BINGO INDUSTRIES
CLEANING UP

BESTPRACTICE CERTIFICATION ISO9001 QUALITY MANAGEMENT SYSTEM
BESTPRACTICE CERTIFICATION ISO14001 ENVIRONMENT MANAGEMENT SYSTEM
BESTPRACTICE CERTIFICATION AS4801 OH&S MANAGEMENT SYSTEM

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OPERATIONS ENVIRONMENTAL MANAGEMENT PLAN

MORTDALE
OEMP-002

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN (OEMP-002)

Occupant:	Mortdale Recycling Pty Ltd
Postal Address:	PO BOX 7, Enfield NSW 2136
Street Address:	20 Hearne Street, Mortdale NSW 2223
Version:	Revision #TBC: DRAFT April 2016
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31 March 2016	DRAFT 1	Environmental Manager
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31 March 2016	DRAFT	All	New document	Env. Manager
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1. CONTENTS

2. INTRODUCTION

The site is Lot 102, DP 585775, 20 Hearne Street Mortdale and operates as a waste management facility under development consent SSD15-7421 issued by NSW Department of Planning and Environment. This consent supersedes all previous consents.

Mortdale Recycling purchased the Get Fast business and took possession of the site on 22 November 2014.

Prior to 2001, the site received and processed waste for recovery, recycling and or lawful disposal when it was a hazardous industrial waste transfer facility. Historical uses of the site include storage and handling of landscape and building supplies and non-putrescible general solid waste resource recovery.

This Operational Environmental Management Plan (OEMP) reflects the operations on site. As such the OEMP is reviewed annually or following a change to operations, following incidents, reassessment of aspects and impacts and when there is a change in activities that is likely to affect environmental aspects and impacts.

Site activities approved by the NSW Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act 1997* (the POEO Act) are included in the Environment Protection Licence (EPL) for the site and include those outlined in **Figure 1.**

Figure 1: Site Operations

General solid waste (non-putrescible) typically inert building and demolition wastes	Waste processing (non-thermal treatment)
	Waste storage
	Resource Recovery

3. DEFINITIONS

Auditor	Person with the competence to conduct an audit
Continual improvement	Recurring process of enhancing the environmental management system to achieve improvements in overall environmental performance in line with the organisation's environmental policy
Corrective action	Action to eliminate the cause of a detected nonconformity
Document	Information and its supporting media
Environment	Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna , human's and their interrelations
Environmental aspect	Elements of an organisation's activities, products or services that can interact with the environment
Environmental impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services
Environmental management system (EMS)	The part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy
Environmental management system audit	A systemic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organisation's environmental management system conforms to the environmental management system audit criteria set by the organisation, and for the communication of the results of this process to management
Environmental objective	Overall environmental goal, arising from the environmental policy, that an organisation sets itself to achieve, and which is quantified where practicable
Environmental performance	Measurable results of the environmental management system, related to an organisation's control of its environmental aspects, based on its environmental policy, objectives and targets
Environmental policy	Statement by the organisation of its intentions and principles in relation to its overall environmental performance that provides a framework for action and for the setting of its environmental objectives and targets. ISO-14001 Elements: 4.2

Environmental target	Detailed performance requirement quantified where practicable, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set in order to achieve those objectives
HCC	Hurstville City Council
Interested party	Individual or group concerned with or affected by the environmental performance of an organisation
Internal audit	Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the environmental management system audit criteria set by the organisation are fulfilled
Leachate	Liquid released by, or water that has percolated through, waste and which contains dissolved and/or suspended liquids and/or solids and/or gases
Non conformity	Non-fulfilment of a requirement
NSW EPA	New South Wales Environment Protection Authority
OEMP	Operational Environmental Management Plan – a plan for the management of environmental impacts
Organisation	Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration. In this instance Bingo Industries
PIRMP	Pollution Incident Response Management Plan as required by section 153C of the *Protection of the Environment Operations Act 1997* containing information required by Part 3A of the Protection of the Environment Operations (General) Regulation 2009.
Preventative action	Action to eliminate the cause of a potential nonconformity
Prevention of pollution	Use of processes, practices, techniques, materials services or products that avoid, reduce or control the creation. Emission or discharge of pollutants or waste which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution in order to reduce adverse environmental impacts
Procedure	Specified way to carry out an activity or a process

Record	Document stating results achieved or providing evidence of activities performed
Waste Classification	A classification of waste as set out in and in accordance with the NSW EPA Waste Classification Guidelines.
Waste Levy	As prescribed by the *Protection of the Environment Operations Act 1997* and associated Regulations

RELEVANT DOCUMENTS

- SOP - SEQ004 SEQ Definitions Register
- NSW EPA Waste Classification Guidelines
- NSW EPA Waste Levy Guidelines
- Pollution Incident Response Management Plan (PIRMP-002)
- Refer also to Section 5: Legal and Other Requirements

4. SEQ MANAGEMENT SYSTEM

The site has implemented a Work Health and Safety, Environment and Quality Management Systems.

Mortdale Recycling is certified to:

- ISO 9001 Quality Management Systems;
- ISO14001 Environmental Management Systems; and
- AS/NZ4801 Occupational Health and Safety Management Systems.

The Bingo Industries Compliance Team manages the SEQ Management Plans and procedures. The SEQ Management Plans, Procedures and associated documents are available in the templates drive

In accordance with SEQ Management System requirements, routine checks and audits are conducted. The Group Compliance Team conducts SEQ site and non-conformance checks and internal audits in accordance with the SEQ Procedures.

5. ENVIRONMENTAL POLICY

Bingo Industries has an Environmental Policy that is reviewed periodically. The policy is communicated to all workers, affiliated businesses and sites, contractors and subcontractors and is prominently displayed on site.

Figure 2: Environment Policy

BINGO INDUSTRIES

Environmental Policy

POLICY STATEMENT

Bingo Industries is committed to achieving the principles of environmental sustainability in our workplace. Bingo recognises that it has a responsibility to the environment that extends beyond legal requirements. Bingo is committed to a process of continual improvement that acknowledges also our moral obligation to ensure our activities do not place the local community or environment at risk of harm.

AIMS AND OBJECTIVES

Bingo is committed to leading the waste industry in prevention of pollution and minimising the impacts of its activities. We will work within our businesses, and with our products, services, customers, suppliers and the community to -

- Reduce waste and wastage through innovative work and recycling practices
- Actively promote resource recovery and recycling within Bingo and to our customers
- Minimise emissions from our fleet and operations and their potential impacts on the community
- Source environmentally acceptable materials, equipment and technology where possible in place of those which may be harmful and encourage our suppliers to adopt environmental objectives
- Ensure that our suppliers maintain acceptable environmental policies and systems
- Actively promote environmental awareness among staff to enlist their support to improve company environmental performance

SCOPE

This policy applies to all of Bingo Industries including employees, equipment, products, services and recycling centres, and of its subsidiaries and associate companies (together referred to in this policy as ***Bingo***).

RESPONSIBILITIES

We recognise that the overall responsibility for environmental protection and sustainability rests with management, who will be accountable for the implementation of this policy. Management responsibilities include –

- Ensuring that all environmental policies and procedures are implemented
- Ensuring environmental aspects and impacts are assessed and addressed
- Ensure that we are aware of and comply with all relevant laws and meet industry and other standards and obligations
- Establishing measurable objectives and targets to ensure continued improvement aimed at the elimination of waste, pollution, environmental harm and threats to human health
- Encouraging consultation and co-operation between management, workers and stakeholders in matters which may affect or impact on the environment
- Providing environmental training and education to ensure our employees are aware of their environmental responsibilities and those of the company and are well equipped to reduce environmental impacts in their area of responsibility
- Providing adequate resources to meet these environmental commitments and a management plan to address aspects and impacts of our operations on an ongoing basis

Employees are responsible for –

- Following all environmental policies and procedures
- Recognising and reporting potential risks to human health or the environment, pollution, and environmental aspects and impacts which may affect the health and well-being of the environment
- Ensuring that the aims and objectives of this policy are met related to their roles

IMPLEMENTATION AND REVIEW

The management of Bingo is committed to regular consultation with our stakeholders and review of this environmental policy and management systems to ensure that this Policy is effective in addressing environment aspects and impacts and environmental issues that have the potential to affect human health or the environment. This policy is reviewed annually by the WHSE Committee and Executive Committee and revised as necessary or as required.

Daniel Tartak
Chief Executive Officer
July 2015

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RELEVANT DOCUMENTS

- Environment Policy

6. LEGAL AND OTHER REQUIREMENTS

Refer to **SOP-COM015 Legal and Other Requirements Register** for requirements related to SEQ and other obligations.

The key legislation that may apply to environmental management at this site includes, but is not limited to:

COMMONWEALTH LEGISLATION

- National Greenhouse and Energy Reporting Act 2007
- National Environment Protection Measures (Implementation) Act 1998
- National Environment Protection Measures
    - Air Toxics
    - Ambient Air Quality
    - Assessment of Site Contamination
    - Diesel Vehicle Emissions
    - Movement of Controlled Waste
    - National Pollutant Inventory
    - Used Packaging Materials
- Environment Protection and Biodiversity Conservation Act 1999;
- Motor Vehicles Standards Act 1989
- Ozone Protection and Synthetic Greenhouse Gas Management Act 1989
- Work Health and Safety Act 2011

NEW SOUTH WALES LEGISLATION

- Contaminated Land Management Act 1997
- Contaminated Land Management Regulation 2013
- Dangerous Goods (Road and Rail Transport) Act 2008
- Dangerous Goods (Road and Rail Transport) Regulation 2009
- Environmentally Hazardous Chemicals Act 1985
- Environmentally Hazardous Chemicals Regulation 2008
- Environmental Planning and Assessment Act 1979
- Local Government Act 1993
- Local Government (General) Regulation 2005
- National Environment Protection Council (New South Wales) Act 1995
- NSW Work Health and Safety Act 2011
- NSW Work Health and Safety Regulation 2011
- Ozone Protection Act 1989
- Protection of the Environment Administration Act 1991
- Protection of the Environment Administration Regulation 2012
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (General) Regulation 2009
- Protection of the Environment Operations (Waste) Regulation 2014
- Protection of the Environment Operations (Clean Air) Regulation 2010
- Protection of the Environment Operations (Noise Control) Regulation 2008
- Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014
- Road Rules 2014
- Road Transport Act 2013
- Threatened Species Conservation Act 1995

- Waste Avoidance and Resource Recovery Act 2001

OTHER REQUIREMENTS

- Australian Code for the Transport of Dangerous Goods by Road and Rail
- Australian Dangerous Goods Code (ADG) 7th Edition
- AS1940-2004 Australian Standard: The storage and handling of flammable and combustible liquids
- AS1692 Australian Standard: Tanks for flammable and combustible liquids
- AS 4452B-1997 Australian Standard: The storage and handling of toxic substances
- WorkCover NSW - Code of practice for the storage and handling of dangerous goods (2005)

OTHER CONSIDERATIONS

- NSW EPA Compliance Policy
- NSW EPA Prosecution Guidelines
- NSW EPA Waste Levy Guidelines 2014
- NSW EPA Waste Classification Guidelines
- NSW EPA Solid Waste Landfill Guidelines
- NSW EPA Draft Protocol for Managing Asbestos During Resource Recovery of Construction and Demolition Waste
- AS/NZS ISO 14001:2004 Environmental Management Systems – Requirements with guidance for use
- AS/NZS ISO 9001 Quality Management Systems – requirements with guidance for use
- AS/NZ 4801 Occupational Health and Safety Management Systems –specification with guidance for use

RELEVANT DOCUMENTS

- Legal and Other Requirements Register

7. ASPECTS IMPACTS AND RISK MANAGEMENT

Mortdale Recycling understands the importance of managing risk. Mortdale Recycling will so far as is reasonably practicable, identify hazards that are associated with the activities, processes, products and services under the management and control of Mortdale Recycling. Risks are assessed and suitable measures implemented to ensure risks are eliminated, minimised, controlled and monitored.

Prior to commencement of operations at Mortdale Recycling, a rigorous risk assessment of all activities at the site was undertaken. From these risk assessments that least annually. Where appropriate the following plans and documents have been developed within either the OEMP or the SEQ Management System and associated documents.

- Traffic Management Plan
- Emergency Management Plan
- Dust Management Plan
- Water Management Plan
- Noise Management Plan
- Evacuation Procedure
- Spill kits placed around the site and staff trained in their use
- Fire extinguishers placed around the site and on all machinery
- First aid kits placed around the site
- Safety Data Sheets (SDSs) updated for chemicals held on site
- SWMSs and SOPs updated for high risk activities
- Site Induction
- Fencing erected around risk of fall areas
- PPE mandatory for all staff on site and minimum PPE requirements for visitors
- Pre-start checks, service logs and auditing of checks and logs of all machinery
- Site perimeter fencing secured
- Risk, aspects and impacts register

7.1 Risk Management Strategy

In order to ensure that risks are identified and managed in a consistent manner at Mortdale we apply the following SEQ Procedures:

- SOP – COM004 SEQ Procedure for the Identification and Management of Risk
- Related SEQ Management Plans and Procedures

7.2 Reporting Risk

The site is to follow SOP-COM003 Incident Reporting, Investigation and Review Procedure to report and follow up in relation to risks identified.

As per this procedure all risks regardless of their likelihood or consequence are to be notified and reported to their Site Supervisor as reasonably practicable and no later 24hours.

Where an environmental aspect has a significant environmental impact has been identified, the following applies:

- Any environmental impacts that score as “High” or “Extreme” are deemed significant environmental impacts and must be recorded with all pertinent information in the Risks, Aspects and Impacts Register and the Incident Reporting system.
- A copy of this record must then be forwarded to the relevant Manager as appropriate. A copy must also be forwarded to the Head of Compliance.
- All environmental impacts identified as High or Extreme shall determine the scope of the EMS.

7.3 Control of Risk

Where possible risks with controls that are high in the order will be implemented and multiple controls will be implemented where necessary.

Examples of controls may include eliminating the activity altogether, substituting the item for something less hazardous which will perform the same function, guarding of moving parts, provision of training and competency assessment, licensing requirements, signage, development of or modification to safe work procedures or identification of personal protective equipment.

When conducting risk assessments consideration must be given to existing Standard Operating Procedures (SOPs) and the need to update them or the need to write new SOPs. In addition, consideration must be given to any updates or additions to the Risks, Aspects and Impacts Register and employee re-education and training and additions or changes to the Training Needs Register.

Different or additional control measures may be required for environmental impacts that occur when operating outside normal conditions. For each aspect and impact, determine if procedures are required to address environmental aspects if operating outside normal conditions or in emergency situations.

7.4 Review Control Measures

Control measures are to be reviewed regularly to make sure they work as planned. Do not wait until something goes wrong.

There are certain situations where control measures must be reviewed under the SEQ system and, if necessary, revised. A review is required when:

- the control measure is not effective in controlling the risk;
- a change occurs at the workplace that is likely to give rise to a new or different health and safety risk or environmental impact that the control measure may not effectively control;
- a new hazard or risk is identified;
- the results of consultation indicate that a review is necessary; and
- a SEQ Committee member requests a review

As well as the reviews required above, all Risks, Aspects and Impacts Register items are subjected to reviews at intervals dependant of risk ratings as per SEQ procedure SOP-COM004.

Following management sign-off in relation to the impacts rating applied to each entry in the Risks, Aspects and Impacts Register, the controls necessary to minimise the environmental impact, prevent pollution or work towards environmental sustainability and to be agreed with management.

These controls are to be documented against each environmental aspect and related impacts in the Risks Aspects and Impacts Register.

7.5 SEQ Objectives and Targets:

SEQ objectives and targets are revised annually and approved by management>SEQ objectives and targets are presented to the SEQ Committee at the first meeting in each new calendar year.

7.6 Review procedural requirements if operating outside normal conditions

For each risk, aspect and impact procedures are required to address circumstances where environmental aspects are affected if operating outside normal conditions or in emergencies.

7.7 Record Keeping

Risk assessments and risk controls are documented in:

- Risks, Aspects and Impacts Register
- Completed BRATs
- Incident investigation reports

Keeping records of the risk management process demonstrates potential compliance with the SEQ Acts and Regulations. It also helps when undertaking subsequent risk assessments.

Keeping records of the risk management process has the following benefits. It:

- Allows us to demonstrate how decisions about controlling risks were made;
- Assists in targeting training at key hazards, aspects and impacts;
- Provides a basis for preparing Standard Operating Procedures (SOPs) and Safe Work Method Statements (SWMSs);
- Allows us to more easily review risks following any changes to legislation or business activities; and
- Demonstrates to others (regulators, customers) that work health and safety and environmental risks are being managed.

All employees are required to comply with identified controls and give feedback on their effectiveness.

7.8 Review and monitoring

The Environmental Manager shall periodically review the environmental aspects and impacts and update the register if required in consultation with the Site Supervisor.

