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Environmental - Remediation - Engineering - Laboratories - Drilling

ENVIRONMENTAL ASSESSMENT FOR CONTAINERS

Always Recycling Pty Ltd

191 Miller Road, Chester Hill NSW

Prepared by

Aargus Pty Ltd

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ATTACHED

SITE PHOTOS

SITE PLAN

1 Introduction

1.1 Introduction and Background

Aargus Pty Ltd was engaged by Always Recycling Pty Ltd (Always) to prepare an Environmental Assessment (EA) in relation to a modification relating to sound mitigation measures for the Materials Recycling Facility at 191 Miller Road Chester Hill, NSW (the site).

On 27 February 2007, the Minister for Planning granted approval to construct and operate a Materials Recycling Facility at the site, for the processing of ferrous and non-ferrous metals only. Always is occupying and operating the site as a Materials Recycling Facility for the recycling of building construction waste including metal. The use of shipping containers was used as a temporary measure for noise control measures and they are now proposed to be used as a permanent noise control measure which is subject to this modification application.

It is understood that this EA is required to accompany the application to modify the Consent be assessed by the Department and relevant authorities.

The main components of the modification at the site are as follows:

- Substitute noise barriers for shipping containers
- Noise control levels and monitoring
- Visual amenity of the modification
- Management of Noise

1.2 Objectives

The objectives of this EA are as follows:

- To describe the proposed modification for noise control measures;
- To justify the proposed alteration to noise control measures;
- To assess the key issues relating to noise, operation, and the potential impacts; and
- Measures to be undertaken to monitor and manage the potential impacts for noise.

2 Regulatory Requirements

Works on the site are required to be in accordance with several pieces of environmental and occupational health and safety legislation and associated regulations. The primary Acts, Regulations and Guidelines are listed below with a brief summary of their applicability. Please note, however, that this list is not intended to be a comprehensive listing of acts and regulations. The site owner and contractors are required to satisfy themselves that all applicable permits and licences have been obtained and their conditions satisfied.

2.1 Occupational Health and Safety Regulatory Requirements

Occupational Health and Safety Act, 2000

The overarching Act for NSW setting law relating to employee health and safety and employer responsibilities.

Occupational Health and Safety Regulation, 2001

Sets Regulations and details the duties for employers to achieve required employee health and safety performance.

National Code of Practice for the Safe Removal of Asbestos IWOHSC:2002(1988)]

Outlines the basic principals for the safe removal of asbestos-based materials and is aimed at minimising the concentration of airborne asbestos fibres.

Your Guide to Working with Asbestos, WorkCover NSW, 2002

Provides specific directions for the safe handling and removal of asbestos-based materials.

2.2 Environmental Regulatory Requirements

Contaminated Land Management Act 1997 (CLM Act)

The CLM Act controls the assessment of contamination and requirement of remediation of soils and groundwater. The act also contains guidance for the determination of whether a site presents a significant risk of harm and allows for accreditation of Site Auditors.

Waste Avoidance and Resource Recovery Act 2001 (WARR Act)

The WARR Act replaced the Waste Minimisation and Management Act 1995 and controls waste generation and waste reduction.

State Environmental Planning Policy (SEPP) 55 'Remediation of Land'

SEPP 55 relates to the decision making process in undertaking remediation of land and making planning decisions in regard to contaminated and potentially contaminated land.

Bankstown City Council Policy for the Management of Contaminated Land 2005

Sets guidelines for the management of contaminated land and remediation works. Sets guidelines for determining level of statutory approvals required for remediation works.

National Environment Protection (Assessment of Site Contamination) Measure 1999

Sets guidelines for the assessment of land contamination. Includes recommended soil and groundwater assessment criteria for a variety of land uses.

Scheduled Chemical Wastes Chemical Control Order 2004 (SCWCCO)
Construction Contaminant Management Plan. The SCWCCO controls the manufacturing, processing, keeping and using of Scheduled Chemical Wastes (SCW).

NSW DECCW (2009) Waste Classification Guidelines, Part 1: Classifying Waste.

Protection of the Environment Operations (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A. The recovered aggregate exemption 2008

Protection of the Environment Operations (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A. The “continuous process” recovered fines exemption April 2009.

Protection of the Environment Operations (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A. The excavated natural material exemption 2008.

Protection of the Environment Operations (Noise Control) Regulation 2008

Part 4 of the Protection of the Environment Operations (Clean Air) Regulation 2002: Emission of air impurities from activities and plant

Protection of the Environment Operations Act 1997 (POEO Act)

The POEO Act defines who is required to hold an environment protection licence, and the also defines the different types of waste and other terms used in the Act relating to waste.

