking will be provided at the site apart from temporary parking for trucks unloading. Parking for smaller vehicles visiting the facility and overnight parking for trucks is provided at the adjacent facility which is already operational. It is proposed to maintain existing visitor/ staff parking or truck parking, the proposed parking provided at the existing facility is considered sufficient to service the proposed new services.

6.2.3 Traffic Flows and Impact

Both Penrith City Council and the Roads and Traffic Authority were contacted for information relating to existing traffic conditions in the area including traffic counts. Neither agency was able to provide information specific to the area surrounding the site.

In order to provide information on existing traffic flows in the immediate area of the site a traffic volume count was undertaken.

The count was undertaken over a 12 hour period between 6am and 6pm on a weekday for 10 distinct routes for specific vehicle types (cars, trucks and buses). As delivery of waste to the site will generally be between the hours of 8.00 am to 2.00 pm this count period was considered appropriate.

Traffic count results are presented in Table 4. Worksheets generated during the traffic count are given in Appendix D.

Table 4: Traffic Count Results

Route		Cars	Trucks	Buses	Total
1	Exiting Smith Street turning RIGHT onto Old Bathurst Road	550	171	10	731
2	Entering Smith Street from Old Bathurst Road RIGHT	891	173	12	1076
3	Entering Smith Street from Old Bathurst Road LEFT	732	97	18	847
4	Exiting Smith Street turning LEFT onto Old Bathurst Road	951	112	19	1082
5	Entering Lee Street from Smith Street LEFT	1351	218	29	1598
6	Exiting Lee Street turning LEFT onto Smith Street	1332	268	29	1629
7	Entering Lee Street from Smith Street RIGHT	18	4	0	22
8	Exiting Lee Street turning RIGHT onto Smith Street	13	1	0	14
9	Travelling on Smith Street towards Old Bathurst Road SOUTH	169	15	0	184
10	Travelling along Smith Street Past Lee Street intersection NORTH	272	52	1	325

The table indicates the following:

- Total vehicles entering from Old Bathurst Road intersection =1923.
- Total vehicles exiting at Old Bathurst Road intersection = 1813.
- Total vehicles entering Lee Street at intersection = 1620.
- Total vehicles exiting at Lee Street intersection = 1643.
- Total vehicles travelling past Lee Street intersection along Smith Street to the north = 325.
- Total vehicles travelling along Smith Street to the south (prior to intersection) = 184.
- The total number of vehicles travelling on Smith Street in a 12 hour period is 419 (equivalent to 35 vehicles an hour for a two lane road).
- The total number of vehicles travelling on Old Bathurst Road in a 12 hour period is 3736 (equivalent to 311 vehicles an hour for a two lane road).

Discrepancies in the numbers are possibly due to vehicle movements outside of the 12 hour period and differences in vehicles being worked on within the various mechanical repair shops along Smith Street.

The traffic flow is considered to be low and appropriate for the light industrial/ commercial activities in the area. No major queuing or delays were observed during peak hours.

In accordance with Table 4.4 of the *Roads and Traffic Authority's Guide to Traffic Generating Developments, 2002* it is determined that the existing level of service of both Smith Street and Old Bathurst Road are classified as Level A with peak flow being less than 900 vehicles per hour for one lane (Table 5).

Table 5: Urban Road Peak Hour Flows per Direction (RTA, 2002)

Level of Service	One Lane (veh/hr)	Two Lanes (veh/hr)
A	200	900
B	380	1400
C	600	1800
D	900	2200
E	1400	2800

The estimated peak hour traffic generation as a result of the proposed development is 2 vehicle trips per hour (4 trucks visiting the site 3 times a day one the site is at full capacity – a total of 12 truck movements in a 6 hour period from 8am – 2pm). The estimated traffic generated by the proposed development will not alter the level of service of Smith Street or Old Bathurst Road (Table 6).

Table 6: Current and Future Level of Service for Roads near the Proposed Development

Location	Level of Service	
	Current	Future
Smith Street	A	A
Old Bathurst Road	A	A

The estimated peak hour traffic generation rate of 2 vehicle trips per hour is considered to be insignificant compared to the current 35 vehicles per hour on Smith Street and 311 vehicles per hour on Old Bathurst Road. Traffic flow impact from the proposed development is therefore considered to be negligible.

In addition vehicles exiting the site will not cause any delays to traffic as there is sufficient space for trucks to enter and leave the site in a forward direction (Section 6.2.2) and good sight distance is available at the site entrance on Smith Street.

6.3 Noise and Vibration

6.3.1 General

A noise assessment of the proposed development was undertaken by BGMA Pty Ltd acoustical consultants to determine the likely impact of noise from the proposed waste

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

treatment facility on nearby residential and commercial premises. A copy of the noise assessment is provided in Appendix E.

Attended noise monitoring was undertaken at the boundary of No.12 Smith Street to determine background noise levels. Equipment noise monitoring was undertaken within the unit with equipment operational (but without waste). Predictive modelling was undertaken for process noise as waste is not currently able to be processed at the site. Monitoring associated with predicted traffic noise modelling was undertaken within the site with a truck reversing to the waste drop off point.

All monitoring using equipment confirming to the appropriate Australian Standard for sound level meters.

6.3.2 Background Noise Levels and Noise Criteria

Noise levels at the front of the premises the LAeq,15min were measured as being 54 dB. The LA90,15min noise level was assessed to be 48 dB(A). These noise levels would be representative of the frontal exposure of the premises along this portion of Smith Street.

During the assessment of background noise the LAmix noise levels of 74 to 80 dB(A) were observed to be due to passing traffic on Smith Street. The LA01,15min noise levels of 56 to 61 dB(A) were indicative of the workshop noise from other nearby premises. The general LAeq,15min noise level of the area was 53 to 55 dB(A) due to local industry noise.