Risk assessments and risk controls are documented in:

- Risks, Aspects and Impacts Register
- Completed BRATs
- Incident investigation reports

RELEVANT DOCUMENTS

- Risk Aspects and Impacts Register
- Safe Work Method Statements (SWMSs)
- Standard Operating Procedures (SOPs)
- SF101 – Compliance Recycling Centre Audit Tool
- SF110 Dust and Litter Control Checklist – Site Supervisor
- Bingo Risk Assessment Tool – BRAT
- SF 054 Bogie Axle Truck Inspection
- Emergency Management Plan
- Evacuation Procedure
- SF063 Hook Truck Inspection
- Recycling Centre Induction and Site Procedures
- SF018 Skip Bin Inspection Form
- SF062 Single Axle Truck Inspection
- Traffic Management Plan
- Document Control and Records Management (SOP-COM016)
- Work Health and Safety Act 2011 (NSW)
- Work Health and Safety Regulations 2011(NSW)
- AS/NZS 4801: Occupational health and safety management systems
- How to Manage Work Health and Safety Risks Code of Practice
- SOP –COM003 Incident Reporting, Investigation and Review Procedure
- Training Needs Register
- SOP-COM015 Legal and Other Requirements Register
- Incident investigation reports (Binwatch)
- Protection of the Environment Operations Act 1997
- Protection of the Environment (Waste) Regulation 2014

8. INDUCTION, TRAINING AND COMPETENCIES

Training is provided to ensure any incidents are controlled, minimised and reported accordingly. The company has an obligation to the EPA, Hurstville Council and other stakeholders to report incidents that have potential to or cause environmental harm. Additionally the site has a Pollution Incident Response Management Plan (PIRMP-002) in place for outlining how the site is to respond in the event of an incident that may cause environmental harm or risk to human health.

All workers undertaking any works at the facility must be aware of their environmental responsibilities and receive induction training to assist them to meet these responsibilities whilst on site and to the extent possible whilst transporting waste material. All workers must receive training as identified in the Training Needs Register and as relevant to their role.

Training can take various forms, ranging from formal accredited training courses to site-specific inductions, daily toolbox talks and meetings. Training is based on the below table and is delivered in accordance with each level of staff and by the nominated manager as per the table below.

Figure 3: Training Matrix

Staff Position (Staff Member)	Training to be provided	Person responsible for ensuring training provided
All workers, contractors and subcontractors	• Spill Response Kits and locations • Chemical storage & other products • Safety Data Sheets (SDS) • Emergency evacuation assembly points • Environmental Impacts Management for: – NCW and Asbestos – Noise – Dust – Water • Emergency contact services and numbers • External complaints handling • Acceptance of fuel and other deliveries to site, that have environmental risks • Monitoring and recording of off-site disposal of fluids. e.g. waste oils and effluent	Site Supervisor or Head of Recycling
Site Supervisor	• Site checking of environmental controls • Monthly reporting • Site Environmental auditing • Compliance with the EPL • Compliance with DC • Risk Aspects and Impacts Register • OEMP and sub plans • PIRMP • All procedures identified in the Training Needs Register for the Site Supervisor	Environmental Manager Compliance Team And Or Head of Recycling

RELEVANT DOCUMENTS

- Training Needs Register
- SOP COM005 Induction Competence Training and Awareness Procedure
- SEQ Management Plan

9. RECORDS AND DOCUMENT MANAGEMENT

A register of the records and documentation related to environmental management requirements is maintained.

All documents are developed and maintained in accordance with the company's SEQ document control system and certified WHS, Environmental Management and Quality Management systems in 2015/2016.

The site folder contains records and procedures to be held on site. The procedures held in the folder provide instructions to staff on when and how the Record Forms are to be completed.

These records include training records, monitoring data, complaints and environmental incident reports, relevant licences, certifications, non-complying waste reports and any other documents specific to the site.

The site maintains the following Registers:

- Complaints
- Site Induction
- Training
- Reject Loads

RELEVANT DOCUMENTS

- Training Needs Register
- SOP-COM016 Document Control and Records Management
- Reject Load Register
- Complaints Register (BINWATCH)
- Records Management Register
- SOP-COM008 SEQMS Monitoring and Measurement
- SEQ Management Plan and associated documents
- Training Needs Register

10. CONSULTATION AND AWARENESS

The site being located in an industrial area has industrial neighbours. The site supervisor is in contact with these neighbouring businesses.

Regular contact is also maintained with Hurstville Council and the NSW Environment Protection Authority (EPA).

There are systems in place to ensure that staff are consulted on matters that affect their health and safety and the environment. They are also made aware through consultation and training and by providing access to relevant information of the risks and controls that affect their ability to perform their jobs, and minimise risks to their health, wellbeing, safety and those of their coworkers and others working on site.

We ensure that consultation with staff and other stakeholders is undertaken on matters that involve:

- identification of, or changes to, environmental aspects and impacts;
- controls that are required to minimise environmental impacts;
- changes to, or introduction of, new policies and procedures;
- resources required to provide environmental management and monitoring, address environmental impacts and achieve continuous improvement; and
- individual and company roles and responsibilities.

We also ensure that stakeholders including staff have access to news and information pertaining to the business, environmental achievements, the environmental performance scorecard, the Bingo Environmental Management System and events and opportunities for the business.

Consultation with staff and opportunities to raise awareness occur via the following mechanisms:

- SEQ toolbox meetings;
- Site visits;
- Site inspections;
- Staff training; and
- Stakeholder meetings and other communications.

RELEVANT DOCUMENTS

- SOP-COM005 Induction Competence Awareness and Training Procedure
- SOP-COM006 SEQ Consultation and Communication Procedure

11. EDUCATION AND TRAINING

Employees are appointed on the basis that they have the skills required to perform their duties. It is recognised that to retain competent staff, employees must remain aware of the changing nature of their workplace, laws and regulations and other aspects and impacts that affect their ability to do their job well and in accordance with company expectations.

We ensure that staff are:

- competent for the work they are required to do;
- trained in relation to the environmental aspects and impacts that affect their work;
- confident in identifying training needs and environmental impacts;
- supervised; and
- provided with access to additional training including from external providers where appropriate.

RELEVANT DOCUMENTS

- SOP-COM005 Induction Competence Awareness and Training Procedure

12. COMPLAINTS INQUIRIES AND NOTIFICATION REQUIREMENTS

12.1 Record of Complaints

Trained site staff have the resources to record complaints and other enquiries in accordance with the SEQ Management System and procedures. The site maintains a Complaints Register that is completed at the time a complaint is lodged. The Compliance Team following advice from staff enters complaints into Bin Watch. The Compliance Team record the details in Bin Watch for follow up and investigation if required.

The person who first receives the complaint records details of complaints. Records are kept for investigation and reporting purposes.

The site EPL requires signage to be placed in an obvious location at entrance to the site advising stakeholders and others as to how to contact Adderley Recycling if they have an inquiry or complaint. The site is required to keep a record of complaints and report the complaints when completing the EPL Annual Return.

Signage at the entry to the site provides stakeholders and visitors with an outline of the conditions of entry and a contact telephone number should anyone have any inquiries or complaints. This is a requirement of the site EPL.

The Mortdale Recycling EPL Annual Return is for the reporting period 5 January to 4 January each year. The Annual Return is to be submitted within 60 days of the 4 January each year and is therefore due on or before the 21 June each year.

12.2 Complaints Management System

It is a specific requirement that the site maintain a complaints management system and accurate records of complaints to ensure that any issues that arise can be addressed and any environmental impacts controlled.

The sites historic records are paper based. Currently the site utilises the Customer Relationship Management (CRM) system to record complaints from customers or depending on the nature and reason for the complaint they may be recorded as an incident in Bin Watch. The system notifies relevant staff and management and provides scope to record corrective action or action taken and track progress in relation to these actions.

All environmental complaints are reported in the EPL Annual Return.

12.3 NSW EPA Notification

NSW EPA must be notified of any incidents likely to or causing material environmental harm. The procedure for notification of environmental incidents is set out in the PIRMP.

RELEVANT DOCUMENTS

- PIRMP – 001_Plan_ Mortdale
- PIRMP – 001_Process_Mortdale

- PIMRP – 001_Flowchart_Mortdale
- OPL CS021 Recording Actioning and Responding to Enquiries
- SOP COM003 Incident Reporting Investigation and Review
- SOP COM006 SEQ Consultation and Communication Procedures
- SOP COM016 Document Control and Records Management

13. IMPLEMENTATION

13.1 Aspects and Impacts and Review

The implementation of this OEMP requires that an environmental review be undertaken to identify the aspects of Mortdale Recycling operations that present a risk to the environment or human health. This review must also take into account consents and licensing conditions.

The site Risk Aspects and Impacts Register is reviewed following an incident and otherwise where:

- a control measure is not effective in controlling an environmental impact;
- a proposed change on site affects an environmental aspect or impact or otherwise following that change;
- new environmental aspects or impacts are identified; or
- internal or external consultation identifies areas of improvement.

The (see OEMP structure below).

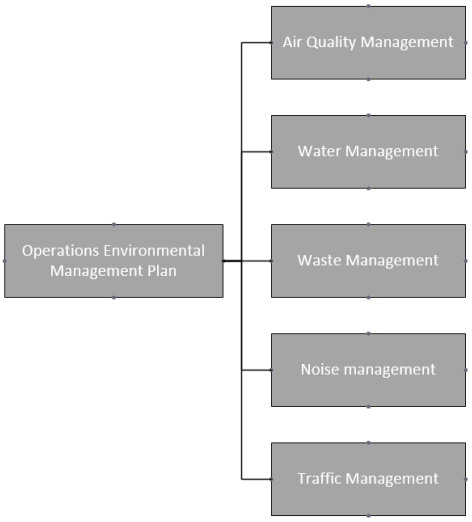
13.2 OEMP Structure

Specifically, the major aspects identified that are associated with waste recovery and processing management operations at Mortdale are:

- Waste;
- Dust (Air Quality);
- Noise;
- Water; and
- Traffic

These aspects and impacts are specifically addressed within the OEMP in Section 12.

Figure 4: OEMP Structure



13.3 Roles and Responsibilities

The management representatives have an overall responsibility to ensure all workers working on site are trained and aware of the EMP and other site-specific information.

All staff on site must complete a site induction / training relevant to the site and their roles and responsibilities.

All workers / employees have a level of responsibility to ensure the operations are conducted in respect of the EMP. Roles and responsibilities are outlined below.

13.3.1 Chief Executive Officer / Head of Recycling

- Ensuring an EMP is developed and implemented; ensuring compliance with conditions of consent and any regulatory or other requirements;
- Ensuring appropriate resources are available to implement all aspects of the EMP and maintain necessary records; and
- Endorsing the company's Environmental Policy.

13.3.2 Environmental Manager and Head of Compliance

- Identifying environmental risks associated with the operations undertaken on site;
- Developing and implementing procedures and mitigating measures to minimise or eliminate any environmental risks identified;
- Ensuring that all personnel undertaking work at the site receive adequate training and education in the environmental measures developed to mitigate or minimise environmental risks at the site;
- Environmental monitoring to ensure that the management measures adopted are effective;
- Undertaking and reporting and internal audit annually; and
- Review maintain and assist implementation of the Environmental Management System

13.3.3 Site Supervisor

- Assisting in the development, implementation and maintenance of mitigation measures to minimise or eliminate the identified environmental risks;
- Complying with environmental measures and procedures implemented to minimise or eliminate environmental risks;
- Maintaining onsite records and documents for inspection as required;
- Attending environmental training and other educational sessions;
- Reporting any environmental incidents that may occur in accordance with the OEMP; and
- Inducting all staff, workers and any person conducting or engaged by the company to complete and works onsite.

13.3.4 Staff and Workers

- Completing the site induction;
- Assisting management to mitigate any environmental hazards;
- Ensuring that the site is regularly inspected for potential hazards that may cause harm;
- Attending environmental training and other educational sessions;
- Continuous awareness of activities and processes that may have environmental impacts; and
- Reporting incidents promptly and assisting with implementing control measures as required.

13.3.5 Contractors and Sub-Contractors

- Completing the site induction;
- Identifying the environmental risks associated with their activities at the site;
- Developing mitigating measures to minimise or eliminate the identified environmental risks; and
- Being aware of and following onsite instructions and procedures implemented to minimise or eliminate environmental risks.

RELEVANT DOCUMENTS

- Bingo Training Needs Register
- SOP-COM005 Induction Competence Awareness and Training Procedure
- SEQ Management Plans

14. SITE DESCRIPTION

14.1 Site Map

The location of buildings and key fixtures on site are indicated in **Figure 5** below.

The site has an area of approximately 7,659m^2. The detailed site plan in **Figure 5** provides an overview of the location of activities that take place on site. Traffic management is indicated in **Figure 5** and further explained in **section 16.7**. There are a number of key structures on site including the main waste storage and processing shed, weighbridge office and two weighbridges.

14.2 Past improvements

Improvements made, prior to current occupation of the site, include:

- processing shed;
- office building;
- concrete pavements;
- surface water drainage pits and drains;
- stormwater pre-treatment device – Rocla First Defense system - for pre-treatment of site runoff prior to discharge to stormwater;
- wash bay including trade waste pre-treatment device (not connected / not operational);
- rumble grids;
- weighbridge;
- secure fencing and gates;
- staff amenities; and
- weighbridge control and reception area.

These improvements were removed / demolished / upgraded to make way for current structures and improvements.

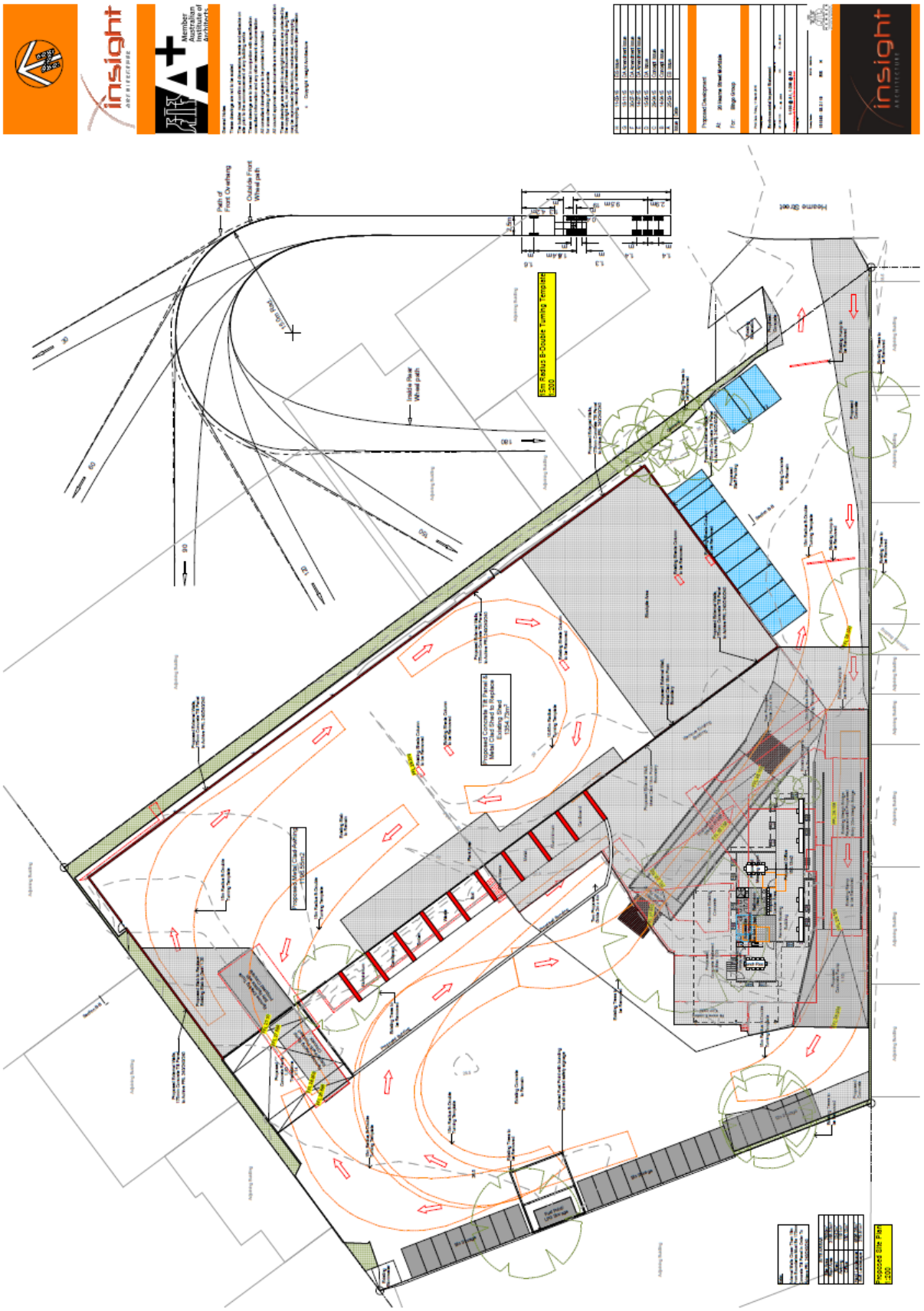
14.3 Surrounding Development

Under the provision of the Hurstville Local Environmental Plan (LEP) 2012, the Development Site is zoned IN2 Light Industrial as is the land surrounding the site.

The site is at the centre of an existing industrial precinct. On the southern boundary, adjacent to the driveway the site is bounded by single storey light industrial developments located mostly on the common boundary. To the west and north, the site adjoins newer industrial activities and buildings with walls of up to 7 metres in height abutting the boundary.

On the eastern boundary, there is a more recent development with walls approximately 7 metres in height on the boundary. Another older development is also sited on the boundary and the walls of this development are of a similar height to that on the subject site.