3 Statement of Responsibilities

3.1 Responsibilities of the Operator

Responsibilities of the Principal Operator covers all aspects of the environment including noise. Their responsibility includes, but is not limited to the following.

The Operator must:

- be responsible for the operation and activities at all times;
- ensure that all persons involved with operation have undertaken appropriate training;
- keep records of induction training for site workers and any site specific training;
- ensure that subcontractors provide safe work method statements for the activities for which they are engaged;
- monitor subcontractors to ensure that they are complying with the work method statements and site noise control measures
- maintain a register for all substances entering, stockpiled, tested or leaving the site.
- Keep, review and manage adequate records for all monitoring including noise.

3.2 Yard Manager

The Yard Manager, or his nominee, is responsible for:

- Communication of any information contained in the site Operational Management Plan and Noise Control Plan to all people who may work on or visit the site, and monitoring compliance with the Plans and relevant legislation;
- Displaying the site safety and environmental rules at a suitable location on site, as well as ensuring that the communication procedure for contacting the 24 hour OHS&R and complaints contact is communicated and clearly displayed at the site;
- Conducting the site specific safety induction training and check that subcontractors have performed work activity training (including refresher training) in particular relating to noise and visual amenity;
- Assessing and monitoring subcontractor's OH&S procedures to ensure they meet OH&S requirements in particular to noise controls;

- Identifying and assessing the noise issues associated with the site operations and/or works and documenting the control measures;
- Keeping OHS&R records and assisting the Operator in investigating and preparing accident/investigation reports and appropriate records of noise exceedances, monitoring, measurement and rectification measures (non-compliance reports);
- Issuing stop work orders when he believes site conditions are considered to be exceeding noise levels; and
- Managing noise incident procedures.

3.3 Environmental Representative

The Yard Supervisor is responsible for the day to day activities within the confines of the yard including monitoring of noise, stockpiles, safe working practices & upkeep of soil and sediment controls. The Yard Supervisor is the environmental representative that liaises with external environmental representatives and reports to the Yard Manager. The role of the Yard Supervisor or his nominated external environmental representative is:

- Liaise and commission environmental consultants;
- Conduct regular environmental monitoring including noise (both sampling/analysis and environmental inspections/checklists);
- Assess monitoring/testing data in relation to environmental compliance on site;
- Provide advice in relation to the management of environmental issues associated with the works;
- Conduct environmental incident investigations;
- Attend and participate in environmental/project control meetings;
- Prepare environmental monitoring report at regular intervals.

3.4 Environmental Specialists

Environmental consultants are called upon to conduct specialist sampling and monitoring procedures. These include:

- Noise consultants to measure noise levels;
- Occupational hygienist used and liaise with the Yard Supervisor.
- Soil characterisation and testing of materials on site.
- Health and safety monitoring (sampling/analysis/data interpretation and exposure assessments);
- Provide advice in relation to the management of OH&S issues associated with the operations.

4 Assessment of Modification

4.1. Description of Proposed Modification

Initial noise control measures were noted as being an acoustic barrier wall approximately 3.5m to 8m high surrounding (at most) the perimeter of the work area. The proposed modification is to place instead shipping containers stacked 2 high and edge to edge around the perimeter in the same locations (as shown in the diagram). Each shipping container has dimensions approximately 2.5m tall, 40ft long and 2.5m width. This equates to a height of approximately 5m and width of 2.5m (still within the consent). The shipping containers whilst initially placed as a temporary measure are now proposed to be used as a permanent acoustic barrier. A review of the adequacy in regards to noise attenuation, control and visual amenity is therefore recommended.

4.2 Justification for proposed modification

The Waste Recycling facility is situated within an area where many shipping containers are being held and stored by adjoining properties. The ease at attaining these containers as a temporary measure was a cost benefit and time benefit. During the process of noise control at the site, the shipping containers being used as an acoustic barrier were found to be able to meet Noise criteria at residential receivers that are contained in Condition 1 of project consent 06_0052.

The following justifications are therefore provided:

- The use of current shipping containers (acoustic barrier) meet current noise criteria as set out for the site;
- The current acoustic barrier is currently working with an inherent risk that if changes are made, new barriers may not meet or may need to be modified until they are met;
- The use of shipping containers allows ease of changing barriers to increase management of noise issues as re-orientation to location of acoustic barriers can be easily modified for any non-compliant event;
- The use of shipping containers are a cost effective means of controlling noise on site;
- The use of shipping containers fits in to the general commercial area and the heavy use of shipping containers on adjoining properties;
- The use of an acoustic barrier (wall or shipping containers) increases the visual amenity to reduce the visual impact of waste brought onto the site.