Modifications are applied relative to an Amenity Noise Level to account for the existing level of environmental noise. Where a site is exposed to constant industrial noise or relatively consistent traffic noise, an Amenity limit is recommended.

If there were nearby residences the criteria would be an acceptable "Intrusive noise limit" of (48+5) or 54 dB(A), but as the only premises nearby are commercial, the "Amenity" noise limit applies. There is a dwelling at the end of Smith Street, however, this house is used for storage purposes and is not used as a residential housing.

The acceptable LAeq, 15min noise limit to nearby premises would be 65 dB(A). The measured LAeq,15min noise level (background noise) was 54 dB(A), which is 11 dB(A) below the recommended 'acceptable' noise limit.

6.3.3 Measured and Predicted Noise from Process Equipment

Noise measurements were carried out within Suite 2, with the equipment operating briefly. These measurements were then used to predict the likely noise impacting on adjacent premises. The predicted levels were based on the process equipment plus an air compressor.

The LAeq noise levels within the facility, with the equipment operating, was 58 to 62 dB(A) inside the building. The LAmix noise levels within the facility, with the equipment operating, was 62 to 64 dB(A) inside the building. Noise break in from general environmental noise of the area produced an internal LAeq noise level of 40 dB(A) with LAmix levels to 50 dB(A). It is assumed that similar noise break in levels are likely to occur in other nearby premises of similar construction.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Due to the proximity of nearby premises, noise breakout via the walls and roof area was assessed. Where buildings immediately adjoin the proposed facility, the noise intrusion into the adjoining premises was assessed.

The building structure of the facility will attenuate the operational L_{Amax} noise levels values to less than 42 dB(A) to the open area to the rear, to less than 34 dB(A) within the premises to the north, and to less than 27 dB(A) to within the premises to the south.

These levels are unlikely to adversely affect these businesses.

6.3.4 Predicted Noise for Mobile Sources (Traffic)

Mobile noise sources are limited to trucks entering the property to unload waste.

Measurements were carried out of one of No Fuss Liquid Waste's truck entering the property. A point was selected 7.5 metres from the semi-circular track of the reversing vehicle. Trucks for the proposed operation will enter in a forward direction, turning into the open area between the front facade of Unit 1 and the front boundary. The trucks will then reverse to the vehicle door to Unit 2, where the trucks will unload by gravity feed.

Trucks associated with the operation of Unit 2 should be no louder than those currently successfully servicing the existing operation in Unit 1, when operating at the front of the property.

When reversing to the unloading point to Suite 2, these trucks are likely to produce L_{Amax} noise levels within the adjacent metal workshop (No.14-16 Smith Street) of less 55 dB(A), from reversing alarms, of less than 39 dB(A) from engine noise, and less than 66 dB(A) from air brake release. Given the short duration of these noise events and the limited number of times per day that they will occur, these levels are unlikely to adversely affect adjacent businesses.

6.4 Visual impacts

The proposed development will be located within the confines of Unit 2 which already exists on site. The proposal therefore is not expected to result in any negative visual impact to the area.

6.5 Air quality impacts

6.5.1 General

Air pollutants from the proposed facility will be limited to those associated with combustion engines and will be released in limited concentrations during the operation of vehicles and mobile equipment. Due to the low levels of emissions these are not considered to be significant.

Exhausts from pumps will also contribute similar emissions, however, these will be minimal and contained within the facility. No emissions will be vented to the atmosphere.

Impacts associated with greenhouse gases are discussed in Section 9.9. Impacts associated with odour are discussed in Section 6.5.2.

6.5.2 Odour

An assessment of potential odour impacts from the proposed facility was undertaken by Terry Schulz from The Odour Unit in July 2010. Qualitative assessment was undertaken as the plant is not able to begin operation until project approval is obtained. The odour assessment was conducted based on the experience and knowledge of Terry Schulz, who is the odour consultant and has 25 years experience in wastewater treatment.

A visit to the site and review of information regarding the proposal identified the following main odour sources:

- the Holding Tank (particularly during filling);
- the Oily Water Separator;
- the Storage Tank;
- the DAF unit;
- and the Sludge Tank.

The holding tank is considered to be the predominant odour source on site.

All operations would occur inside an existing unit and no specific external venting is provided. The factory unit is not sealed and gaps occur between the roof and walls which may allow fugitive odours to escape. In addition a roller door enabling the entry of trucks to the facility is located adjacent to the Holding Tank which may result in short term odour emissions while the roller door is open.

Although odours may be generated by the treatment of oily waste this is not considered significant when compared to potential odours generated from the treatment of septic waste at the adjacent site. From discussions with neighbouring operations and other stakeholders it is understood that the existing operation does not cause significant adverse odour impacts beyond the industrial area.

Once the plant is commissioned SEMF is proposing to undertake two monitoring cycles (1st cycle: 10 – 15 weeks after plant is in operation and 2nd cycle: 8 months after 1st cycle). This will be conducted at various locations around the facility during normal business hours by a qualified odour consultant. (refer Appendix J) Four locations were chosen which covers the boundaries around the source of odour (point S). In addition, these locations were chosen since employees or visitors would generally be around those locations during business hours. Depending on the results of the odour monitoring cycles No Fuss would install a bioreactor (any odour would be captured within one small unit inside the facility and one large unit outside the facility). Approximate distances of the proposed locations from the source of odour (point S) are shown in Appendix J.

The odour assessment recommended a number of management practices to reduce odour and these are outlined in Section 8.1.

A copy of the odour quality assessment is provided in Appendix F.

6.6 Water Quality/ Stormwater

6.6.1 General

Water on site can be classified into two management streams according to source.

- Water from the impermeable areas including the roof and forecourt.
- Process water (including wash down water and spills).