Figure 5: Site Plan



15. ON-SITE OPERATIONS

15.1 General Activity

The site receives and transfers non-putrescible general solid waste delivered in bins and trucks from construction demolition, commercial industrial and domestic sources. The waste received on site is in most cases pre-classified under the NSW EPA "Waste Classification Guidelines". Refer to **section 16.1.3** for materials that may appear in waste transported to the site and are approved waste types within Environment Protection Licence (EPL 20622). **Section 16.1.3** refers to criteria that must be met before waste materials can be accepted on site.

The site processes material to re-use, recycle recovered materials from the waste and as a means to achieve the resource recovery target of 85%. Material is stored on site temporarily for processing and for transport.

15.2 Signage and Access

The site displays suitable signage as a means of communication with the public, customers and visitors to the site.

Site access for all visitors and incoming waste vehicles is restricted to the existing entrance gateway, and this area is appropriately sign posted.

Signage on entry to the site includes; Site rules, PPE requirements and site speed limit and radio channel to communicate with site staff.

Other signage is positioned to manage identified risks and legal requirements.

All pedestrian and visitors to the site can access the office/weighbridge directly and must report to reception prior to gaining entry to the site.

All visitors will be required to complete the visitor induction and complete the visitor register and wear appropriate PPE. Appropriate PPE includes high visibility clothing, safety shoes and a helmet.

NO person is to enter the site without permission or authority. All persons entering the site must undertake and site induction.

15.3 Weighbridge Operations

The weighbridge operator supervises incoming and outgoing materials and the recording of all relevant information in relation to vehicles and waste entering and leaving site.

Appropriate records and other documentation (e.g. waste materials, recovered materials and materials recovered for recycling) are kept in accordance with the POEO Act and Regulations.

Inbound and outbound materials are recorded at the weighbridge as per NSW EPA requirements and records are kept for the required period.

Consumables are accepted only if they are approved to be held on site. A Safety Data Sheet (SDS) is available for each substance held on site including for any hazardous materials and dangerous goods.

15.4 Incoming (raw) Materials

The bulk of waste and materials bought to site is delivered in either bulk trucks or in skip and hook bins delivery. All incoming material is subject to an inspection process as outlined in **16.1.2**, and non-complying waste is treated in accordance with the relevant management plans and procedures for waste classification and acceptance, transport and disposal, asbestos handling and management, non-complying waste and unexpected finds that are referenced in Supporting Documents. Rejected loads are managed in accordance with these procedures.

The traffic controller manages loading and unloading of all vehicles while the site is open to the public for loading and unloading. Trucks that park on site are required to off load bins on the tip floor inside the building and park empty trucks in the centre of the yard. Bins tipped by site staff using on site equipment are returned empty to the bin storage area.

Potential emissions arising from this activity include greenhouse gases and noise from vehicle and plant operations and dust emissions when tipping and managing material.

15.5 Use of mobile plant and equipment

The use of mobile plant and equipment is as per the manufactures recommendations. Mortdale Recycling employs trained and experienced operators and Safe Work Method Statements (SWMS) are in place for vehicle operators. Competency of mobile equipment operators is assessed on a regular basis.

15.6 Servicing of on-site mobile plant and equipment

Servicing of equipment is in accordance with manufacturer's recommendations. Equipment and machinery breakdowns are managed by Bingo's mobile service vehicle. The van is equipped to ensure worker safety and environmental protection for these activities. Risks are assessed and safe work methods applied that also ensure environmental controls are in place.

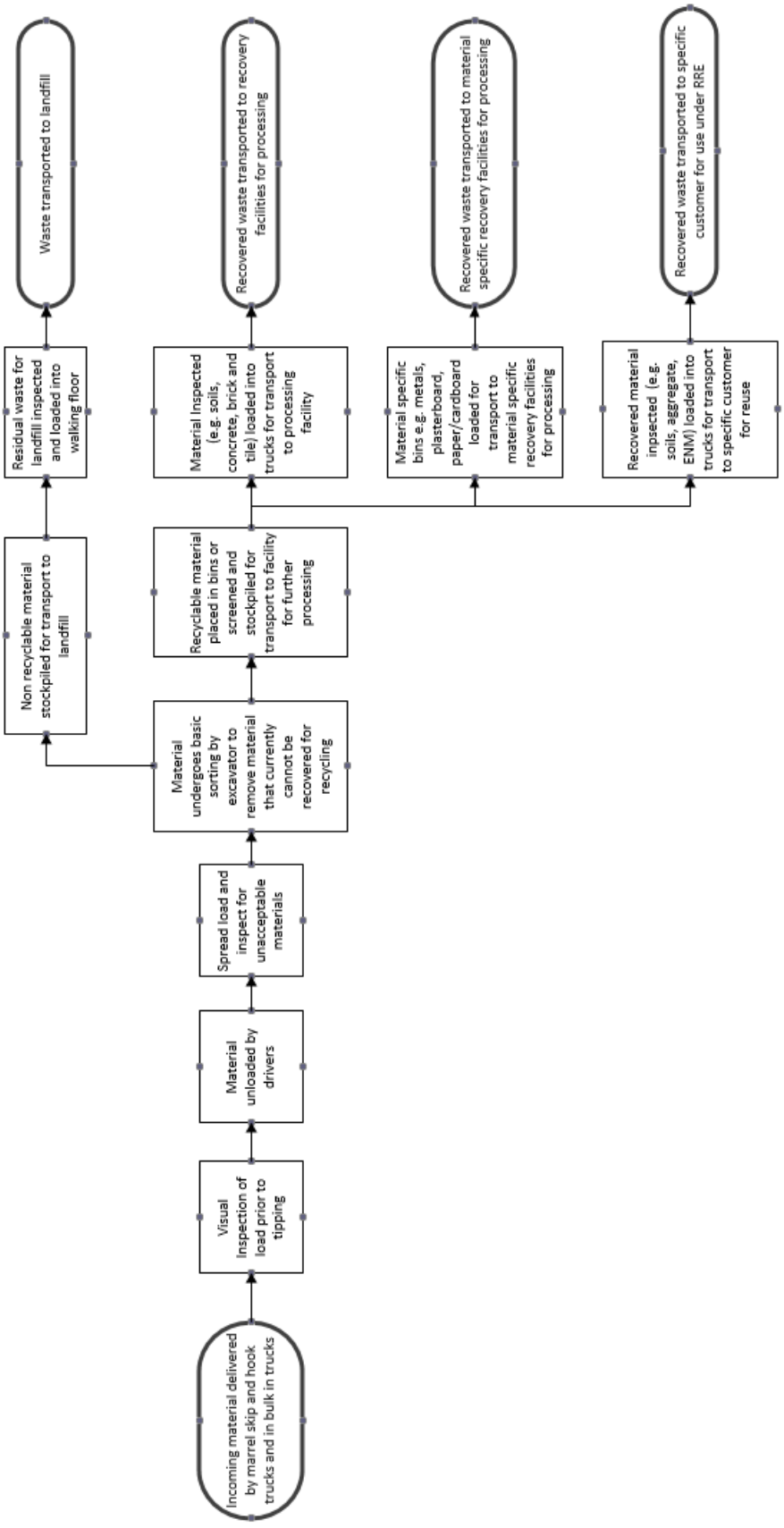
The mobile service van is operated by qualified and experienced plant and vehicle mechanics that attend the site for planned, emergency and routine maintenance. A SWMS is in place for this work. This work is undertaken in the undercover area adjacent to the weighbridge office.

For the purposes of maintaining all on site equipment in a proper and efficient condition, as well as being able to operate plant and equipment in a proper and efficient manner, all maintenance is in accordance with standard operating procedures and manufacturers recommendations.

All operators conduct pre-start checks on their machines, record, and report any defects. Included in the pre-start activities are requirements to action basic maintenance as outlined below prior to operating the machine.

Servicing of equipment is in accordance with manufacturer's recommendations and includes for example re-fuelling, top up of oil and fluids, greasing of moving parts, checking of tyre pressure, lights, reversing sensors and the like. These activities are required to ensure the equipment remains functional and operational. The mobile service van is called to site if required for emergency maintenance.

Figure 6: Site Operations



15.7 Processing of materials

The on-site processing of materials includes sorting and screening of material for the purpose of reuse recovery and recycling. These processes involved the use of heavy plant and equipment within the waste storage, processing and resource recovery areas of the site.

Site operations require the use of mobile equipment including, for example:

- Excavators
- Forklifts
- Magnets
- Wheel loaders
- Industrial sweepers

Mobile and other unfixed equipment change from time to time pending maintenance and other site needs.

Fixed equipment includes:

- 2 weighbridges
- Self bunded fuel tank
- Finger screen
- Finlay screen
- Fixed magnets
- Picking stations
- De-Stoner

Excavators sort tipped material, load the screening equipment and load outbound trucks.

Wheel loaders are required for movement of material around the site and loading trucks.

Fixed equipment screens mixed waste to recover materials for recycling and re-use.

Figure 6 provides details of the material management process and operations. Potential emissions arising from the use of vehicles, plant and equipment on site to move and manage materials are:

- Dust
- Vehicle Emissions
- Noise
- Water

Dust may occur when equipment operators move material. Water used for dust control may result in silt-laden runoff across the site.

The storage of materials in any area that is not covered may result in leachate discharge to stormwater.

Heavy plant and machinery require fuelling and maintenance and as a result, fuels, chemicals and other substances are stored on site. These items are potential pollutants in the event of an accident or incident on site. The Pollution Incident Response Management Plan (PIRMP) includes incidents involving these materials – refer **section 17**.

15.8 Outgoing materials / Product out

Residual waste leaves the site in bulk. Prime movers, with semi-trailers, transport residual waste destined for landfill and recycling. Waste to landfill consists mostly of materials such as plastics and timber that do not have viable markets for large volumes of these materials currently. The transport is by a third party.

Waste for recovery, reuse and or recycling consists mostly of heavy materials including concrete, brick, tile, soil, aggregate, and mixes of these materials. This transport is by third party transporters.

Truck and dog trailers may also transport recovered material products destined for recycling, to other facilities for further processing. The transport is by third party transporters. These materials include separated concrete, bricks and tiles, soils and aggregates and a mixture of these materials.

Other materials are easily recovered on site, including ferrous and non-ferrous metals, timber, paper and cardboard and plasterboard. These materials are placed into hook bins for transport off site to recycling facilities. When full, the bins are transported by either Bingo Bins or another third party provider, to a material specific recycling facility for further processing.

All outgoing waste transport is pre-scheduled where possible to ensure minimal impact to site operations and traffic. Loading out of outbound product is scheduled to avoid peak periods for inbound waste.

15.9 Fate of Materials

Agreements are in place with licenced facilities that can accept waste for disposal by application to land. Waste destined for landfill, is in the most part classified as general solid waste (non-putrescible). From time to time, the site may make unexpected finds of materials that are not classified as general solid waste (non-putrescible). Materials are dealt with on a case-by-case basis in accordance with site procedures and legal and other requirements. Materials classified for disposal are disposed of at a lawful facility.

Agreements are also in place with facilities that accept specific materials for recovery and recycling. All facilities accepting this material maintain the appropriate licences and other approvals to do so and have confirmed their ability to accept this material.

15.10 Housekeeping

Untidy, cluttered work areas are neither productive nor safe. There are operational implications with things getting in the way, litter and objects compromising quality and environmental protection, and it is much easier and more enjoyable to work in an organised and tidy environment.

When a workplace is organised and looked after staff and visitors are more inclined to conduct their work on site with due care and responsibly. In order to eliminate waste in all its forms for example in time, resources, materials and effort, planning and organisation of the site and its activities is crucial.

The approach to good housekeeping requires:

- An organised workplace
- A clean workplace
- Everything to have a place; everything kept in its place
- Repair, replace, maintain
- Systemised approach

An organised workplace reduces wasted time and the potential for things to be misplaced, lost or broken.

The site has allocated areas set aside for each of the key activities. **Figure 5** indicates each of these areas. Key activities on site include those outlined in **section 15**.

The only things that should remain in a work area are the parts, tools, and instructions needed to do the job.

Safe Work Method Statements (SWMS) are in place where appropriate that establish the standards relied upon for a well-organised workplace.

Problems are disguised by clutter, untidiness and lack of cleanliness. Not being able to recognise risks and potential problems can result in problems that are not quick and easy to resolve. The SEQ Management system emphasises continuous improvement and has established procedures and processes to assist with revealing problems and potential problems and establish corrective actions. Encouraging people to reveal problems involves a significant culture change, as does the reporting of near misses.

Keeping up appearances and ensuring things remain clean, which may require painting, sweeping, and washing, to ensure the site is well maintained. All workers are more inclined to maintain the site based on clear guidelines and expectations and established standards.

Maintenance includes cleaning and cleaning can be used as a method of inspection. For example, keeping the pavement areas swept and clear of sediment enables the site to monitor the condition of the pavement.

Routine and preventative cleaning and maintenance programs are in place. The objective is to have on site only those items and resources that are essential to the activities conducted on site. Support teams at head office manage other tools and resources that are not essential to the site. Preventative maintenance is routinely performed with the head office workshop for example being responsible for some planning and scheduling, with much of the routine maintenance and servicing performed by the individuals allocated with the responsibility and with the appropriate skills, qualifications and experience to perform the task.

15.11 Litter Management

Litter control is a factor of housekeeping that requires constant attention. Litter generating activities and weather conditions are monitored. A combination of controls manage litter and prevent litter escaping the site. Controls maintained for the purposes of litter management include:

- Mesh screening on all fencing;
- Keeping waste stockpiles damp;
- Adjusting operations to suit weather conditions;
- Conducting site checks;
- Conducting street checks; and
- Signage and other training and awareness tactics to keep staff informed and on the alert for situations and circumstances that may give rise to litter.

15.12 Future Development

The site has undertaken the following upgrades to meet projected demand and regulatory requirements.

- Redevelopment of the site to accommodate excepted growth including demolition of obsolete ancillary buildings, installation of an additional weighbridge and replacement of the existing weighbridge, construction of a new and larger waste storage and processing shed.
- Construction of a new site office and covered work area and new amenities for staff; and
- Installation of additional pollution control equipment.

Development of the site has improved environmental controls and will contribute in the longer term to a resource recovery rate higher than current average industry standards. There are no further developments currently planned for the site.

RELEVANT DOCUMENTS

- Bingo Risk Aspects and Impacts Register
- SF101 Compliance Recycling Centre Audit Tool
- SOP-COM007 Procurement Procedure
- SOP–COM010 Site Visits and Non Conformance Resolution
- SOP-COM019 Classification and Acceptance of Non trackable Waste
- SOP-COM020 Transport and Disposal of Non Trackable Waste
- SOP-OP006 Using Waste Locate
- SOP-COM021 Transport and Disposal of Trackable or Reportable Waste
- SOP-YA009 Tracking Waste from the Metropolitan Levy Area
- SOP-YA008 Weighbridge Operation
- Recycling Centre Induction and Site Procedures
- SDS as appropriate
- PIRMP 002 Pollution Incident Response Management Plan and Procedures
- SEQ Management Plan
- SOP-COM Incident Reporting Investigation and Review

16. ENVIRONMENTAL MANAGEMENT

16.1 Waste Management

16.1.1. Waste Acceptance

Waste accepted on site is consistent with the materials classified as General Solid Waste (non – putrescible) and in the most part pre-classified within the *NSW EPA Waste Classification Guidelines*. These waste types are permissible under the *Protection of the Environment Operations Act 1997* (POEO Act) and associated Regulations as approved by the EPL.

The following definitions relating to this operation are taken from the NSW Environment Protection Authority (EPA) *Waste Classification Guidelines*. The following information has been copied from Part 1: Classifying waste (November 2014).

Figure 7: Waste Classification Guidelines Part 1 Classifying Waste

General solid waste (non-putrescible) - the following wastes have been pre-classified as 'general solid waste (non-putrescible)':

- *glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal*
- *paper or cardboard*
- *household waste from municipal clean-up that does not contain food waste*
- *waste collected by, or on behalf of, local councils from street sweepings*
- *grit, sediment, litter and gross pollutants collected in, and removed from, storm water treatment devices and/or storm water management systems that have been dewatered so that they do not contain free liquids*
- *grit and screenings from potable water and water reticulation plants that have been dewatered so that they do not contain free liquids*
- *garden waste*
- *wood waste*
- *waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions*
- *containers, previously containing dangerous goods, from which residues have been removed by washing or vacuuming*
- *drained oil filters (mechanically crushed), rags and oil-absorbent materials that only contain non-volatile petroleum hydrocarbons and do not contain free liquids*
- *drained motor oil containers that do not contain free liquids*
- *non-putrescible vegetative waste from agriculture, silviculture or horticulture*
- *building cavity dust waste removed from residential premises or educational or child care institutions, being waste that is packaged securely to prevent dust emissions and direct contact Waste Classification Guidelines*
- *synthetic fibre waste (from materials such as fibreglass, polyesters and other plastics) being waste that is packaged securely to prevent dust emissions, but excluding asbestos waste*
- *virgin excavated natural material*
- *building and demolition waste*
- *asphalt waste (including asphalt resulting from road construction and waterproofing works)*
- *biosolids categorised as unrestricted use, or restricted use 1, 2 or 3, in accordance with the criteria set out in the Biosolids Guidelines (EPA 2000)*
- *cured concrete waste from a batch plant*
- *fully cured and set thermosetting polymers and fibre-reinforcing resins*
- *fully cured and dried residues of resins, glues, paints, coatings and inks*

- *any mixture of the wastes referred to above.*

In assessing whether waste has been pre-classified as general solid waste (non-putrescible), the following definitions apply:

***Building and demolition waste** means unsegregated material (other than material containing asbestos waste) that results from:*

- *the demolition, erection, construction, refurbishment or alteration of buildings other than:*
  - *chemical works, or*
  - *mineral processing works, or*
  - *container reconditioning works, or*
  - *waste treatment facilities, or*
- *the construction, replacement, repair or alteration of infrastructure development such as roads, tunnels, sewage, water, electricity, telecommunications and airports, and includes materials such as: bricks, concrete, paper, plastics, glass and metal, and timber, including unsegregated timber, that may contain timber treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP) but does not include excavated soil (for example, soil excavated to level off a site prior to construction or to enable foundations to be laid or infrastructure to be constructed).*

***Garden waste** means waste that consists of branches, grass, leaves, plants, lopping's, tree trunks, tree stumps and similar materials, and includes any mixture of those materials.*

***Virgin excavated natural material** means natural material (such as clay, gravel, sand, soil or rock fines):*

- *that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities, and*
- *that does not contain sulfidic ores or soils, or any other waste, and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved from time to time by a notice published in the NSW Government Gazette.*

***Wood waste** means sawdust, timber offcuts, wooden crates, wooden packaging, wooden pallets, wood shavings and similar materials, and includes any mixture of those materials, but does not include wood treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP).*

Additional wastes may be classified as general solid waste (non-putrescible) by the EPA from time to time by a notice published in the NSW Government Gazette. All currently gazette general solid wastes (non-putrescible) are listed on EPA's website at www.environment.nsw.gov.au.