4.3 Assessment of Key Potential Impacts

The following potential noise impacts have been identified for the site as follows:

- Use of Excavators

- Use of screens to segregate soils and foreign materials
- Use of Heavy vehicles such as semi-trailers
- Use of lighter vehicles such as cars and street sweepers
- Persons within the site
- Reversing Beepers
- Use of material crushers for preparation of materials
- Passing motor vehicle traffic

For on-site workers, when working within 10m of heavy equipment all personnel will wear adequate hearing protection. Further Noise Management information is provided within the initial Noise Management Plan submitted within the initial consent.

4.4 Visual Amenity

The site is situated within a commercial environment. Directly opposite and across Miller Street (west) is a container and logistics yard and the northern boundary contains a container yard. The eastern boundary also contains various industrial activities plus a container yard. The property to the south is a factory in nature and is currently industrial warehousing.

Photographs have been attached to look at the actual containers and their visual impact from the street and neighbours. The photos demonstrate that the use of containers does not affect the visual integrity of the area and in fact is consistent with the area. No residential receptors have any views of the site and the site is also set back from Miller Street so has limited views to the container acoustic barrier on site.

4.5 Environmental Monitoring and Management

Noise criteria at residential receivers are contained in Condition 1 of project consent 06_0052 as follows:

NOISE

1. The Proponent shall ensure that noise from the project does not exceed the noise limits presented in Table 1.

Table 1: Project Noise Limits (dB(A))

Location	Day (L_{Aeq} (15 minute))
Residences in Waldron Road	47
Residences in Goodstate Street / Orchard Road	50
Any other affected residence	50

Notes:

- a) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with noise level limits in the above table. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the Department and the DECC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- b) The noise emission limits identified in the above table apply under meteorological conditions of:
 - wind speeds of up to 3 m/s at 10 metres above ground level.

The noise audit required under Condition 6 of the consent was conducted by Spectrum Acoustics on 13 May 2010. The audit found a small exceedance of the noise criterion at one receiver and since that time shipping containers have been stacked in two layers around noise-generating areas of the site as acoustic barriers (none were initially present).

A further noise audit was conducted on 7 April 2011. During a site inspection by Spectrum, it was observed that an excavator was feeding material into the hopper of the crusher and other excavators and a Kawasaki front-end loader were also operating. Several semi-trailers also entered and departed the site indicating that normal operations were in progress.

Noise levels were measured for 15 minutes using a Bruel & Kjaer Type 2260 integrating sound level meter at two representative residential locations: the rear (southern) boundary of 149-151 Waldron Street and 14 Hughes Place (measured on Orchard Road) as shown in Figure 1 of the Spectrum report dated 15 April 2011. The Orchard Road measurement location was chosen as it was close to the assessment point in the original noise assessment and was determined as the most impacted location along Orchard Road. There was a gap between industrial buildings on the western side of Orchard Road where the excavator on the subject site was clearly visible. The possible placement of an additional shipping container is discussed below.

The total measured noise level at Location 1 was 55.3 $\text{dB(A),Leq(15minute)}$. The recorded time-trace was analysed using Bruel & Kjaer Evaluator software to determine the various noise contributions. The dominant source was local traffic, followed by general hum from the crusher and excavator on the subject site. After removal of cars from the measured signal, the noise level from the subject site was 47 $\text{dB(A),Leq(15minute)}$ which is below the criterion of 50 dB(A) . In the interests of minimising noise emissions from the site, an additional shipping container could be placed as shown in Figure 2 of the same report.

The total measured noise level at Location 2 was 58.5 $\text{dB(A),Leq(15minute)}$. The recorded time-trace was analysed using Bruel & Kjaer Evaluator software to determine the various noise contributions. The dominant source was road traffic on Waldron Road. Noise from the subject site was barely audible throughout the measurement and is estimated to equal the measured background (L90) noise level of 43 dB(A) . This is 4 dB below the noise criterion at this receiver.

It is proposed that monthly monitoring of noise be conducted for a period of 4 months then quarterly monitoring be undertaken thereafter (if all results indicate meeting consent conditions). All noise reports should be made available to relevant regulatory officials.

Continual monitoring will provide information regarding site conditions and management required for any rectification works (as demonstrated above). In addition to this, the works on site shall only be permitted during the following hours to restrict out of hour complaints

Monday to Friday: 7:00 am to 6:00 pm

Saturdays: 8:00 am to 1:00 pm

Sundays and Public Holidays: No work permitted.

Emergency work is permitted to be completed outside of these hours.

All machinery and equipment used on site will be in good working order and will be fitted with appropriate silencers when necessary.