Water from the roof and paved forecourt areas will be directed to the existing stormwater collection system installed during the development of the units. This water is generally considered to be clean and will be re-used on site for non-potable purposes.

Process water including any spills and water utilised to washdown the facility/ washing equipment and floors will be contained and directed to the holding tank for treatment through the facility. Process water will be contained via the sealed walls of the unit and a speed hump at the entrance to the unit which will act as a bund.

6.6.2 Site Water Balance

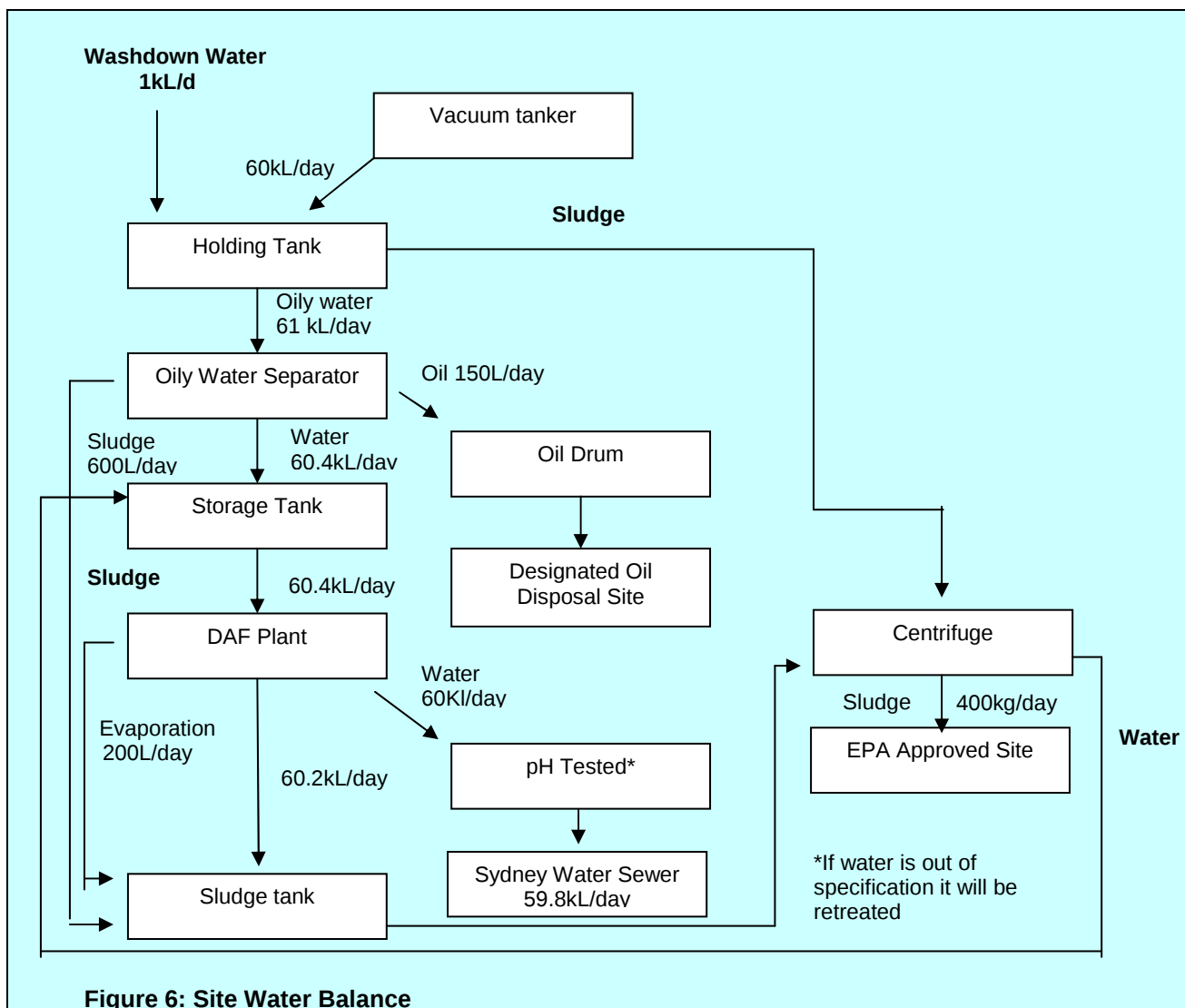
A site water balance was undertaken for the facility by SEMF in 2010. Discussions with the site owners and existing infrastructure constraints provided an indication of water inputs and outputs.

The following assumptions were used:

- 30kL/ month of fresh water will be used for plant washdown. This is based on existing freshwater usage for the adjacent operational unit and water usage for the new facility is assumed to be similar. This equates to 1kL/ day of washdown water.
- Waste collection tankers deliver 60kL/day to the facility.
- 150L/day oil is collected through the oily water separator.
- 400kg of solids per day are removed from the system to an approved disposal site (800L equivalent)
- 200L/day is lost through evaporation from the DAF Plant due to the use of warm compressed air as part of the DAF process.
- The remaining treated water will be sent to sewer through existing pipework. All existing pipework has been designed to meet the discharge rates approved by Sydney Water. Water passing through the discharge system is tested prior to release and recirculated through the facility if needed.

Figure 6 shows a schematic diagram describing the use of water within the facility.

The site water balance indicates that a total of 59.8kL/day will be discharged from the site. It should be noted that although fresh water may be used for plant washdown, a stormwater collection system is operational on site and stormwater will be used for washdown where possible.



6.7 Greenhouse Gases

A greenhouse gas assessment was undertaken for the proposed development. The assessment used predictive modelling and included a quantitative analysis of scope 1 and scope 2 emissions.

Emissions were determined using documentation for the 2010 – 2011 financial year and methodology as specified in the *National Greenhouse and Energy Reporting Act (2007)* and associated guidelines. Tables detailing the operational scope 1 and scope 2 emissions, operational total energy consumption, operational energy production and construction GHG emissions and energy consumption is provided in the Greenhouse Gas Assessment report (Appendix G).