***Soil** means soil that meets CT1 thresholds for General Solid Waste in table 1 of the Waste Classification Guidelines as in force from time to time with the exception of the maximum threshold values for contaminants specified in "Other Limits" in the EPL.*

***General or Specific Exempted Waste** means waste that meets all the conditions of a resource recovery exemption under clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005 (NB: This is as noted in EPL 10935. Amendments to the Regulation have resulted in amendments to the structure of the resource recovery orders and exemptions under what is now Clause 91 of Protection of the Environment Operations (Waste) Regulation 2014).*

16.1.2. Inspection of Incoming Waste

The weighbridge officer requests information from the driver about the contents of the load while the driver is on the inbound weighbridge and prior to the vehicle being able to proceed to the tipping floor. The Site Supervisor and staff / workers first inspect the waste on the tip floor prior to unloading during unloading, and after unloading, to determine waste acceptability.

Management of NCW is in accordance with NCW Management Procedures. Reject loads are recorded in the Reject Load Register.

NCW is either:

- not unloaded and the load is rejected prior to tipping; or
- rejected following tipping, re-loaded and charged a reloading fee.

From time to time small quantities of NCW hidden within the bulk of the waste load may be discovered. These wastes are set aside, transported, and disposed of according to procedures.

NCW includes putrescible wastes which can be food for birds and vermin (rats and mice) or attractive to some birds (birds of prey) because of the vermin. All putrescible waste when found is collected and stored in vermin proof containers for transport and lawful disposal.

The Site Supervisor and staff / workers inspect waste at the weighbridge prior to the vehicle being able to proceed to the tipping floor. Inspection of the load occurs again on the tipping floor during unloading, and after unloading, to determine waste acceptability. (refer to **Figure 9**)

Any non-conforming waste will be managed in accordance with procedures for NCW. Reject loads are recorded in the Reject Load Register.

16.1.3. Waste Materials Accepted and Managed on Site

Materials delivered to site in trucks and bins from construction demolition, commercial, industrial and domestic sources are as per Error! Reference source not found. and consistent with that may ppear in skip, hook and bulk vehicles tipping at the site. The site has the capacity and capability to manage these waste types efficiently and professionally.

The site objective is to facilitate maximum resource recovery and to source additional processing facilities and or markets for recovered materials where feasible, financially viable and lawful.

Appendix B contains an assessment of the management and risks associated with each of the materials listed in **Figure 8**.

Figure 8: Waste Materials Accepted on Site

Code	Waste	Description	Activity	Other Limits
	General solid waste (non-putrescible)	Virgin excavated natural material as defined in Schedule 1 of the POEO Act, in force from time to time	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Building and demolition waste as defined in Schedule 1 of the POEO Act, in force from time to time	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Soil that meet the CT1 thresholds for general solid waste in Table 1 of the Waste Classification Guidelines as in force from time to time with the exception of the maximum threshold values for contaminants specified in the 'Other Limits' column	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	Arsenic 40mg/kg; Cadmium 2mg/kg; Copper 200mg/kg; Mercury 1.5mg/kg; Zinc 600mg/kg; Petroleum Hydrocarbons C6-C9 150mg/kg; Petroleum Hydrocarbons C10 – C36 1600mg/kg; Polycyclic aromatic hydrocarbons 80mg/kg Polychlorinated biphenyls (individuals) 1mg/kg. No Acid Sulfate Soils or potential Acid Sulfate Soil to be received at the Premises. Soil thresholds will be subject to review from time to time
	General solid waste (non-putrescible)	Asphalt waste (including asphalt resulting from road construction and waterproofing works as defined in Schedule 1 of the POEO Act, in force from time to time	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Office and packaging waste (including paper, plastics, glass, metal, timber) that is not contaminated or mixed with any other type of waste	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Non –chemical waste generated from manufacturing and services (including metal, timber, paper, ceramics, plastics, thermosets and composites)	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid	Household waste from	Waste Processing	

	waste (non-putrescible)	municipal clean up that does not contain food as defined in Schedule 1 of the POEO Act, in force from time to time	(non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Paper or cardboard	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	
	General solid waste (non-putrescible)	Wood waste	Waste Processing (non-thermal treatment) Waste Storage Resource Recovery	

16.1.4. Waste Source and Source Control

The majority of waste arrives on site as mixed waste. Mixed loads of building, demolition commercial industrial and domestic materials as well as single material loads (e.g. loads of brick and tile, concrete or similar materials) are received on site. Loads of soils and soil-like materials are also received either in mixed waste or as clean (single material) loads. Clean construction and demolition materials include: bricks, tiles, concrete, aggregate, crushed concrete and bricks, rock, soils and soil like materials or any combination of these, for example. This mostly heavy material from municipal, commercial / industrial and construction and demolition sources is recoverable for recycling.

Single or like material loads are tipped separately to mixed waste so they remain clear of possible contaminants such as glass and plastic. Building and demolition materials and soils delivered as single materials are often referred to as ‘clean heavy’ or ‘clean’ materials and mean that the load does not contain other materials that affect resource recovery processing or product quality.

All loads to enter the site undergo a number of visual inspections as outlined in **Figure 9** prior to sorting on site. The waste undergoes a visual inspection prior to entering the yard and prior to unloading on the tip floor – see section **16.1.2**. A third visual inspection is conducted on the tip floor prior to material placement on a stockpile or into a bin.

The weighbridge officers must get information about the load to be tipped prior to tipping. The purpose of understanding the nature and contents of the load prior to tipping is to ensure maximum resource recovery, control and isolation of potential contaminants and to activate emissions controls should they be required.

Potential emissions, which may be a risk during tipping, include odour and dust. Odour has not been an issue for the site since Mortdale Recycling took possession of the site in November 2014. The

insignificant volume of green waste present in incoming waste and the absence of any other waste that may cause an odour e.g. food waste mean that odour is an insignificant environmental impact of site activities.

16.1.5. On Site Storage

A number of factors influence waste storage requirements including:

- Conditions of EPL20622;
- Conditions of Development Approval;
- Environmental management requirements;
- SEQ and site management plans and procedures;
- Supply (incoming volume) and demand (for recovered materials); and
- Weather conditions (that determine construction and demolition, household clean-up and other related activities that influence waste volumes and inbound and outbound waste traffic).

Waste storage on site is temporary and subject to availability of transport and markets for end product.

A risk assessment of the waste types appearing in mixed waste delivered to site considers the risks of storage of the materials listed in **Figure 8**. **Appendix B** contains the risk assessment for the waste types noted in **Figure 8** and the controls required to minimise these impacts associated with these aspects of site operations.

Storage of waste on site is in accordance with the OEMP and the site plan at **Figure 5**. The OEMP is reviewed in accordance with SEQ Management Plans and Procedures. Waste is stored within the shed (refer to section **16.1.5**).

The site has the capacity and capability to manage these waste types efficiently and professionally. The site objective is to facilitate maximum resource recovery and to source additional processing facilities and or markets for recovered materials where feasible, financially viable and lawful.

Impacts that may be associated with waste storage include odour and dust. Odour is a potential concern for some materials. Given the limited amount of these waste types received on site and the limited time that they are stored on site the likelihood of odour emissions is extremely low.

Dust control measures are in place on site to prevent, control and manage dust, leachate and stormwater emissions (refer to **section 16.3**).

16.1.6. Waste Processing

Processing of waste is in accordance with the details set out in the OEMP and the site plan in **Figure 5**.

Waste processing equipment installed increase both operational efficiency and the resource recovery rate of the site in line with the State Governments Resource Recovery target. Bingo has a resource recovery target of 85%.

16.1.7. Materials Produced

Materials produced by the site are set out in the waste management - material risk assessment in **Appendix B**. For each type of waste, the resulting site output is documented and the risk associated with management of the materials has been assessed. The risk assessment is based on the processes and procedures outlined in the OEMP. For example, waste that is stored and processed in the shed poses minimal risk of leachate contamination of stormwater as waste is stored undercover and protected from rainwater.

Materials produced from waste delivered to site include:

- Paper and Cardboard
- Metal – ferrous
- Metal – non ferrous
- Timber / Wood waste
- Soils
- Plasterboard
- Green Waste
- Concrete (and aggregates including)
- Brick and Tile (and aggregate including)
- Asphalt
- Mixed residual including plastics, textiles, treated and other timbers, concrete, brick and tile, soil.

16.1.8. Resource Recovery

Where materials are recovered for reuse under Resource Recovery Orders and Exemptions, the SEQ processes and procedures for the weighbridge, stockpile management, and recovered material management must be followed. These are included in SEQ Management System documentation.

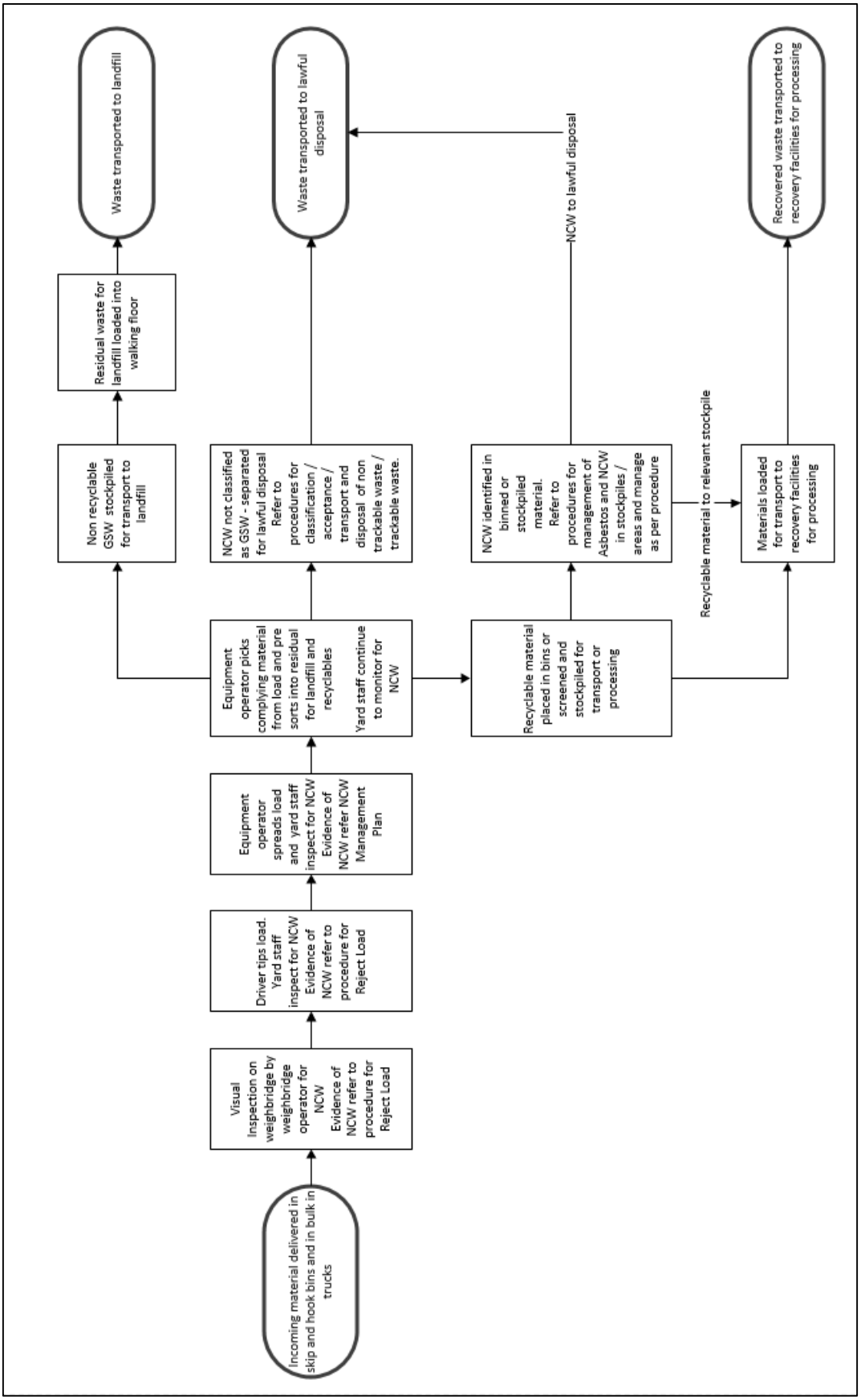
The site recovers soils from mixed waste and these soils must undergo a screening process on site. Soils are also delivered to site as clean material that meets the CT1 threshold requirements within the NSW EPA Waste Classification Guidelines Part 1 and EPL limits. Following processing these soils are tested to determine if they meet the requirements of “The Continuous Process Recovered Fines Order 2014”.

Other materials can be derived from mixed waste and clean construction and demolition waste, including aggregate. Aggregate may be processed and stockpiled on site. Where this occurs, it must be sampled and managed in accordance with the Recovered Aggregate Resource Recovery Order.

The site may receive a load of material classified as virgin excavated natural material (VENM). This material is separately stockpiled for sampling and analysis and until a market can be found for excavated natural material (ENM) that meets the requirements of a resource recovery order and exemption. Resource Recovery Orders that may be applicable include the following:

- Excavated natural material Order (PDF 92KB) Exemption (PDF 55KB)
- Recovered aggregate Order (PDF 72KB) Exemption (PDF 57KB)
- Recovered fines (Continuous)Order (PDF 82KB) Exemption (PDF 57KB)

Figure 9: Visual Inspection and NCW Management Process



16.1.9. Composting

Garden waste materials received on site are typically contained in the contents of skip bins mostly from household clean up mixed waste or demolition sites. Garden waste is a low volume material and is picked and then stored separately for recycling. The waste contains stumps, thick branches and other garden waste. The size and nature of this material means that it is not able to be mulched chipped or reused on the generators site and requires processing.

There is no chipping mulching or composting on site. All material is transported off site to a local facility approved for this type of processing before they can be sent to a suitable market.

16.1.10. Transport and Disposal

Materials are transported and disposal occurs in accordance with SEQ Management System procedures and processes.

Typically, contractors transport bulk waste off site for disposal and recycling. Where material is transported in bins rather than in bulk, Bingo Bins typically transport the bins to a recycling facility or landfill as appropriate.

All third party transporters are required to provide evidence that they are lawfully able to transport the material and dispose of it at the proposed disposal or recycling facility.

All disposal and recycling facilities are required to confirm their ability to lawfully accept the material. Reviews are conducted on a random basis of the development and other approvals required by landfill and recycling facilities to lawfully accept, store, process, recover or landfill waste.

If soil analysis identifies trackable or contaminated material the handling, transport and disposal of this material must be conducted in accordance with site procedures and legal requirements for NCW.

16.1.11. Waste Tracking

Waste tracking for certain waste types or from certain generator locations is a requirement of the Protection of the Environment Operations (Waste) Regulation 2014 (“the Waste Regulation”). The Waste Regulation came into force on 1 November 2014.

Waste required to be tracked includes for example:

- Trackable waste – types 1 and 2
- Waste generated in the metropolitan levy area (MLA) and transported for lawful purposes outside the MLA
- Special waste – tyres and asbestos

Trackable Waste

Mortdale Recycling does not accept or transport trackable waste. Customers are advised that these waste types are prohibited on site. Any material suspected of being trackable waste is rejected and management system procedures followed.

The waste described in Schedule 1 of the Regulation is required to be tracked when transported. It may be exempt if it does not have any of the characteristics also listed in Part 3 of Schedule 1.

MLA Waste Tracking

The Waste Regulation requires that waste generated in the MLA is to be tracked if transported anywhere outside of the MLA if it is to be transported more than 150 kilometres. The reporting of transport of material more than 150 kilometres outside of the MLA requires the use of the EPA OWT – MLA online portal.

Weighbridge officers are responsible for creating a Consignment Templates and Transport Reports.

All waste transported interstate is required to be reported in accordance with the Regulation and EPA requirements.