4.6 Incident Management

The Facility Emergency Controller (FEC) is the nominated person responsible for incident management. The chief responsibility of the nominated person in this regard is to ensure proper coordination of incident response systems and Non-conformance reports.

A written Incident (Non-conformance) Report must be completed for any incident or complaint including noise. Incident Report Forms are to be completed by the Site Safety Representative and submitted to the Operator within 24 hours of the Site Safety Representative becoming aware of the incident.

Notification of WorkCover is required for any lost time injuries exceeding seven days of lost work and is required for all serious injuries.

4.6.1 Incident Response

Once a safety issue or incident is brought to the attention of the Yard Manager, the Yard Manager will:

- Order all work to cease immediately;
- Attempt to contain the situation (if appropriate);
- Seek outside expertise as required;
- Notify any necessary agencies; and
- Notify the Principal Contractor as soon as possible,

The Yard Manager or representative will report environmental or OH&S incidents in an Incident Form detailing corrective and preventative actions taken.

The OEHL and the Director-General shall be notified in writing within 7 days of any exceedances of performance criteria within the EPL or for any incident with actual or potential significant off-site impacts.

4.7 **Complaints Procedure**

The Environmental Protection Licence (EPL) provided by OEHL outlines the monitoring and recording conditions. The EPL requires:

- A record of complaint must be kept for 4 years from complaint
- A record of the complaint must be made available to any regulatory officer (e.g. OEHL representatives)
- A telephone complaints number is operated and advertised to the public as a complaints line.

Complaints may be received either via:

- Residents telephoning the company directly;
- Contact details provided at the entrance to the site;
- Email; or
- The OEH.

The person receiving the complaint shall document:

- The date and time of the complaint;
- The method by which the complaint was made;
- Any personnel details of the complainant which were provided by the complainant or if no such details were provided, a note to that effect;
- The nature of the complaint;
- The action taken in relation to the complaint, including follow up action; and
- If no action was taken, the reasons why.

A complaint register will be formed and made accessible to interested parties. The complaint register will include Non-Conformance Reports and follow up actions. The complaint will be investigated within 12 hours of receipt of the complaint. If justified, a remedial action report shall be prepared. The complaint report and, if required, the remedial action report shall be reviewed and approved by the Operations Manager. If action is required, it will be implemented immediately if urgent, otherwise within 24 hours of the complaint. The person who lodged the complaint will be notified of the action taken.

- Non-Compliance Reports are issued for any areas where rectification works or complaints are made. The Operational Manager is responsible for following actions.

4.8 Site Signage and Contact Numbers

A sign will be installed at the entrance to the site with a 24 hour contact number for members of the public to direct any queries / complaints.

5 Monitoring Program

5.1 Noise-Monitoring-Program

A Noise Management Plan & Traffic Noise Management Plan has been prepared for the site as part of the initial consent. Any controls and inspections are to be conducted as per the plan.

5.2 Acoustic Inspection List

The primary purpose of the Acoustic Inspection Checklist is to discover conditions, which upon correction will result in a better place to work. The checklist assists personnel in determining what safe guards are necessary to eliminate or otherwise remove concerns before accidents, personal injuries / illnesses and or environmental exposure / releases occur.

The Acoustic inspection list comprises of;

- Condition of Containers,
- Location of site works in relation to containers,
- Heavy vehicle movement outside of acoustic barriers,

- Appropriate servicing of machinery to ensure appropriate running and noise levels,
- Minimising reversing and thus beepers,
- Ensure crushers have appropriate noise dampeners,
- Provide appropriate complaint procedures and rectification measures,
- Maintain appropriate PPE for workers in noisy areas.

The environmental representative / occupational hygienist shall conduct inspections daily. Personnel shall have sufficient technical competence and equipment necessary to conduct thorough inspections. During the inspection, inspector(s) shall enlist employees help to identify and remove potential concerns.

Implementing the checklist as a guideline, the inspector(s) should conduct inspections of all workplaces at least annually to identify deficiencies that require corrective action. The inspector(s) should complete all information on the form except the abatement section(s). The form must then be posted at or near the deficiency until it is corrected.

Records of Safety, Health, and Environmental Inspections should be maintained for five years.

6 Limitations

To the best of our knowledge information contained in this report is accurate at the date of issue, however, conditions, including noise levels and incidents can change in a limited time. This should be borne in mind if the report is used after a protracted delay.

There is always some disparity in site conditions across a site that cannot be fully defined by investigation. Hence it is unlikely that measurements and values obtained from sampling and testing during environmental works carried out at a site will characterise the extremes of conditions that exist within the site.

Opinions expressed herein are judgements and are based on our understanding and interpretation of current regulatory standards and should not be construed as legal opinions.

Revision 2 Dated 14th October, 2009 15