The greenhouse gas assessment indicates that the construction and operation of the proposed facility will result in an increase in Scope 1 and 2 GHG emissions. The Scope 1 emissions associated with the construction phase are estimated to be 106.99 t CO₂-e / yr, which is approximately equal to 36.7% of the emissions of a large articulated truck traveling 200,000 km per annum and using 53.9 L of diesel per 100 km. The Scope 1 emissions

associated with operation are estimated to be 10.793 t CO₂-e / yr, which is approximately equal to 3.7% of the emissions of a large articulated truck traveling 200,000 km per annum and using 53.9 L of diesel per 100 km.

The Scope 2 emissions of 81.42 t CO₂-e / yr will be equivalent to the emissions from approximately 9 average Australian households (where it is assumed that an average Australian household consumes 25 kWh of electricity per day).

The proposed facility is not therefore expected to be a significant contributor to GHG emissions.

The overall energy consumed in the operation of the plant is expected to be less than the embodied energy in the oil produced. The facility therefore has the potential to be energy negative if the recycled fuel off-sets the use of “newly” generated fossil fuel. An additional environmental benefit is achieved by removing the oil and sludge from streams that could otherwise be disposed of directly as trade waste.

7. PLANNING FRAMEWORK, APPROVALS AND LICENCING

7.1 State and Regional Planning Framework

The No Fuss operations are regulated by a number of NSW Environmental and Planning statutes. These are outlined below.

7.1.1 State Environmental Planning Policy (Major Development) 2005

The State Environmental Planning Policy (Major Developments) 2005 lists the following aims:

- (a) to identify development to which the development assessment and approval process under Part 3A of the Act applies,*
- (b) to identify any such development that is a critical infrastructure project for the purposes of Part 3A of the Act,*
- (c) to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State,*
- (d) to facilitate service delivery outcomes for a range of public services and to provide for the development of major sites for a public purpose or redevelopment of major sites no longer appropriate or suitable for public purposes,*
- (e) to rationalise and clarify the provisions making the Minister the approval authority for development and sites of State significance, and to keep those provisions under review so that the approval process is devolved to councils when State planning objectives have been achieved,*
- (f) to identify development for which regional panels are to exercise specified consent authority functions.*

In regards to the proposed development by No Fuss Liquid Waste, the definitions and applicability to part 3A of the Act must be considered. Definitions of development applicable under Part 3A of the Act have been included within Schedule 1- Project Classes of Development and the following group identified as potentially relevant to the proposal:

Group 9 Resource and waste related industries

27 Resource recovery or waste facilities

(1) Development for the purpose of regional putrescible landfills or an extension to a regional putrescible landfill that:

- (a) has a capacity to receive more than 75,000 tonnes per year of putrescible waste, or*
- (b) has a capacity to receive more than 650,000 tonnes of putrescible waste over the life of the site,*

or

(c) is located in an environmentally sensitive area of State significance.

(2) Development for the purpose of waste transfer stations in metropolitan areas of the Sydney region that handle more than 75,000 tonnes per year of waste.

(3) Development for the purpose of resource recovery or recycling facilities that handle more than 75,000 tonnes per year of waste or have a capital investment value of more than \$30 million.

(4) Development for the purpose of waste incineration that handles more than 1,000 tonnes per year of waste.

(5) Development for the purpose of hazardous waste facilities that transfer, store or dispose of solid or liquid waste classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste that handles more than 1,000 tonnes per year of waste.

(6) Development for the purpose of any other liquid waste depot that treats, stores or disposes of industrial liquid waste and:

(a) handles more than 10,000 tonnes per year of liquid food or grease trap waste, or

(b) handles more than 1,000 tonnes per year of other aqueous or non-aqueous liquid industrial waste.

The proposed development will have the capacity to treat 100,000 litres (approximately 100 tonnes) of liquid waste daily, however, it is not estimated that the plant will operate at this capacity in the foreseeable future. The estimated amount that is actually expected to be received and treated is in the order of 10,000 litres (approximately 10 tonnes) daily, at least for 1-2 years. The volume to be received is limited by the hours of proposed operation and the ability of No Fuss to treat the material in this time frame.

At 10,000 litres per day (approx 10 tonnes) over 5 days in a 52 week year a total of 2600 tonnes of oily waste water will be handled and treated. This triggers that consideration of this project requires Part 3A approval.

7.1.2 State Environmental Planning Policy No. 33- Hazardous and Offensive Development

The State Environmental Planning Policy No. 33- Hazardous and Offensive Development lists the following aims:

(a) to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and

(b) to render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the ground that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy, and

(c) to require development consent for hazardous or offensive development proposed to be carried out in the Western Division, and

(d) to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and

(e) to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and

(f) to require the advertising of applications to carry out any such development.

The following definitions are applicable to the Policy:

Hazardous industry means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would pose a significant risk in relation to the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment.

Offensive industry means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.

Providing the outlined mitigation strategies and management plan are implemented, the operation of the plant is not expected to pose a significant risk to human health or the environment or produce offensive discharges.

An assessment of environmental risk was undertaken as part of the preparation of this report for the proposed development (see Section 5).

The assessment was conducted by reviewing the nature of the process and identifying the potential for any environmental impact regardless of the possible frequency of the event. In this way, mitigation strategies to reduce any possible impact can be implemented. Potential impacts are discussed in detail in Section 6 and strategies to mitigate impacts are discussed in Section 8.

The outcomes of the assessment indicate that the development would not pose a *significant* risk in relation to human health, life, property or the biophysical environment if it were to operate without employing any mitigating measures. Hence the development would not be defined as potentially hazardous or offensive industry under the provisions of SEPP 33.