Special Waste – Asbestos and Tyres

Mortdale Recycling does not accept or transport Special Waste. Customers are advised that these waste types are prohibited on site. Any material suspected of being Special Waste is rejected and SEQ Management System procedures followed.

Refer to the relevant procedures for classification, acceptance, transport and disposal of trackable or reportable / non trackable waste – see Relevant Documents

16.1.12. Special Considerations

Stockpile Height

Stockpiling on site is limited to the extent required by the development consent for the site. Stockpiles are managed in accordance with NSW EPA *Waste Levy Guidelines,* the *Protection of the Environment Operations Act*, the site Environment Protection Licence and this OEMP.

There are no stockpile height limits applied to this site as the site is limited by the shed and the capacity to store materials undercover.

Special Waste – Asbestos and Tyres

Asbestos is a potential NCW find. The SEQ Management Plan and associated procedures address unexpected finds of special waste. Specifically the below procedures apply if waste materials are suspected of containing asbestos.

- SOP-COM019 Classification and Acceptance of Non trackable Waste
- SOP-COM020 Transport and Disposal of Non Trackable Waste
- SOP-COM021 Transport and Disposal of Trackable Waste
- SOP-OP006 Using Waste Locate
- SOP-YA001 Tipping Loading at Recycling Centres
- SOP-YA003 Asbestos at Recycling Centres

If waste materials are suspected to contain asbestos they are treated as asbestos regardless.

Single tyres are a rare find in inbound waste. Tyres if found, are set aside and transported to a local tyre recycler for recycling in quantities below reporting thresholds.

Soils

Soil may be recovered on site or delivered as a mostly soil load. Mixed waste that is mostly soil is stockpiled separately on site for processing. Most soil recovered on site is from mixed waste from construction and demolition works and household clean-up projects. Processing of waste on site results in recovery of fine (small particle materials that are 9.5mm or less. Soil where required is managed in accordance with the conditions of the relevant Resource Recovery Order and Exemption (RRO&E). If required soils are transported to licenced recycling facility for further processing to remove mixed waste materials that cannot be separated on site.

Sampling

If a material is subject to a Resource Recovery Order and Exemption (RRO&E), and if the site is approved to store and process that material, the site employs a consultant to conduct sampling and analysis of that material in accordance with the relevant RRO&E.

Suitably qualified independent third party consultants undertake sampling and analysis. Mortdale Recycling uses pre-approved preferred suppliers that meet Bingo's minimum standards for preferred suppliers.

Authorised Amount

The site is required to comply with limits applied by the EPA related to the amount of waste that can be stored at any one time on the premises. This is an 'authorised amount' and is a limit for the purposes of the waste levy and a site waste threshold. The Authorised Amount is a condition of the EPL where applicable to the site.

Mortdale Recycling has the capacity and approval to store 5,000 tonnes of waste at any one time. This number is based on a reasonable assessment of the development consent to be amended by section 96 application to Hurstville Council, site storage capacity, operational needs, processing capacity and the investment being made in the site to support resource recovery, material throughput and storage.

Weighbridge Operation

The SEQ Management System includes a procedure for weighbridge operation to ensure all incoming and outgoing vehicles whether transporting waste or not, are recorded in Tipwatch in accordance with relevant laws and SEQ Management System procedures.

The weighbridge is calibrated at least annually in accordance with the requirements of the National Measurement Institute (NMI) and the National Measurement Act 1960 and Regulations (as amended).

RELEVANT DOCUMENTS

- NSW EPA Waste Classification Guidelines
- NSW EPA Waste Levy Guidelines
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Waste) Regulation 2014
- Protection of the Environment Operations (General) Regulation 2011
- Resource Recovery Order and Exemption (RRO&E) for Recovered Fines
- Work Health and Safety Regulation 2011
- NSW EPA Draft Protocol for Managing Asbestos During Resource Recovery of Construction and Demolition Waste
- Reject Load Register

- Reject Load Form
- OPL-CS006 Entering Waste Breakdown Values
- OPL-CS010 Entering and Retrieving an Enquiry
- OPL-CS013 Tipping at Bingo Waste Recycling Centres and Other Facilities
- OPL-CS020 Dealing with Material Bins
- Bingo Risk Aspects and Impacts Register
- SF101 Compliance Recycling Centre Audit Tool
- SOP-COM007 Procurement Procedure
- SOP–COM010 Site Visits and Non Conformance Resolution
- SOP-COM019 Classification and Acceptance of Non trackable Waste
- SOP-COM020 Transport and Disposal of Non Trackable Waste
- SOP-COM021 Transport and Disposal of Trackable Waste
- SOP-OP006 Using Waste Locate
- SOP-YA001 Tipping Loading at Recycling Centres
- SOP-YA003 Asbestos at Recycling Centres
- SOP-YA009 Tracking Waste from the Metropolitan Levy Area
- SOP-YA008 Weighbridge Operation
- SOP-YA011 Recovered Fines Management
- SOP-YA012 Stockpile Management Process
- Recycling Centre Induction and Site Procedures
- SDS as appropriate
- PIRMP 002 Pollution Incident Response Management Plan and Procedures
- SEQ Management Plans

16.2 Pest Management

The site is relatively devoid of vegetation and as such has extremely low habitat value for animals. The land is also paved and experiences high vehicle and pedestrian activity that is a deterrent to many fauna.

Birds and animals can become pests if not managed. To minimise the attraction of birds and other pests resulting from waste operations the following management procedures apply:

- use rodent baiting stations;
- ensure no ponded water (water source);
- control and remove weeds (nesting sites and source of food);
- no food and food scraps – any found or generated by staff on site are to be placed in a lidded commercial waste bin which is to be kept closed when not in use;
- lunchroom wastes to be contained in lidded garbage bins until appropriate disposal; and
- no putrescible wastes accepted in incoming material.

Rodent baiting stations where installed are checked and maintained according to the supplier's and pest controllers recommendations.

From time to time, the site may receive advice from an authority with regard to a control order or similar requirement in relation to plant and animal pests that need to be controlled. The concern is that some waste materials for example green waste may harbour or contain controlled pests and need to be managed in accordance with the relevant legislation and controls.

Environment Alerts are posted at the site describing the pest, the waste materials most likely to be affected and controls required.

RELEVANT DOCUMENTS

- SF109 Fire Ant Inspection Form
- Current Environment Alerts

16.3 Air Quality: Dust

Exhaust emissions, dust and odour have the potential to affect air quality. This section deals with particulate emissions being dust arising from site activities associated with the handling and management of waste.

The likelihood and consequence of dust emissions are likely and therefore the risk of dust emissions is rated as high in the site Risk, Aspects and Impacts Register.

The Site Supervisor completes a daily review of the site and completes a checklist ensuring that equipment is operating and that suitable controls are in place for activities that may have an impact on air quality. Odour and dust are typical emissions attributed to waste management operations.

Mortdale Recycling receives on site mostly inert materials and therefore odour is an insignificant risk. Odour is assessed as a potential impact of site aspects and has been assessed in the Risk, Aspects and Impacts Register.

Dust is a likely risk and as such, dust management measures have been identified to manage this risk. Measures are reviewed and amended as required and where new risks are identified. Measures are also reviewed following incidents and audits at which time site controls are changed or upgraded and workers re-trained.

The Site Supervisor has the authority to cease operations if weather conditions cause unmanageable conditions for the operation.

16.3.1 Dust Management

The management of dust is by means of the following staged approach that is dependent on weather conditions. The measures are hierarchical and dust prevention is key.

1. Dust Prevention, ways and means to prevent the formation of dust;
2. Dust Minimisation, ways and means to minimise the formation of dust; and
3. Dust Control, ways and means to control dust once it has been formed.

Many of the procedures are common to one or more of these dust management options and a clear distinction may not exist between prevention, minimisation and control.

In the event of an uncontrolled emission, the Pollution Incident Response Management Plan (PIRMP) is to be implemented.

16.3.2 Sources of Dust

Dust is defined as *solid particulate matter (of mineral or biological origin) capable of temporary suspension in the air, smaller than grit, larger than smoke*, with a maximum size of 100 micrometres. Potential sources of dust are:

1. unloading (waste inwards) / loading (waste outwards) of vehicles;
2. processing of materials by screening;
3. passage of vehicles over sealed surfaces;
4. stockpiles of raw feed, products and by-products;
5. local traffic on Hearne Street; and
6. local and regional winds.

Unloading / Loading of vehicles

Waste is unloaded by tipping onto the ground, during which dust can be generated from the contents being tipped. Dust can be minimised by unloading slowly and by not dumping. If necessary hoses are on hand to spray the area when dust is detected during unloading in the instance where water sprays / sprinklers and fogging system, are not adequate to prevent dust.

Waste for disposal or recycling is loaded by the front-end loader and removed by rigid trucks or truck and trailer combinations. Dust generated during the loading-out process. Dust can be minimised by tipping the front-end loader bucket slowly from a minimum height (consistent with preventing damage to the truck body).

Processing Area and sorting of waste

A principal source of dust is the thin, surface layer of fine particulate material, sand, soil, etc. on the floor of the processing and tipping areas, internal roads and processing equipment sourced from materials tipped on site. The surface layer however is without the very coarse fraction present in the stockpiles and is usually dry.

Machinery used in the processing area Finlay and Finger Screens and mobile plant (front-end loaders and excavators) load and transfer materials into the sorting and processing equipment. Water sprays are the main means of dust control on the processing plant and across the shed, with outdoor sprays available as required.

Dust minimisation and control for mobile plant servicing screens is by water sprays and by careful use of the loader or excavator bucket. For plant fitted with a boot hopper, the boot should be kept close to full to minimise the depth of fall of material from bucket to boot. Keeping the bucket close to the boot hopper and tipping evenly without dumping the contents minimises dust emissions.

Surfaces and vehicles on the Premises

The passage of vehicles across the site spreads and distributes particulate material, promotes drying, and can cause the material to become airborne and form dust. When the material is wet it becomes “mud”, and may be tracked about the site before it dries to a fine dust. Removal of fine material through sweeping the paving around the site minimises vehicle generated dust. Dampening/watering of on-site roadways is to be carried out at the first appearance of a dust plume following vehicles travelling on the internal roads and surfaces.

Stockpiles

The stockpiles of raw feed, products and by-products on site are a potential source of dust. In summer, during dry, windy periods if the stockpiles are not dampened, dust can be formed by wind passing over the stockpiles. Stockpiles with a pointed apex should be truncated to minimise their profile. Sprays systems are designed to ensure coverage of stockpiles.

Hearne Street

It is unlikely that dust from the premises will affect Hearne Street; the waste processing and storage shed encloses activities on site and is fitted out with an internal fogging system and an external sprinkler system. Other dust control measures are in place.

Local Winds

The Premises slopes significantly from the entrance to the rear and is fully enclosed by surrounding buildings that restrict wind access to site. The building is enclosed on three sides preventing access by wind to internal stockpiles and processing equipment. Local winds are likely to follow the local main road and open space corridors; thus south to north. Regional winds are expected to have the profile and pattern of winds of Royal National Park and Georges River.

Winds passing over adjoining sites, traffic on adjoining sites or traffic on nearby roads could generate dust events and deposit dust onto the Premises and nearby properties. Mortdale has no control over this source of dust. The Site Supervisor is to make note of:

1. all noticeable dust events (date, time, duration, apparent origin and wind direction[1]),
2. significant wind events (date, time, duration and wind direction),
3. the details when plant/operations is/are shut down because of dust management concerns.
4. the sites wind anemometer readings and adjust site operations accordingly.

16.3.3 Dust & Wind

Under zero or very low wind conditions, dust will settle in the same location as it is generated. With any noticeable wind (Beaufort scale 2 or greater – refer to **Figure 10**) dust will be mobilised and move away from the area in which it was generated. To control dust, operations are reduced when wind speed is above Beaufort 4, and operations should stop when wind speed is at or above Beaufort 5 and/or when a mobilised[2] dust plume is observed.

All boundaries are either fenced or bordered by buildings several metres in height. All activities of the site are located well below adjacent building wall heights.

Figure 10: Beaufort Wind Force Scale and Wind Speeds

Beaufort scale	Descriptive term	Wind speed km/h	Wind speed Metres/second	Description on Premises
0	Calm	0	0	Smoke rises vertically
1	Light air	1-6	0.28-1.67	Wind motion visible in smoke.
2	Light breeze	7-11	1.94-3.05	Wind felt on exposed skin. Leaves rustle.
		10	2.7	Speed limit of vehicles on the Premises
3	Gentle breeze	12-19	3.3-5.3	Leaves and smaller twigs in constant motion.
		20	5.4	Reference speed*
4	Moderate breeze	20 - 29	5.5-8.05	Raises dust and loose paper; small branches are moved.
		30	8.1	Reference speed*

[1] Wind direction is specified as the direction from which the wind originates, i.e. a north wind is from the north.

[2] A dust plume is mobilised when it is moving from the dust source at walking speed, about 5 km/hour or 2 metres/second.

5	Fresh Breeze	30-39	8.33-10.8	Small trees in leaf begin to sway
		50	13.5	Reference speed*
Notes. Mean wind speed measured at 10 metres above ground level. Speed of Sound in air: 344 metres/sec. at 20°C *Vehicles speeds included for reference purposes.				

16.3.4 Dust Prevention

The most effective means of dust management is the control of dust at the source where the dust is a point source. Dust that has dispersed over an area is extremely difficult to control. Measures and means to prevent dust include:

1. good housekeeping of the facility;
2. regular sweeping of the yard;
3. maintain and enforce a vehicle speed limit of 5 km/hour on the Premises;
4. fixed water sprays installed around the perimeter of the shed and boundary;
5. hand held hoses to dampen areas not covered by sprays;
6. regular use of a water sprays and sprays during dry and/or windy conditions; and
7. ensuring that loads-outwards in vehicles are covered and vehicle tailgates are securely fixed.

16.3.5 Dust Minimisation

Measures and means to minimise the formation of dust include those under Dust Prevention, plus:

1. inspection of loads for dusty materials prior to unloading;
2. use of water sprays as required during unloading; and
3. use of water sprays as required during sorting.

16.3.6 Dust Control

Dust control on the Premises is aimed at preventing air pollution and preventing degradation of local amenity. Measures and means to control dust are those above under Dust Prevention and Dust Minimisation, plus the following:

1. at wind speeds at or above Beaufort 3 water sprays to be activated,
2. at wind speeds at or above Beaufort 4 operations to be reduced.
3. at wind speeds at or above Beaufort 5 operations to stop,
4. when a mobilised dust plume is observed water sprays to be activated and level of operations assessed.

Wind speeds can be determined by the wind anemometer located on site or estimated by observation of the movement of the surrounding trees; **Figure 10** gives details. Automatic operation of the water sprays is not a practical option as the use of the sprays needs to be adjusted to suit the work in hand. The sprays should be activated once visible dust is being raised by operations or by vehicles passing over the yard. Machine operators are in constant radio contact with traffic controllers and the Site Supervisor to activate external sprays and internal fogging systems.

The controlled unloading/loading of materials and site housekeeping combined with the use of water sprays as required will significantly minimise dust generation. Error! Reference source not ound.provides a summary of dust management measures.

16.3.7 Rumble Grid

The rumble grid sits in line with the outbound weighbridge and all vehicles are required to travel over the rumble grid prior to exiting the site.

Maintenance involves an excavator removing the grid and scraping out any material captured in the sump.

Figure 11: Rumble grid

16.3.8 Street Sweepers

The street sweeper is a critical item of equipment on site as it ensures material build up on paved areas is kept to a minimum. It also provides coverage for dust control to the areas of the site outside the reach of the sprinkler system (i.e. areas outside of the main traffic and waste management areas of site.

16.3.9 Water Sprays – External sprays and fogging system

A dust suppression system has been installed throughout the site. A fogging system has been installed throughout the building, over equipment, on equipment at tipping points. The system provides for maximum flexibility in dust control including the use of town water and harvested rainwater. Machine operators and yard supervisors under the control of the Site Supervisor manually control the system. Details of the dust control system are given in **Figure 12**.

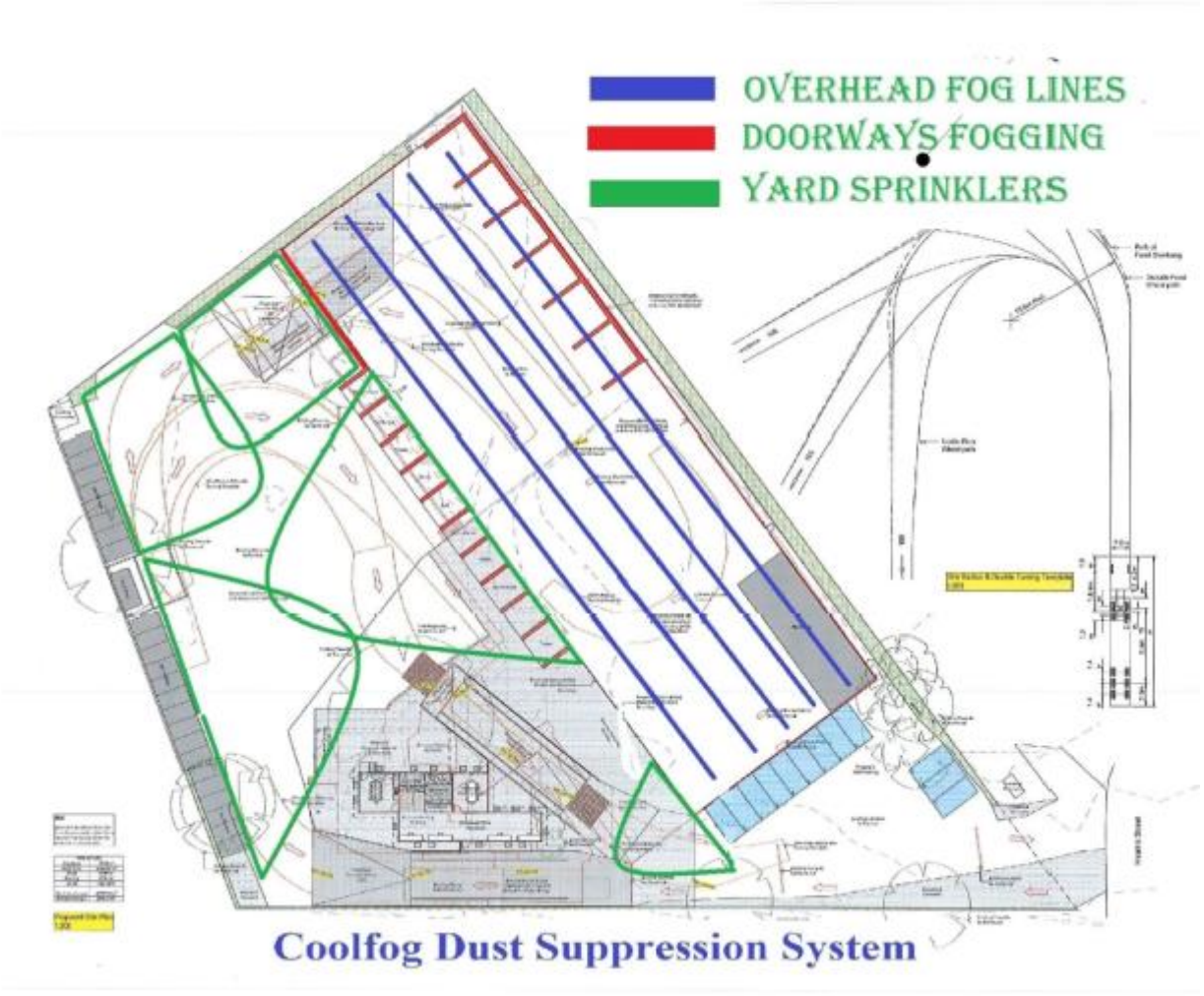
Fugitive Overhead Fog Lines

Fog lines are installed overhead inside the shed as shown in **Figure 15** in blue to control the dust from being generated from excavators, front-end loaders and trucks whilst loading and unloading. The fog produced at 1,000 psi is 3-10 micron allowing it to encapsulate dust particles. The dust particles are then too heavy to remain airborne thus suppressing these particles to the ground. The fog in turn evaporates as it is nearing the ground so there is no wetting of the floor area. This zone is controlled to cycle on and off according to the levels of dust being generated.

Fugitive Doorways Fogging

The doorway fogging uses the same method as the overhead fog lines except installed around the doorway as shown above in red (not including storage bays). One line is installed horizontally across the top and two vertical lines, one down each side of the doorway. These nozzles are aimed directly inwards to create a fog curtain so that any dust escaping from the building that the overhead fogging has failed to encapsulate is suppressed when passing through this fog curtain. This zone is controlled to cycle on and off according to the levels of dust being generated and operate independently of the overhead fogging.

Figure 12: Details of Dust Suppression System



Recycling Plant Fogging

The recycling plant has fog nozzles installed over the feed in screen and at the conveyor transfer points, sorting lines, finished product stockpiles and load out bays. By fogging at these transfer points, the dust does not rise into the air and is suppressed back onto the conveyors. The product on these conveyor belts does not become too wet due to the fine fog particles. This zone is controlled to operate when the plant is turned on and will turn off when the plant is not operating.

Yard Sprinklers

The yard are controlled by rotating sprinklers as shown in **Figure 14**. Strategically mounted sprinklers cover the yard area. These sprinklers control the dust on the ground to prevent the dust leaving the

site. The yard area is controlled to operate from a standalone pressure pump via a timer and remote control. This program can be set to operate on a daily basis including cycle times with a remote control override if required to turn the sprinklers on permanently for a period.

Water Supply and Treatment

The water supply for the fog system and yard sprinklers is sourced from water storage tanks located on site adjacent to the building. The tanks fill from rainwater captured from the roof. This water will be filtered to 5 micron and treated through an Ultra Violet System before being used in the fogging system or yard sprinklers. The tanks have a town water top up option.

Figure 13: Summary of Dust Suppression Measures

Issue	Dust Prevention	Dust Minimisation	Dust Control
Loading & Unloading			
Unloading & Sorting	unload slowly, no dumping Keep tipping face tight	minimise use of excavator on top of stockpile Keep tipping face tight water sprays	Water sprays as required
Loading-out: waste	water sprays as required	loader bucket close to truck body, tip slowly water sprays as required	Loads to be covered. Water sprays as required
Loading-out: product	water sprays as required	water sprays as required	water sprays as required
Processing			
Screens	water sprays excavator bucket close to boot hopper, tip slowly	water sprays excavator bucket close to boot hopper, tip slowly	water sprays
Local winds	retain moisture on ground and stockpile surface with water sprays	Reduced operations when wind speed at or above Beaufort 4.	water sprays to be activated when wind speed at or above Beaufort 3 NO operations when wind speed at or above Beaufort 5.
Mobilised dust plume			water sprays activated assess operations
Trucking Issues			
Vehicles on the Premises	speed limit 5 km/hour	speed limit 5km/hour	speed limit 5 km/hour

Vehicles Inwards	adhere to traffic plan	adhere to traffic plan	Loads to be covered. Untarping only on site
Vehicles Outwards	sweep driveways as required	sweep driveways as required	Loads to be covered. Sweep driveways as required
Hearne Street	sweep driveways as required	sweep driveways as required	Loads to be covered. Sweep driveways as required

16.3.10 Site Dust Management Checks

Daily visual inspections and management strategies

- Check for dust plumes
- Check the way that loaders and excavators are moving material between stockpiles and vehicles – e.g. releasing loads close to surface of stockpiles and vehicle loads
- Activate water sprays as required
- Check functioning of water sprays
- Check functioning of fogging system including pumps
- Check functioning of street sweeper
- Check truck loads covered prior to departure from site
- Check rumble grid
- Check levels of sediment build up in stormwater pits / Enviropods and clean as required.
- Complete daily site supervisor checklist and note weather conditions

Weekly visual inspections and management strategies

- Check levels of sediment build up in stormwater treatment devices.
- Check the settlement of sludge in reservoir and sump of rumble grid.

During and after a rainfall event

- Check there is no risk of discharge of sediment from the Premises.
- Check stormwater treatment units are functioning effectively
- Check stormwater pits and clean out as required
- Scrape up and sweep any material deposited on paved areas
- Check water content of material leaving site and ensure no leakage from vehicles prior to vehicle leaving site
- Check surrounding roads and sweep as required

RELEVANT DOCUMENTS

- SEQ Management System and Procedures

- Risk Aspects and Impacts Register
- Pollution Incident Response Management Plan
- Coolfog Dust Suppression System Operations and Maintenance Manual
- Rocla Operations and Maintenance Manual
- SWMS
- SEQ Management Plan and Procedures
- SF059 Bingo Risk Assessment Tool
- SF093 Recycling Centre Induction and Site Procedures
- SF101 Compliance Recycling Centre Audit Tool
- SF110 Dust and Litter Control Checklist – Site Supervisor
- PIRMP-002

16.4 Air Quality: Odour

Dust, exhaust emissions and odour have the potential to affect air quality. This section deals with exhaust emissions being potential emissions arising from use of on-site equipment and trucks transporting waste to and from the site. This section also deals with odour being a potential emission arising from the waste types managed on site under certain circumstances and from leachate that may be generated if water was to be exposed to these waste types.

Particulate emissions are dealt with in **section 16.3**.

16.4.1 Exhaust emissions

The burning of fuel by combustion engines has the potential to result in odour caused by the products of fuel combustion which can be particulate or gaseous in nature.

These emissions are minor and rated as a low risk in the site Risk, Aspects and Impacts Register.

Preventative, routine and emergency maintenance programs are in place for on-site equipment. Emissions of this nature are managed within the equipment maintenance programs.

All equipment maintenance is coordinated and managed by the head office workshop and is determined in conjunction with the Site Supervisor and Head of Recycling.

16.4.2 Odour emissions

Odorous materials such as putrescible waste are not accepted on site. The source of putrescible materials unexpectedly found in materials on site is most likely to be lunch scraps from workers on buildings sites. Food scraps are immaterial in the waste received on site. Where identified they are separated and stored in a commercial waste bin on site for proper disposal.

A commercial waste bin on site contains office waste, waste from staff amenities such as the staff lunchroom and from time to time putrescible waste found in tipped material. The commercial waste bin is serviced at least weekly.

Some non-putrescible waste types may deteriorate in certain conditions and give rise to odour. Green waste can decompose over time and if not stored undercover to prevent it being exposed to stormwater.

Small amounts of green waste are received on site usually as part of a mixed load of waste. Green waste is manually separated from mixed waste on the tip floor. It is separately stockpiled undercover, in a dedicated storage bay or bin. Green waste is removed from site on average on a weekly basis and has no time to decompose on site and cause odour.

Given the above, green waste and putrescible materials are highly unlikely to generate any significant odour.

The potential for odour nuisance as assessed in the risk aspects and impacts register is unlikely and of insignificant consequence and is therefore rated as low.

16.5 Water Management

16.5.1 Stormwater

Approximately 100% of the site is concrete paved. The concrete is in relatively good condition across much of the site.

The stormwater drainage system connects roof runoff and surface runoff and exits the site in the rear north-western corner. The drainage system consists of:

- surface water drainage lines;
- treatment devices;
- firewater retention;
- gross and fine pollutant screens;
- pits and sumps; and
- rainwater tank.

16.5.2 Uses of Water

Water is used on site mostly to control dust in the following applications including:

- Street Sweepers
- Sprinkler system
- Other uses of water include use in staff amenities and for cleaning.

Waste water from staff amenities is drained to sewer.

Stormwater runoff drains to the on-site stormwater management system.

16.5.3 Water Sprays - Sprinkler and Fogging Systems

A sprinkler system is installed around the perimeter of the outside of the building to assist with dust control. A fogging system is also installed inside the building.

The site is split into zones that can be activated independently or together. The fogging system and sprinkler system can also be operated independently.

The system provides for maximum flexibility in dust control and uses both rain-water and mains water. Mains water is used to top up rain-water tanks located near to the entrance to the site and pumps connected to the rainwater tanks supply consistent water pressure to the sprinklers and fogging system.

The system is manually controlled by remote control by the Traffic Controller, machine operators and yard supervisors under the control of the Site Supervisor. Details of the water sprinkler system are in **section 16.3.9**.

The sprinkler system controls and settles dust on trafficable areas that are external to the building. The sprinklers are activated intermittently in circumstances where vehicle movements on paved areas of the site or any other activity causes dust.

The fogging system operates almost full time whilst the site is operational. All zones of the fogging system can be operated independently of one another or at the same time. The fogging system provides dust control to all aspects of the operations inside the building that may give rise to dust.

Figure 14: Sprinkler System Specifications

Pump	TBA
Fixed sprinklers	TBA
Type	TBA
Minimum flow	TBA
Coverage	TBA
Radius	TBA
Water Supply	
Water Tank	1 x 45,000 litre rainwater tank.

Figure 15: Fog System Specifications

Pump	TBA
Fixed sprinklers	TBA
Type	TBA
Minimum flow	TBA
Coverage	TBA
Radius	TBA
Water Supply	
Water Tank	1 x 45,000 litre rainwater tank.

16.5.4 Stormwater Drainage System

The site is concrete paved and falls significantly to the northern corner of the site, where the main discharge off-site is located. The site has an interconnected drainage system that drains to Council's stormwater at the north (north western) boundary of the site. The drainage system is outlined in **Figure 19.**

16.5.5 Management of Stormwater Runoff

Strategies are adopted to manage potential sediment laden runoff and leachate resulting from

rainwater inundation of waste stored on site. Waste materials are tipped, processed stored and loaded inside the shed. The waste material stored inside the shed is protected from rainwater. Waste stored in bins is prevented from contaminating stormwater as the bins are maintained in good condition, sealed to prevent leakage and are either stored inside the shed or covered and stored outside for transport from site. Vehicles from time to time transfer materials from the shed to internal roads when moving between the main shed and areas outside the shed. The material is mostly soil transferred to external paved areas.

A 150mm high bund has been constructed around the external perimeter of the site to capture runoff and direct it into the onsite stormwater system via the Rocla system. The Rocla system is designed to remove fine sediment and associated pollutants, oil spills, trash and debris. Note that the Rocla system is capable of removing most suspended solids however it is not to be solely replied upon to prevent pollution The materials retained in the Rocla system are the main pollutants that may arise from activities in the yard.

Runoff from the external paved areas is first treated by a Rocla First Defence separator system into which all site drainage pits are connected. To reduce maintenance requirements of the treatment system prevention measures are in place to minimise sediment pick-up by stormwater are as follows:

- All drainage pits are fitted with gross pollutant screens with a maximum diameter of 2-3 mm to retain coarse sediments and gross pollutants;
- All drainage pits are fitted with Enviropods with sediment and oil filters to screen out sediment and other materials in suspension in site runoff;
- On a daily basis and after each significant rainfall event the inlet screens are to be inspected and retained sediment and other debris removed as appropriate;
- Any unpaved catchment areas are either landscaped or dressed with coarse aggregate / mulch or similar to promote water infiltration into the ground;
- Undercover storage areas are protected from stormwater and maintained in as dry condition as possible (i.e. ponding of water should not occur) at all times;
- Roof drainage is to the stormwater tank located near the entrance of the site;
- No undercover storage areas drain to the stormwater system;
- Waste storage bay are bunded to prevent stormwater entry and runoff from within waste storage areas entering stormwater;
- Surface and other water sources are drained to the Rocla system (refer to Error! eference source not found. and

- **Figure** 18 for details).; and
- Establishment of an exclusion zone where the Rocla system is located to ensure that access to the system is not impeded at any time.

The Site Supervisor has the responsibility to check the stormwater management system and controls to ensure it is operational and that sediment has been removed. Regular maintenance of the system is conducted as per the manufacturer's recommendations where relevant. The Site Supervisor completes periodic assessment of the performance of the controls in accordance with the SEQ Management Plans and Procedures.

16.5.6 Stormwater Treatment

Rocla stormwater treatment and detention devices are installed on site to pre-treat runoff prior to discharge to a stormwater easement at the northwest boundary. These units increase capacity for silt removal from water discharged from site. The units are detailed in **section 16.5.6**.

Enviropods

EnviroPods™ are the first stage of the sites stormwater management system. They are a pre-treatment device inserted into site stormwater pits. They remove a significant portion of litter, debris, and other pollutants from stormwater runoff. The wire frame is covered with a mesh screen through which stormwater is filtered before passing though the pit into the drainage pipes.