7.1.3 Ecological Sustainability: -

The “principles of ecologically sustainable development” as stated in schedule 2 of the Environmental Planning and Assessment Regulation 1994 are listed below;

- a) The precautionary principle - namely that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation,
- b) Inter-generational equity - namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations,
- c) Conservation of biological diversity and ecological integrity, and
- d) Improved valuation of pricing of environmental resources.

This EA has been developed in recognition of the principles of Ecologically Sustainable Development.

7.1.4 Indicative Statutory Requirements: -

The following listing provides environmental issue-based groupings of legislation commonly applicable to road construction projects in NSW.

Commonwealth Statutes:

- National Environment Protection Council (NEPC) which is tasked nationally with developing ambient air, marine, estuarine and fresh water quality standards, as well as implementing, monitoring and enforcing these measures.
- The Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds and Birds in danger of Extinction and their Environment (JAMBA);
- The Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment (CAMBA);
- The Convention on Wetlands of International Importance, especially as waterfowl habitat (the RAMSAR Convention);
- Convention on Biological Diversity (1992)

Environmental Issue	Legislation
Vegetation	Native Vegetation Conservation Act 1997
Hazardous Materials Management	Dangerous Goods Act 1975
	Environmentally Hazardous Chemicals Act 1985
	Environmentally Hazardous Chemicals (Amendment) Act, 1996
Aboriginal	Aboriginal Land Rights Act 1983
Pollution	Protection of the Environment Operations Act, 1997
Weed, Pest and disease control	Noxious Weeds Act (1993)
	Noxious Weeds Amendment Bill 1996
	Pesticides Act 1978
Runoff, Erosion and Sediment control	Rivers & Foreshores Improvement Act (1948), Amendments sec.23A (1992), as well as The Fish Habitat protection Plan No.2.
Fauna and Planning	Environmental Planning and Assessment Act 1979
	Threatened Species Conservation Act 1995
	National Parks & Wildlife Act (1974)

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Environmental Issue	Legislation
	Fisheries Management Amendment Act 1997
Heritage	Heritage Act 1977; Heritage Amendment Act 1998
Soil management	Contaminated Land Management Act, 1995
	Amendment (Contaminated Land) Act 1996
Noise and Vibration	Noise Control Act 1975
	Noise Control (General) Regulations 1995
	Noise Control (Miscellaneous Articles) Regulation 1995
Ozone Depleting Substances	Ozone Protection Act 1989
Air Quality	Pollution Control Amendment Act (1996)
Waste Management	Waste Minimisation and Management Act 1995
	Draft Hazardous Waste Definition and Draft Environmental Guidelines: Solid Waste Assessment.
Water Quality	Water Act (1912)

7.1.5 State Environment Planning Policies (SEPPs)

- **SEPP-14** Coastal Wetlands SEPP 14 (Coastal Wetlands) was created in 1985 to conserve wetlands in the face of escalating development pressure on the coast, especially the north coast. SEPP 14 requires the consent of the relevant local council and the concurrence of the Director-General of the DECC before a listed wetland can be destroyed, damaged or modified.
- **SEPP – 55** Managing Land Contamination

7.1.6 Sydney Regional Environmental Plans

The Sydney Regional Environmental Plans were reviewed but found not to be applicable to the development.

The most relevant Plan was the Sydney Regional Plan No. 20 – Hawkesbury Nepean. This Plan applies to certain land in the Greater Metropolitan Region that is within the following local government areas:

Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Hornsby, Ku-ring-gai, Liverpool, Penrith, Pittwater, Warringah, Wollondilly.

The aim of this Plan is to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.

7.2 Local Planning Framework

7.2.1 Penrith Local Environment Plan 1996 (Industrial Land)

The subject site is zoned 4(a) General Industry Zone pursuant to Penrith Local Environmental Plan Industrial Land.

The objectives of the 4(a) General Industry zone are -

- I. to encourage a diversity of industrial employment generating activities; and*
- II. to promote development which observes responsible, and environmentally sound, management practices; and*
- III. to promote development which makes efficient use of industrial land; and*
- IV. to permit development which serves the daily convenience needs of persons working within industrial areas; and*
- V. to permit development for the purpose of recreational facilities, child care centres or community facilities to serve the need of the workforce of the industrial areas and adjacent residential communities; and*
- VI. to promote development of land with frontage to Castlereagh Road, Old Bathurst Road and Christie Street which, by its architectural and landscape design, will enhance their gateway entry roles to the City of Penrith; and*
- VII. to prohibit development of land for any purpose if the development will:*
 - (a) have direct vehicular access between that land and Castlereagh Road or Parker Street, and*
 - (b) Significantly affect the function, efficiency and safety of Castlereagh Road or Parker Street.*

The proposed waste treatment facility is defined as an industry pursuant to Penrith Local Environmental Plan- Industrial Land as:

“an undertaking involving the manufacturing, assembling, altering, repairing, renovating, ornamenting, finishing, cleaning, washing, processing, treating or adapting of any goods or articles for commercial purposes”

Industries, as the one proposed, are permissible with consent within the 4(a) General Industry Zone subject to development consent.

The proposed facility satisfies the objectives of the zone by:

- adding to the diversity of the industries in the area,
- being a development which promotes responsible, and environmentally sound, management practices; and
- providing a service to the community

The following land use table (Table 3) applies to the 4(a) General Industry Zone

Table 7: Development Control Table- Penrith LEP 1996 (Industrial Land)

Consent requirements	Uses
Without development Consent	Nil
Only with development consent	<i>Any land use other than those included in Item (b)(iii) "Prohibited"</i>
Prohibited (b) (iii)	• <i>Advertisements of a type, form or size listed in schedule 2 visible outside of the site on or from which they are displayed or controlled,</i> • <i>amusement parks,</i> • <i>boarding houses,</i> • <i>camp or caravan sites,</i> • <i>dwellings (other than those used in conjunction with another land use that is not prohibited in this zone and situated on the land on which the other use is conducted),</i> • <i>extractive industries,</i> • <i>general stores,</i> • <i>offensive or hazardous storage establishments,</i> • <i>office premises (other than those ancillary to, and used in conjunction with, another land use that is not prohibited in this zone),</i> • <i>restaurants,</i> • <i>shops (other than convenience stores, corner shops, fast food take-away restaurants and take-away food shops),</i> • <i>shops trading principally in bulky goods or those trading in motor parts and accessories, including marine vessel parts and accessories,</i> • <i>waste disposal</i>

7.2.2 Draft Environmental Planning Instruments

There are two (2) known draft Environmental Planning Instruments:

- Draft Penrith LEP 2008
- Draft Penrith DCP 2008

Both are still in draft form and yet to be gazetted. There are no changes or restrictions to the proposed wastewater plant within these drafts.

Prior to 1996 Penrith City Council had around 20 major DCPs and 85 site specific DCPs covering land within the City of Penrith. Since this time, Council have taken steps in consolidating these documents into one and thus have developed the Penrith Development Control Plan (DCP) 2006.

The purpose of this plan is:

- a. To consolidate Council's existing, adopted development control plans and its key codes and policies that apply to development in the City of Penrith;*
- b. To give detailed guidance to people wishing to carry out development within the City of Penrith;*
- c. To ensure relevant, high quality information is submitted with development applications; and*
- d. To ensure the quality of development in the City of Penrith is of a high standard.*

No Fuss Pty Ltd's proposed development is subject to the provisions of a number of sections within Penrith's Development Control Plan (2006). Sections applicable with regards to the development application are summarised in Sections below.

7.3 Development Control Plans

7.3.1 Penrith DCP 2006 – Section 2.1 Contaminated Land

The purpose of this part of the Plan is to act as a practical guide for all involved with developments and recognises Council's responsibilities under relevant legislation.

Contaminated land is: land in, on or under which any substance is present at a concentration above that naturally present in, on or under the land and that poses, or is likely to pose, an immediate or long term risk to human health or the environment.

Council will fully consider the possibility of land contamination and will accordingly proceed with development applications according to its usual practice if the site has been proven suitable for the proposed uses without need of further testing or treatment.

There was no recognition that a contaminated site assessment was required. The industrial unit to house the water treatment facility is already in place with concrete floors. Any contamination from previous operations would be restricted to the concrete floor and would pose little issue to the environment.

7.3.2 Penrith DCP 2006 – Section 2.6 Landscape

The proposed development is subject to the provisions identified in section 2.6 of the Penrith DCP- Landscaping. The industrial units housing the proposed development are already in place; therefore, a requirement for landscaping is not required.

7.3.3 Penrith DCP 2006 – Section 2.8 Register of Significant Trees and Gardens

This part of the Plan assists with the conservation of Penrith's significant trees and gardens by complimenting the Tree Preservation Order and the Heritage Local Environmental Plan.

There are no significant trees or gardens located on or near the proposed development.

7.3.4 Penrith DCP 2006 – Section 2.9 Waste Planning

The proposed development is subject to the provisions identified in section 2.9 of the Penrith DCP- Waste Planning. The key objectives to this part of the plan are to:

- 1. Minimise the volume of waste generated during the demolition, construction and ongoing use of a premise;*
- 2. Encourage development, which facilitates ongoing waste avoidance and complements waste services offered by both Council and private contractors;*
- 3. Maximise the re-use and recycling of building and construction materials, industrial, commercial and household generated wastes;*
- 4. Encourage building designs and construction techniques that minimise waste generation;*
- 5. Provide advice to applicants seeking development approval; and*
- 6. Support the principles of Ecologically Sustainable Development.*

The nature of the facility and its operations is for the proactive management of liquid wastes through their treatment and disposal. Waste management systems have been established prior to operations:

- Water to sewer
- Oil
- Sludge

All works will be internal to the industrial unit.

7.3.5 Penrith DCP 2006 Section – 4.1 Industrial Land

The proposed development is subject to the provisions identified in section 4.1 of the Penrith DCP- Industrial Land. The key objectives to this part of the plan are to:

- (a) Provide clearer guidance and certainty to industry, employers and investors regarding Council's requirements;*
- (b) Assist in the promotion and development of Penrith's established industrial land;*
- (c) Promote industrial development which can operate in a functional and safe manner;*
- (d) Ensure the orderly provision of services and infrastructure to meet the needs of development;*
- (e) Ensure that development of land to which this section applies will not significantly affect the function, efficiency and safety of the road network particularly Castlereagh Road, the Great Western Highway, Mulgoa Road and Parker Street;*
- (f) Promote development of a visually attractive form, design and scale, where urban elements and built forms are integrated with the existing environment; and*
- (g) Promote development that is consistent with Council's vision for the region, namely one where a harmony of urban and rural qualities exists, and with a strong commitment to environmental protection and enhancement.*

7.3.6 Penrith DCP 2006 – Section 6.9 Emu Plains Commercial Area

Part 6 of the Penrith DCP 2006 includes a range of specific development controls that apply to particular sites and areas within the City of Penrith, and includes Council's Urban Release Areas.

Development in the Emu Plains Commercial Area is covered in Section 6.9, however, this section applies to land at Emu Plains, bounded by Old Bathurst Road, the Great Western Highway, Lamrock Street and the Western Railway. This is therefore outside of the area of the proposed development at Smith Street.