Figure 16: Enviropod Detail

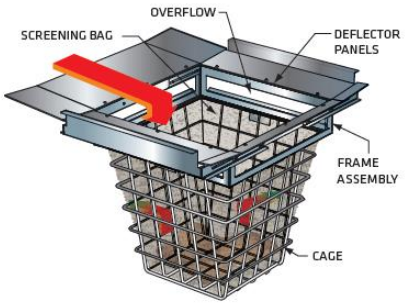
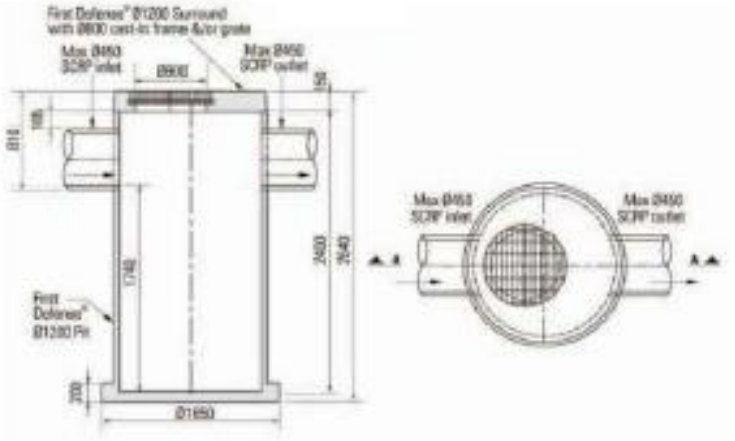


Figure 17: Rocla First Defence System



ROCLA FIRST
DEFENCE DETAIL
NOT TO SCALE

Figure 18: Rocla Vortex Separator Operation

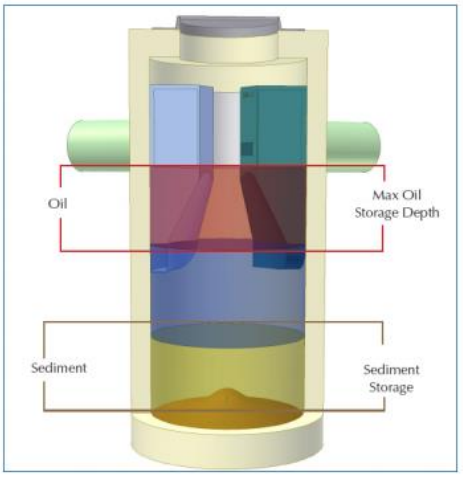
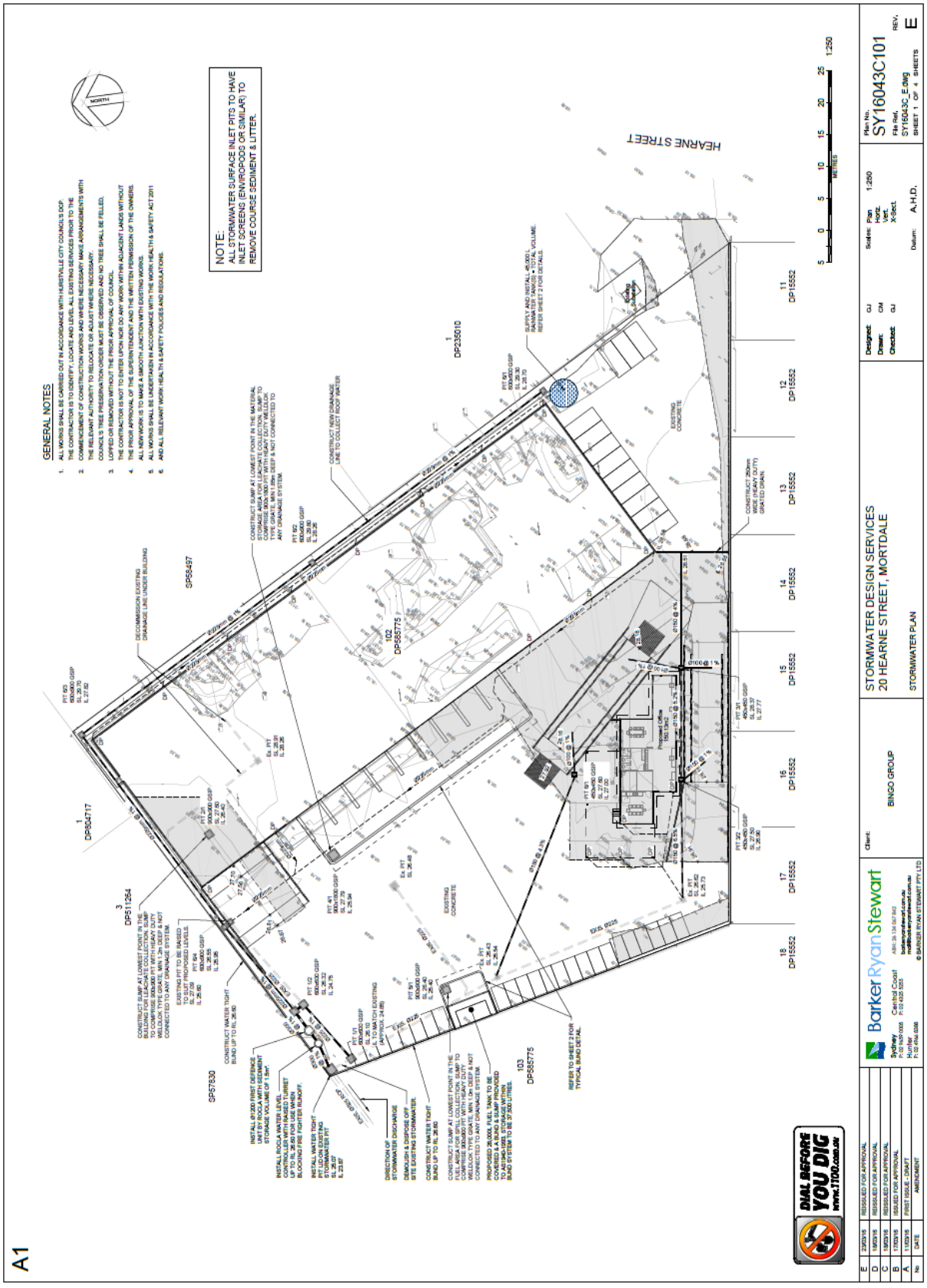


Figure 19: Stormwater Management Plan



16.5.7 Leachate Management

A rain event or dust suppression by use of water sprays may result in a small amount of runoff. This runoff may be contaminated if it has encountered waste. In these circumstances, the water needs to be managed as leachate.

A leachate collection sump has been located at the lowest point in each undercover area where waste is stored or processed. The location of these pits is shown in **Figure 19**. If leachate is generated it is pumped into a tanker for removal and lawful disposal. Leachate generation on site is a rated risk within the Risk, Aspects and Impacts Register and is insignificant.

Figure 20: Leachate Sump Detail

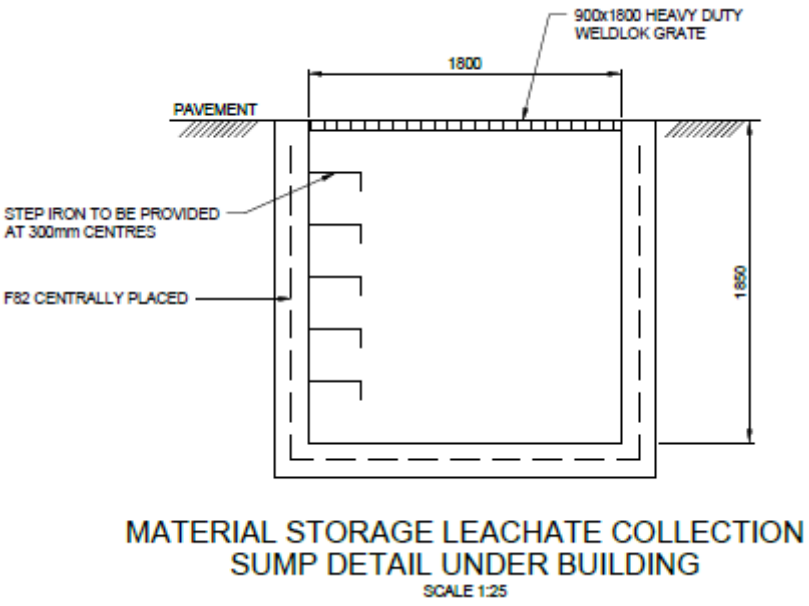
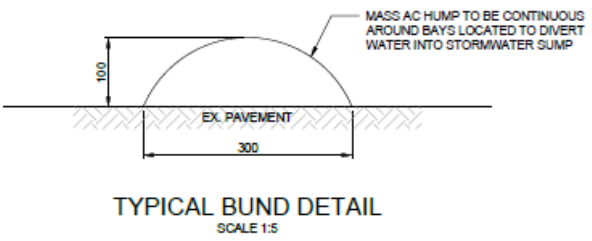


Figure 21: Bund Detail



16.5.8 Groundwater

All operations are conducted on paved surfaces that are in good condition. Groundwater impacts have not been identified as a risk related to the environmental aspects (operational activities) of this site as there is no contact with groundwater in normal operating conditions. Groundwater is unlikely to be impacted where the site is operating outside normal conditions.

Groundwater impacts may need to be considered during site development activities that involve excavation.

Any future works on site that involve excavation to the extent that risks to groundwater or soil and associated impacts need to be assessed, where required they will be managed by a consultant appropriately qualified to assess and supervise the works.

In circumstances where excavation or other ground disturbance may occur, an appropriately qualified consultant is to be engaged if required to provide advice in relation to soil and water classification for the purposes of management. Suitable controls will then be implemented to manage generated groundwater and excavated soil as and when this occurs.

At any time that contamination is detected, further action will be subject to the advice of an appropriately qualified consultant.

16.5.9 Fire water

A Rocla water level controller with raised turret up to RL 26.60 has been installed on site in the northwestern corner of the site.

The unit is for use in an emergency particularly fire when large amounts of water are used for firefighting. The unit enable the site to block firefighting water runoff from entering off site stormwater drainage systems. Refer to the site Stormwater Plan No. SY16043C_E prepared by Barker Ryan Stewart for details.

RELEVANT DOCUMENTS

- SOP-YA014 Stormwater Treatment Device Maintenance and Cleaning
- Rocla First Defense Operations and Maintenance Manual
- Sludge Judge
- Spill control procedures
- SWMS Environmental Management
- OPL-YA013 Wheel wash and Cattle Grid Use and Maintenance
- OPL_YA023 Environmental Management at Bingo Sites
- SOP-COM022 Spill and Leak Control Procedures
- PIRMP-002

16.6 Dangerous Goods and Hazardous Chemicals

Small volumes of substances with properties that may classify them as dangerous goods or hazardous chemicals may be kept on site to facilitate equipment servicing and fuelling mainly. The site is not classified as dangerous or offensive under the criteria established within the *Environmental Planning and Assessment Act 1979*.

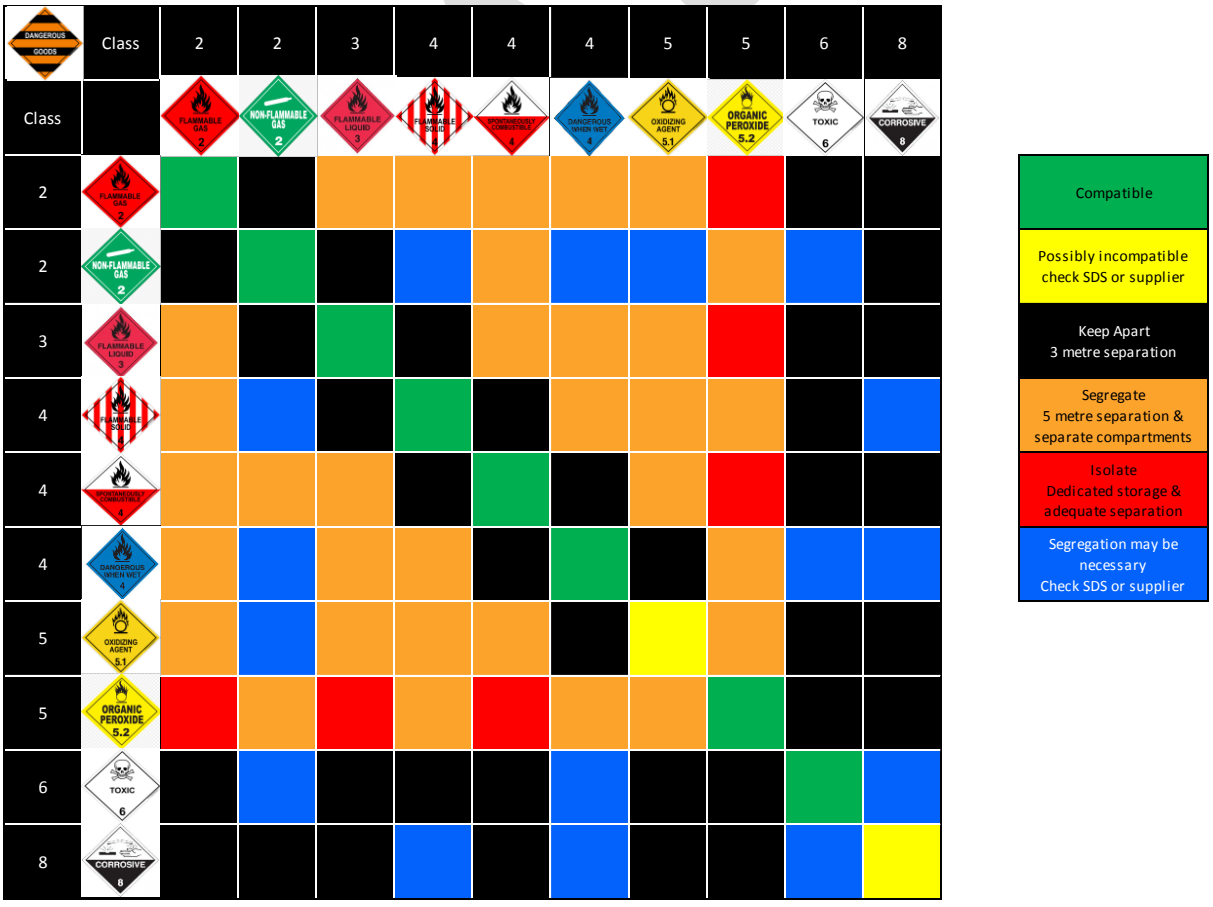
The key substances kept on site include diesel and LPG. Both substances are fuel for fixed and mobile equipment on site. The maximum volumes of any substances including the above are well below screening thresholds and therefore are rated as a minor risk within the Risks Aspects and Impacts Register.

Controls are in place for the storage and handling of these materials. The controls are established with the SEQ Management Plans and Procedures and are located in the Templates Drive.

The location of substances within the site and the management strategies for pollution incidents that may occur involving these materials are addressed within the Pollution Incident Response Management Plan (PIRMP)

Dangerous Goods on site are managed in accordance with the segregation principles outlined in **Figure 22**.

Figure 22: Dangerous Good Segregation Chart



16.7 Traffic Management

Traffic management is critical to ensuring streamlined operations on site. Effective traffic management reduces traffic impacts such as congestion in the surrounding neighbourhood. **Figure 5** details the sites traffic flow. The Traffic Management Plan is available on the Templates Drive.

Hurstville Council has previously placed restrictions on access to site. Barry Avenue is a residential street therefore Mortdale Recycling requires visitors', customers and other users of the site to approach and the leave the site via Hearne Street from Boundary Road at all times.

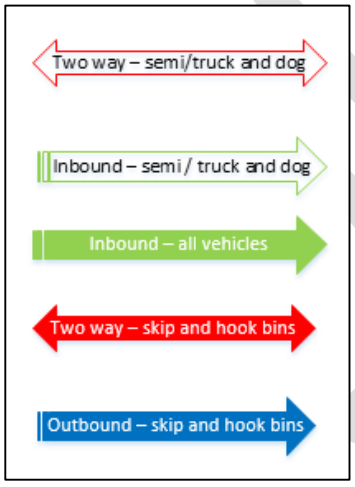
The Traffic Controller controls the entry and exit of vehicles to and from site. The Traffic Controller is on-site whilst the site is open to the public i.e. from 6am to 6pm. The role of the Traffic Controller is to ensure worker safety, efficient operations and to conduct visual inspections of incoming loads. The traffic controller manages vehicles involved in bin changeovers to ensure trucks can move onto and off site quickly and quietly.

Trucks returning to site at the end of the day park in the centre of the yard. If they are carting laden bins and site processing has ceased for the day bins are off-loaded on the tip floor where they are stored overnight for tipping by site staff and drivers using site equipment the following morning.

The traffic flow indicators in **Figure 23** outlines direction for vehicles entering and leaving the site as per the detailed site plan in **Figure 5**.

Potential emissions arising from this activity include greenhouse gases and noise.

Figure 23: Traffic Flow Indicators



The site is accessed via a driveway off Hearne Street and the traffic impact of the site is negligible in the context of the existing traffic network that services the site. Hearne Street is a Local Road with a speed limit of 50km/hour.

Hearne Street can be accessed via Boundary Road or Barry Avenue. Access to the site via Barry Avenue is not encouraged by the site. Boundary Road is a Regional Road. Boundary Road also has a 50km/hour speed limit.

The main road servicing the local area is Forest Road, which is a State Road. At the intersection with Boundary Road the speed limit is 60km/hour. Local Roads adjoining Boundary Road to the East are mass limited and restricted to heavy vehicles.

Peak traffic periods for surrounding roads are 9:00am to 10am and 4:30pm to 5:30pm.

16.7.1 Traffic Rules

On the Site, all NSW Road Rules apply with the exception of the following.

- seat belts are to be worn at the driver's discretion;
- two and three wheeled vehicles are prohibited from the site;
- mobile plant operators or vehicle drivers are required to hold a valid licence or certificate of competency;
- all vehicles entering the site must enter and proceed with caution;
- speed limit is 5 km/hour maximum;
- site equipment / mobile plant have Right of Way at all times;
- the Site Supervisor, or his delegate will direct and manage traffic;
- all pedestrians in all areas, except the car park, are to wear high visibility clothing, helmets and protective footwear;
- pedestrians include drivers outside their vehicles;
- pedestrians in all areas do not have Right of Way;
- all vehicles entering the site are to do so via the inbound weighbridge adjacent to the site office;
- all trucks exiting the site are to pass over a rumble grid;
- all vehicles exiting the site are to do so over the outbound weighbridge; and
- all vehicles exiting the site must do so in a forward direction.

16.7.2 Traffic Management Considerations

Pedestrians are advised to make eye contact with, and be recognised by mobile plant operators or vehicle drivers to register their presence before walking into a plant/vehicle manoeuvring area.

Pedestrians (non staff) are to be accompanied at all times by site staff.

Parking is provided on site for visitors and Bingo fleet vehicles only. On-site parking is very limited.

Limited street parking is available in Hearne Street.

Hearne Street is the main and only access roadway to the site.

All vehicle types use surrounding roads and the internal road network is suitable for all vehicles up to a truck and quad dog trailer and semi-trailers configuration.

A sign at the access gate to Mortdale Recycling specifies a 5 km/hour speed limit within the Site.

The Hearne Street precinct is a fully developed high traffic area, largely occupied by industrial land. These businesses and industries involve a significant number of vehicle movements per day.

Hearne Street joins with the traffic network at Boundary Road.

All visitors and contractors vehicles must proceed directly to the visitor car parking area and then report to the site office at the weighbridge.