7.4 Licensing Requirements

7.4.1 The Protection of the Environment Operations Act 1997 (POEO Act)

The Protection of the Environment Operations Act 1997 sets out requirements for the licensing of activities by the Environment Protection Authority (EPA). Licenses are imposed on operations to ensure that environmental impacts are kept to a minimum and agreed conditions adhered to. Not all operations however, are licensed by the EPA. Local Councils may have this jurisdiction instead. The overseeing body is defined through Schedule 1 of the Act setting out the criteria for operations requiring an EPA license.

In regards to waste management facilities, the need for an EPA license is determined by the nature of the waste received, the annual quantity of waste to be handled and the location of the facility in regards to environmentally sensitive areas.

Schedule 1 of the POEO Act outlines the operations that need to be licensed. As this proposed facility intends to handle liquid wastes it requires a license.

The DECCW have been approached and are aware of the proposal.

7.4.2 Trade Waste Permit

A trade waste permit is currently in place for the adjacent septic treatment facility. Discussions with Sydney Water indicate that the current permit would be amended to include the proposed oily waste treatment facility.

A draft copy of the permit is provided in Appendix H. The new permit will be issued by Sydney Water once project approval has been received.

8. STATEMENT OF COMMITMENTS

8.1 Commitments to Mitigate Environmental Aspects

A range of strategies are to be implemented to manage the potential environmental impacts that could result from the operation. These strategies make up the environmental management plan for the site and include practical pollution control measures as well as quality systems and accompanying procedures and check lists. The following table lists the mitigation strategies proposed.

Table 8: Commitments to Mitigate Environmental Risks

Nature of risk	Operation	Nature of possible impact	Commitments
During operation – Air	Transportation of materials to site	Generation of emissions & odours from vehicles	Contractors to be required to service and maintain vehicles. Vehicles found to be polluting will not be permitted on site. The roller door will be closed when trucks are not unloading. Using renewable energy sources such as bio-diesel or a diesel/ethanol blend in the place of 100% fossil fuel diesel oil, Using lower emitting fuels such as LPG, CNG or LNG. This option is less desirable to the capital expense of retrofitting trucks.
	Unloading of waste to Holding Tank	Short term odour emissions from open roller door	The roller door will be closed when trucks are not unloading. Tanks will be emptied of sludge to a designated depth to minimize odour generation.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Nature of risk	Operation	Nature of possible impact	Commitments
	Treatment process	Generation of odours from waste water and treatment chemicals. Generation of emissions	All gaps between walls and the roof of unit will be sealed prior to commencement of operation. The treatment plant will undergo preventative maintenance regularly to ensure optimal working conditions. This is conducted every Friday afternoon when the site is closed. This would involve checking and cleaning of all pipes, hoses, tanks, DAF unit etc. The use of odour neutralizing products with proven performance in the oily water industry will be investigated. Two rounds of monitoring events by a qualified odour consultant. 1st round would be conducted 10 to 15 weeks after the plant is operational. 2nd round would be conducted 8 months after the 1st round. The proposed locations are shown in Appendix F2. Alternatively, bioreactors could be installed inside and outside the facility if required depending on the results of the monitoring rounds. Using locally generated renewable electricity in place of grid purchased electricity, such as PV solar panels. Using purchase of Greenpower from the grid.
During operation – water	Transportation of materials to site	Spills of oil, fuel and waste resulting in contaminated stormwater	Spill kits will be required to be carried in all transport vehicles. Only EAP or suitably licensed vehicle operators with appropriately serviced and maintained vehicles will be used.
	Storage - Holding Tank	Spills or leaks of waste from holding tank resulting in contaminated stormwater or groundwater	Bunding will be utilized to prevent outflow of spillage from the unit and the walls of the unit will be maintained to ensure they remain sealed. Spill kits will be provided within the facility. The holding tank will be inspected regularly to ensure no leakage.
	Treatment process	Spills or leaks of waste resulting in contaminated stormwater Chemical spills resulting in contaminated stormwater	Bunding will be utilized to prevent outflow of spillage from the unit and the walls of the unit will be maintained to ensure they remain sealed. Spill kits will be provided within the facility.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Nature of risk	Operation	Nature of possible impact	Commitments
	Treatment process	Discharge/ disposal of untreated or incorrectly treated water into sewage system	Company QA/QC procedures will be detailed in an EMP for the facility. All treatment to be undertaken by experienced employees with regular refresher training provided. The treatment system will include a VOC Alert trigger facility.
	Transportation of materials from site	Spills of oil, fuel and waste resulting in contaminated stormwater	Spill kits will be required to be carried in all transport vehicles. Only suitably licensed vehicle operators with appropriately serviced and maintained vehicles will be used.
	Transportation of materials from site	Incorrect disposal resulting in pollution of waters	All waste is classified as per DEC waste classification guidelines with a docket system in place to ensure disposal to an appropriate disposal facility. Company QA/QC procedures will be detailed in an EMP for the facility.
	Offices	Amenity discharge	All toilets and wash facilities will be connected to sewer.
During operation - noise	Transportation of waste materials to site	Noise impact on neighbours due to reversing beepers, engine noise	Deliveries will only occur between 6am and 6pm.
	Treatment process	Noise generated from pre-treatment process, machinery etc.	Operations will inside fully an enclosed building with all processing occurring between 8am and 6pm Monday to Friday. Equipment will be maintained in good working order
During operation – waste	Treatment process	Generation of waste product, potential contaminated material (Sludge/oil/water) Generation of waste from chemical containers	All waste materials accepted for treatment will be pre-tested to ensure suitability for processing. Waste not meeting acceptable description, waste disposal to appropriate facilities, All waste to be disposed of off site will be suitably classified prior to removal off site to a suitable facility.
	Storage-Holding tank	Generation of waste product	All waste to be disposed of off site will be suitably classified prior to removal off site to a suitable facility.
	Transportation of waste materials from site	Incorrect disposal resulting in contamination	All waste to be disposed of off site will be suitably classified prior to removal off site to a suitable facility.

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

Nature of risk	Operation	Nature of possible impact	Commitments
	Offices	Generation of putrescible waste	All waste to be disposed of off site will be suitably classified prior to removal off site to a suitable facility.
During operation – land	Transportation of waste materials to site	Traffic impact to Smith Street from vehicles entering and existing site	All vehicles to enter and exit site in a forward manner using the vehicle turning patterns identified in Appendix C.
	Transportation of waste materials to site	Spills of oil, fuel and waste resulting in contaminated land	Spill kits will be required to be carried in all transport vehicles. Only suitably licensed vehicle operators with appropriately serviced and maintained vehicles will be used.
	Storage- Holding Tank	Spills or leaks of waste from holding tank resulting in contaminated land	Bunding will be utilized to prevent outflow of spillage from the unit and the walls of the unit will be maintained to ensure they remain sealed. Spill kits will be provided within the facility.
	Treatment process	Generation of waste product, potential contaminated material	All waste materials accepted for treatment will be pre-tested to ensure suitability for processing. Waste not meeting acceptable description, waste disposal to appropriate facilities, All waste to be disposed of off site will be suitably classified prior to removal off site to a suitable facility.
	Transportation of waste materials from site	Spills of oil, fuel and waste resulting in contaminated land	Spill kits will be required to be carried in all transport vehicles. Only suitably licensed vehicle operators with appropriately serviced and maintained vehicles will be used.

8.2 Timing/ implementation of measures

Mitigation strategies will be implemented from the commencement of work onsite and throughout the operation period as appropriate.

All environmental management procedural strategies will be established prior to operation. All strategies and management measures will be detailed in an Environmental Management Plan to be prepared prior to commencement of operations (see Section 3.9).

8.3 Environmental Monitoring and Management

An Environmental Management Plan for the proposal will be drafted once project approvals are in place. This will enable any changes in treatment processes or management of the site as a result of the approvals process to be included. An basic EMP outline is presented below.

As a minimum the EMP will include the following:

- Environmental Aspects and Impacts

Environmental Assessment – No Fuss Liquid Waste Pty Ltd

- Relevant Legislation and Licensing
- The Environment Management plan Process (including daily housekeeping inspection registers, maintenance and log sheets to record plant performance)
- Roles and Responsibility
- Operational control
- Emergency preparedness
- Monitoring and measurement
- Incident management and corrective actions
- Review periods

The type and the frequency of monitoring proposed to be undertaken on is site is detailed in Table 9.

Table 9: Proposed Monitoring

Monitoring Component	Type of Monitoring	Monitoring Authority	Frequency
Noise -Maintenance of equipment	Records	Company	As required
Traffic	Records	Company	Continually
Odour	Records of odour complaints	Company	Establishment of baseline data at startup thenceforth - As required
Excluded waste- out of specificity	Inspection	Company	Continuous
Volatiles – prior to disposal to Sydney Water	In-line VOC monitor	Company (via Trade Waste Permit)	Continuous
Wastewater discharge to Sydney Water	Chemical Analysis	Company (via Trade Waste Permit)	Continuous

9. JUSTIFICATION FOR THE PROPOSAL

This Environmental Assessment reviews the risks of the proposed operation and outlines management and mitigation strategies to enable the proactive management of anticipated impacts. The results of studies relating to specific impacts, and commitments made by the proponent indicate that the facility can operate without any significant environmental impacts.

The proposed expanded operations of No Fuss Liquid Waste are required to meet the current demand for treatment of liquid wastes other than septic wastes. The proposed operations will ensure that oily and grease trap wastes are treated prior to being discharged into the environment thus protecting local biodiversity values and the water catchment.

Following an identification of potentially adverse environmental aspects this EA concluded that the works will have a minimal environmental impact. The existing receiving environment would not be impacted upon in any deleterious manner since the proposed works area is very small and contained within the sealed boundary of current NO Fuss operations.

Noise and vibration impact overall was assessed as minimal, since the area is primarily industrial and has no immediate neighbours. This project does not involve construction, therefore construction noise is not relevant. The economic impact is assessed as being positive with increased safety and quality and resultant environmental protection of all identified environmental aspects.

In the long term the works should result in a net environmental and economic gain.

This Environmental Assessment has determined that the impact resulting from the development proposal is unlikely to significantly affect the environment in a negative manner. This conclusion assumes that safeguards recommended within this document are adopted within the Environmental Management Plan that would be prepared prior to the commencement of operations.

The additional development and operations of the facility will add value to the Penrith community, as well as ensuring that the appropriate treatment of oily liquid waste is undertaken diligently and in a manner that causes negligible environmental impact within the region.

DECLARATION

This Environmental Assessment provides a true and fair review of the Proposal in relation to its potential effects on the environment.

It addresses to the fullest extent possible, all matters affecting or likely to affect environmental values as a result of this proposal.

A handwritten signature in black ink, appearing to read 'Iveta Mylchreest', is written over a horizontal line.

Signed: _____ Date: _____

Iveta Mylchreest

Sector Manager, NSW
Risk, Environment & Infrastructure Services
SEMF Pty Ltd



APPENDIX A:

ON SITE WASTE TESTING FORM



Appendix B:

Laboratory Testing Form

Appendix C:

Driving Patterns: SK1, SK2 and SK3 (SEMF, 2010)

Appendix D:

Traffic Count Worksheets (SEMF, 2010)

Appendix E:

Noise Assessment (BGMA Pty Ltd, 2010)

Appendix F:

Odour Assessment (The Odour Unit, 2010)

Appendix G:

Greenhouse Gas Assessment (SEMF, 2010)

Appendix H:

Draft Trade Waste Permit

Appendix I:

DECC Waste Codes

Appendix J:

Odour monitoring locations

Appendix K:

Process Photos