The site generally provides a one-way traffic flow including access to the weighbridge/office building. Vehicles are required to leave the site in a forward direction passing by the site office and over the outbound weighbridge.

Truck movements consist of the arrival, unloading, loading and departure of trucks. A traffic report was completed for the development assessment. The quantity of material received and resources recovered vary due to seasonal, weather and industry influences.

From time to time the site will experience larger volumes of trucks queued for tipping or loading. Areas have been set aside as truck holding areas particularly for larger vehicles which have a greater impact when moving around on site. This does not impede access to the site or neighbouring sites.

16.7.3 Traffic Management Plan

The site maintains a Traffic Management Plan that is amended from time to time following changes in operations. The Traffic Management Plan and Traffic Rules form part of site induction for all workers and visitors to site.

The Traffic Management Plans address:

- Site access requirements;
- Traffic flow;
- Parking on site;
- Site operations; and
- Site traffic rules.

During peak times, the following additional procedures are implemented for a driver approaching the site:

- Driver calls site on approach
- As soon as the truck driver reports in on approach, the site supervisor shall inform the site of its arrival by two-way radio.
- The Site Supervisor, Weighbridge Officer or Traffic Controller will direct the truck to the truck holding area to await further instruction.
- The site shall confirm that an offloading / loading space is available before the truck is allowed to enter the site.
- When a truck is cleared to proceed, it enters under the direction of yard staff.

The site can comfortably accommodate multiple truck and dog trailer, or semi-trailer configurations, with further units accommodated within the confines of the site. Multiple smaller trucks can be parked up in the same way.

RELEVANT DOCUMENTS

- SF115 Mortdale Traffic plan

16.8 Noise

The surrounding development of the site is characterised by a mix of industrial developments including factories, automotive servicing, parts, panel beaters and painters, printing facilities, hardware and general supplies, manufacturing and warehousing. The closest residential premises are 200 metres south of the site. Barry Avenue has residential and industrial premises. The nearest industrial receptors neighbour the site. The environment is dominated by noise consistent with the neighbourhood including dogs, birds, etc., distant road traffic noise, and infrequent industrial noise arising from use of for example angle grinders and ratchet guns.

Notwithstanding that the site is located within an industrial zone and the surrounding land use is largely industrial, the site operations must be controlled to protect acoustic amenity and prevent offensive noise. The concrete buildings provide significant noise retention for site operations. Buildings of similar construction border the site. The site however must control noise and vibration emissions to minimise potential impacts to neighbours. The sites approved operating hours are 6am to 10pm Monday to Saturday with 24 hour truck access. The site is open to the public from 6:00am.

Aspects considered acoustically significant are:

- Noise emissions from vehicles movements on the premises;
- Noise emissions from vehicle movements on the surrounding lands; and
- Noise emissions from operational processes on the premises.

Noise sources on site include:

- Trucks;
- Traffic off site and within other premises;
- Processing equipment in largely enclosed shed; and
- Use of mobile equipment including excavators and loaders.

Acoustic amenity protection measures are as follows:

- Site speed limit of 5 km/hour;
- Site hours of operation are outlined in Figure 24;
- All on-site, fixed and mobile diesel powered plant, excluding road vehicles are to be correctly fitted and maintained according to the manufacturers' standards or the minimum standards or specifications with respect to engine exhaust or muffler, and reversing beepers ;
- Where plant has been, or is proposed to be modified, the modifications are to conform to the manufacturers' standards or specifications;
- Site activities not to occur adjacent to site boundaries where possible;
- Access to site at any time must be via Boundary Road / Hearne Street. Access via Barry Road is permitted after 7am and prior to 6pm only but is discouraged by the site.
- Doors and other openings in the building directed away from sensitive receptors such as residential premises.

Figure 24: Hours of Operation

Day	Truck movements	Waste management and processing
Monday to Saturday	24 hours	06:00 to 22:00
Sunday	No operations	No operations
Public holidays	See day of week	See day of week

RELEVANT DOCUMENTS

- OPL-YA027 Controlling Noise Emissions
- OPL-YA023 Environmental Management at Bingo Sites

16.9 Greenhouse Gas Emissions

For the purposes of determining potential environmental impacts, emission sources identified in relation to the operations are consumption of fuel for facility operations and transport of materials to and from the site, consumption of electricity for facility operations.

16.9.1 Emission Scope

National Greenhouse Account Factors define three emission scopes for greenhouse emissions accounting and reporting purposes. Scope 1 emissions are those emissions that occur directly because of activities. Scope 2 emissions are indirect and mostly associated with the use of purchased electricity because of the production of electricity by a third party requires the burning of fossil fuels. Scope 3 emissions are optional for greenhouse accounting and reporting purposes because they are a consequence of business activities, for example disposal of waste generated by the activity at a landfill off site and owned and or operated by a third party.

16.9.2 Emission Source

Specifically scope 1 emissions arising from Mortdale Recycling operations are consumption of diesel fuel for stationary energy purposes (on site fixed equipment) and consumption of diesel for transport energy purposes (vehicles housed on site). Scope 2 emissions include Consumption of purchased electricity.

Scope 3 emissions that have some significance include consumption of diesel for transport of waste to and from site by third party vehicles and transport of residual waste to landfill.

16.9.3 Greenhouse Gas Assessment

A greenhouse gas assessment completed in April 2016 by SLR Consulting, for the site operations set out in this OEMP, indicates that the site has a negligible contribution to the National Greenhouse Accounts and sits well below registration and reporting thresholds established in the *National Greenhouse and Energy Reporting Act 2007*.

17. POLLUTION INCIDENT RESPONSE / EMERGENCY MANAGEMENT PLAN

Mortdale Recycling has a *Pollution Incident Response Management Plan* (PIRMP) developed to meet the requirements of the *Protection of the Environment Operations Act 1997* (the Act). The Act was amended in 2011 to improve the way pollution incidents are reported and managed. Licensees under the Act are required to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP). Mortdale Recycling is the licence holder for EPL20622.

The purpose of this document is to plan Mortdale Recycling's response should a pollution incident occur, to document this response and the ensure that the plan is prepared, kept, tested, reviewed and implemented in accordance with the legislative requirements. The specific requirements for PIRMPs are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation) and are summarised below. The legal requirement for a plan is as follows.

- Holders of EPLs must prepare a pollution incident response management plan (section 153A, POEO Act);
- The plan must include the information detailed in the POEO Act (section 153C) and the POEO(G) Regulation (clause 98C) and be in the form required by the POEO(G) Regulation (clause 98B);
- Licensees must keep the plan at the premises to which the EPL relates (section 153D, POEO Act); licensees must test the plan at least every 12 months and after a pollution incident in accordance with the POEO(G) Regulation (clause 98E); and
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened within the meaning of Part 5.7 of the POEO Act, licensees must immediately implement the plan (section 153F, POEO Act).

All site staff are trained in this procedure, which is subject to annual review.

The notification of environmental incidents under this PIRMP is only required for those incidents causing or threatening to result in material environmental harm (a material harm incident) as defined in the POEO Act (see Section 5.1).

The site is not classified as dangerous or offensive and therefore presents

RELEVENT DOCUMENTS

- The *Protection of the Environment Operations Act 1997*
- The *Protection of the Environment Operations (General) Regulation 2009*
- Pollution Incident Response Management Plan – Mortdale (PIRMP-002)
- PIRMP-002_Process
- PIRMP-002_Flowchart

18. SUPPORTING DOCUMENTS

- Recycling Centre Induction and Site Procedures
- Pollution Incident Response Management Plan – Mortdale
- NSW EPA Waste Classification Guidelines
- NSW EPA Waste Levy Guidelines
- Resource Recovery Order and Exemption (RRO&E) for Recovered Fines
- Records Management Register
- SOP-COM016 Document Control and Records Management
- SF093 Recycling Centre Induction and Site Procedures
- PIRMP-002 Pollution Incident Response Management Plan
- Training Needs Register
- SOP-COM005 Induction Competence Awareness and Training
- SOP – COM010 Weekly Site Visits and Non Conformance Resolution
- SDS as appropriate
- SWMS as appropriate
- Completed risk assessments
- Safe Work Method Statements (SWMSs)
- Standard Operating Procedures (SOPs)
- Risk Assessment Tool – BRAT
- SF054 Bogie Axle Truck Inspection
- Emergency Management Plan
- Evacuation Procedure
- SF063 Hook Truck Inspection
- SF018 Skip Bin Inspection Form
- SF062 Single Axle Truck Inspection
- SF115 Mortdale Traffic Plan
- SEQ Management Plans and procedures
- Documents referred to throughout the OEMP

APPENDIX A: UNPAVED AND LANDSCAPED AREAS

APPENDIX B: WASTE MANAGEMENT MATERIAL RISK ASSESSMENT

WASTE MANAGEMENT

Classification	Source Control / Source Separation	Storage	Processing	Materials Produced	Resource Recovery Order & Exemption	Transport & Disposal	Risk Assessment
VENM: means 'natural material (such as clay, gravel, sand, soil or rock fines): (a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and (b) that does not contain any sulfidic ores or soils or any other waste and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved for the time being pursuant to an EPA Gazettal notice.'							
Pre-classified as General Solid Waste (non-putrescible)	Rarely delivered to site Source specific delivery Separately stockpiled in main shed	Internal	Nil on site	VENM	YES	3rd party transport Transfer to end user	YES
BUILDING AND DEMOLITION WASTE: means unsegregated material (other than material containing asbestos waste or liquid waste) that results from: The demolition, erection, construction, refurbishment or alteration of buildings other than: • chemical works; • mineral processing works; • container reconditioning works; • waste treatment facilities. The construction, replacement, repair or alteration of infrastructure development such as roads tunnels sewage, water, electricity, telecommunications and airports and includes materials such as: • bricks, concrete, paper, plastics, glass and metal, timber including unsegregated timber, that may contain timber treated with chemicals such as copper, chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP) but does not include excavated soil (for example, soil excavated to level off a site prior to construction or to enable foundation to be laid or infrastructure to be							

Classification	Source Control / Source Separation	Storage	Processing	Materials Produced	Resource Recovery Order & Exemption	Transport & Disposal	Risk Assessment
constructed)							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site as either mixed waste or clean material by type Types include: concrete brick and tile, aggregate	Internal	Screening	Concrete Brick and tile Aggregate	NO NO YES	3rd party transport Transfer to recycling facility	YES
SOILS (UNDER CT1 THRESHOLDS): means the definition applies to soils as recovered fines screened using a "continuous process". Recovered fines means a soil or sand substitute with a typical maximum particle size of 9.5 mm that is derived from the continuous processing of mixed construction and demolition waste including residues from the processing of skip bin waste.							
Not pre-classified as General Solid Waste (non-putrescible) Classification according to physical and chemical analysis in accordance with Waste Classification Guidelines	Delivered to site in mixed waste. Delivered to site as soil below CT1 threshold with waste classification report	Internal	Screening	Recovered Fines	YES	3rd party transport Transfer to recycling facility Transfer to end use	YES
ASPHALT WASTE: asphalt recovered from pavements etc. and including from road construction and waterproofing works							
Pre-classified as General Solid Waste	Delivered to site in mixed waste	Internal	Nil	Asphalt	YES	3rd party transport Transfer to	YES

Classification	Source Control / Source Separation	Storage	Processing	Materials Produced	Resource Recovery Order & Exemption	Transport & Disposal	Risk Assessment
(non-putrescible)	and as asphalt					recycling facility	
OFFICE AND PACKAGING WASTE: recyclable materials derived from source separated non putrescible general solid waste streams (including paper, plastics, glass, metal, timber) that is not contaminated or mixed with any other type of waste.							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking	Paper & Cardboard Metals Timber Residual	NO NO NO NO	3rd party transport Transfer to recycling facility	YES
NON CHEMICAL WASTE: generated from manufacturing and services (including metal, timber, paper, ceramics, plastics, thermosets and composites)							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking	Paper & Cardboard Metal Timber Residual	NO NO NO NO	3rd party transport Transfer to recycling facility Transfer to landfill	YES
HOUSEHOLD CLEANUP WASTE: from municipal clean up that does not contain food as defined in Schedule 1 of the POEO Act, in force from time to time							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking	Paper & Cardboard Metal Timber Residual	NO NO NO NO	3rd party transport Transfer to recycling facility Transfer to landfill	YES
GARDEN WASTE: consists of branches, grass, leaves, plants, loppings, tree trunks. Tree stumps and similar materials and includes any mixture of those materials							
Pre-classified as General Solid Waste	Delivered to site in mixed waste.	Internal	Picking	Garden Waste	YES	3rd party transport Transfer to	YES

Classification	Source Control / Source Separation	Storage	Processing	Materials Produced	Resource Recovery Order & Exemption	Transport & Disposal	Risk Assessment
(non-putrescible)						recycling facility	
GLASS, PLASTIC, RUBBER, PLASTERBOARD, CERAMICS, BRICKS, CONCRETE or METAL:							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking & Screening	Concrete, brick & tile Aggregate Metals Timber Plasterboard Residual	NO YES NO NO YES (N/A) NO	3rd party transport Transfer to recycling facility Transfer to landfill	YES
PAPER OR CARDBOARD:							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking	Paper & Cardboard	NO	3rd party transport Transfer to recycling facility	YES
WOOD WASTE: means sawdust, timber offcuts, wooden crates, wooden packaging, wooden pallets, wood shavings and similar materials and includes any mixture of those materials but does not include wood treated with chemicals such as copper chrome (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP).							
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site in mixed waste.	Internal	Picking	Timber	NO	3rd party transport Transfer to recycling facility Transfer to landfill	YES
MIXED WASTE: any mix of materials included in Appendix B							

Classification	Source Control / Source Separation	Storage	Processing	Materials Produced	Resource Recovery Order & Exemption	Transport & Disposal	Risk Assessment
Pre-classified as General Solid Waste (non-putrescible)	Delivered to site as mixed waste. Any mix of wastes including those separately listed in Appendix B	Internal	Picking & Screening	Concrete, brick & tile Aggregate Metals Timber Soils Asphalt Garden Waste Plasterboard Residual	NO YES NO NO YES YES NO YES NO	3rd party transport Transfer to recycling facility Transfer to landfill	YES

* Pending completion of WHS, Environment and Quality Management Systems

RISK ASSESSMENT AND CONTROL MEASURES

Waste	Potential Pollutants	Likelihood	Consequence	Controls	Responsibility	Refer to Environment, WHS & other procedures *
VENM	Dust	2	2	Storage inside shed in allocated stockpile bays	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Building and Demolition	Dust Sediment Non complying waste (including asbestos)	2 2 1	2 2 1	Storage inside shed in allocated stockpile bays Dedicated bins for separated materials including metals, timber, paper and cardboard, plasterboard	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Soils	Dust Sediment Non complying waste (including asbestos)	2 2 1	2 2 1	Storage inside shed in allocated stockpile bays	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Asphalt	Leachate	1	3	Leachate from Asphalt is unlikely however to remove any concern of leaching from asphalt waste it is stored in dedicated bins Bunding of shed to	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures

Waste	Potential Pollutants	Likelihood	Consequence	Controls	Responsibility	Refer to Environment, WHS & other procedures *
				prevent external surface runoff from entering shed		
Office and Packaging Inert materials	Litter	1	1	Dedicated bins for separated materials	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Non Chemical Inert materials		1	1	Dedicated bins for separated material	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Household Clean up Inert materials	Odour	1	2	Dedicated bins for separated materials	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Garden	Leachate	1	2	Nutrient leaching from garden waste is possible with long periods of exposure. The risk is very minor due to waste storage on site being dedicated bins for separated materials Bunding of shed to prevent external surface runoff from	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures

Waste	Potential Pollutants	Likelihood	Consequence	Controls	Responsibility	Refer to Environment, WHS & other procedures *
				entering shed		
Glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal Inert materials	Dust Sediment Leachate	1	2	Leaching of nutrients from glass is highly unlikely. It is preferable not to have glass in incoming material. When it is discovered it is stored inside shed and separately binned Other materials are stockpiled in the shed Dedicated bins for separated metals and plasterboard. Bunding of shed to prevent external surface runoff from entering shed	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Paper and Cardboard	Leachate	1	1	Leaching of nutrients from paper and cardboard are extremely unlikely however to eliminate any risk of leaching paper and cardboard are	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures

Waste	Potential Pollutants	Likelihood	Consequence	Controls	Responsibility	Refer to Environment, WHS & other procedures *
				stored in dedicated bins. Bunding of shed to prevent external surface runoff from entering shed		
Wood Waste	Leachate	1	2	Nutrient and heavy metal leaching from wood waste is possible with long periods of exposure to water. The risk is very minor due to waste storage on site being undercover. Recyclable wood waste is stored in bins. Unrecyclable wood waste stockpiled inside the shed as mixed waste. Bunding of shed to prevent external surface runoff from entering shed	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and Procedures
Mixed Waste	Leachate Odour Dust	1 2 2	2 2 2	Leaching of heavy metals, and nutrients from mixed waste may	Site supervisor	Site Operations Environment Management Plan SEQ Management Plan and

Waste	Potential Pollutants	Likelihood	Consequence	Controls	Responsibility	Refer to Environment, WHS & other procedures *
	Sediment Non complying waste	2 1	2 1	occur if the waste comes into contact with water. This is prevented by storage of waste undercover. Bunding of shed to prevent external surface runoff from entering shed		Procedures