

WILLIAMS PLANT HIRE LTD  
WASTE TRANSFER FACILITY  
ABERBECHAN WHARF  
NEWTOWN  
POWYS  
SY16 3AW  
NOISE MANAGEMENT PLAN

Version 1.0

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## **1) Introduction**

### **1.1 Background**

Williams Plant Hire Ltd have been operating a waste transfer facility at Aberbechan Wharf since 2004. In addition to the permitted activities exemptions were registered for processing of aggregates and some storage under the 1994 Waste Management Regulations. Since the implementation of the latest exemption regime this has restricted site activities and the permit variation is to allow previous activities to be covered by the varied permit. Williams Plant Hire Ltd intends to produce secondary aggregates under the WRAP Protocol. Aggregate is processed by crushing and screening and tested to show compliance with Highways Specifications and sold for use off site as a product. An application has been made for an environmental permit variation to allow excavated waste materials to be brought to the site for processing under the WRAP protocol to produce secondary aggregates and soils.

The site is located in a rural location where the waste arisings will be limited due to the limited amount of development that takes place nearby. There is limited storage available for aggregates and soils and processing operations will only be carried out under suitable conditions and when there is enough material to process. Processing is not likely to be carried out more than 6 times per year.

This plan covers the reception of wastes, stockpiling, processing and loading of materials leaving the site and will be reviewed on a regular basis and at least once per year. If improvements can be introduced to working practices then they will be incorporated into the plan.

The site has not been the subject of any noise complaints during the period it has been operating.

### **1.2 Methodology**

This application is to vary the existing permit to increase the area and allow for the storage and processing of specified wastes on hardstanding. A bespoke Locational Risk Assessment has concluded that noise will not be a risk for the environmental/ecological receptors and therefore it is only the human receptors which remain as potential sensitive receptors.

Due to the tonnages which this site is likely to accept and the frequency of crushing/screening operations it is considered to be appropriate to undertake a qualitative assessment to identify those areas of concern regarding noise and to management those areas.

### 1.3 Responsibilities

The site is operated by Williams Plant Hire Ltd and Keith Williams will be responsible for managing the day to day operations and compliance. In his absence Andrew Williams or a nominated person who is fully conversant with the EMS will direct operations.

### 1.4 Site Location

Drawing CEC/WPH/01 shows the location of the site and CEC/WPH/02 shows the site layout.

### 1.5 Sensitive Receptors

#### Human Receptors

An assessment of the nearby sensitive receptors has been undertaken and the distance and directions from the site are shown in Table 1 below

**Table 1**

<b>Feature</b>	<b>Distance (approximate) metres</b>	<b>Direction From the Site to Receptor</b>
Houses at Aberbechan	80m to 190	W and WSW
Agricultural premises	300m	ESE

#### Ecological Receptors

The Montgomery Canal is designated as an SPA and SSSI. The designation relates to plants living in the canal which will not be affected by any noise generated on the site.

## **2) Potential Sources of Noise**

2.1 Potential sources of noise include :

- Vehicle movements
- Loading and unloading
- Vehicle reversing
- Crusher operation
- Screener operation
- Shredding
- Trommel

## **3) Noise Impacts**

### **3.1 Effects of noise**

‘Although the various physical attributes of sound can be quantified, the subjective aspects of noise are much more difficult to assess. The degree of annoyance and stress that can result from exposure to noise is almost impossible to quantify, since responses may vary widely between individuals. This can influence the apparent effectiveness of noise–control measures.

However, the following are some of the factors that may influence response:

- hours of operation (day, night, 24hr, 7day)
- continuous or intermittent sources
- nature of the noise (tones, clatters, hums and the like)
- whether or not the noise is “avoidable” as perceived by the community
- community standing of the Operator (good/bad neighbour)
- response to complaints and other problems
- odour/litter/traffic or other adverse environmental effects
- good/bad employer
- nature of the area’

( Environment Agency , H3, Horizontal Guidance for Noise Part 2 – Noise Assessment and Control ).

### **3.2 Risk Management Approach**

At this site, as the receptors, which are potentially sensitive to noise, are all human and due to the subjectivity of noise responses between individuals, this Noise Management Plan, seeks to reduce all sources of noise at source as the primary mitigation measure i.e. elimination. Further significant mitigation measures include controls on exposure time, maintenance ( ie engineering controls ), followed by management controls such as monitoring, handling techniques, training and finally responding promptly to any complaints.

## **4) Noise Management Measures**

### **4.1 Hours of Operation**

In order to reduce the length of time that sensitive receptors may be exposed to noise the site has restricted opening hours.

The site will not be operational every day as it depends on suitable wastes being available for processing. Processing will only be carried out when there is sufficient material to process. Operating hours will be restricted to

Monday to Friday	08.00 - 17.30
Saturday	08.30 – 12.30
Sunday	No Operations

### **4.2 Expected Operational Use**

Whilst vehicles will be delivering and taking away materials most day it is only expected that the crushing operations will be undertaken 6 times per year with a duration of 1 to 2 days, processing 500 to 1000 tonnes at a time. Screening may be more frequent at 2 to 3 days per month.

### **4.3 Site Setting, Design and Noise Screening**

The site is in a rural location to the rear of an agricultural building and a house, which is owned by the operator. The site layout is shown on drawing CEC/WPH/02. These buildings form a noise barrier effectively to the South and the West. An earth bund has also been constructed which is approximately 3m high and extends from the Western Boundary, along the Northern boundary and along the North Eastern boundary to the site entrance. This bund will also act as a noise screen.

The base of the yard is hardstanding and stockpiles will be contained within the area delineated by the bund as shown on the drawing. The crushing and screening operations will be located in the processing area shown on the drawing. This will keep the potentially noise generating activities as far away as possible from the sensitive receptors.

### **4.4 Crushing.**

A crusher with a mobile plant permit will be hired in when required. The crusher is fitted with the manufacturer's silencer and maintained in accordance with the manufacturer's specifications.

Noise can also be generated when loading the crusher and all staff will be instructed to load the plant in a careful manner using the minimum drop possible from the excavator into the hopper and to not overload the bucket which can result in materials being dropped.

#### **4.5 Screening**

The screen will be loaded carefully and not overloaded as this can cause additional noise to be generated.

#### **4.6 Site Plant and Vehicle Movements**

Noise can be generated by vehicles moving around the site and to reduce noise emissions the site surfaces will be re graded when rutted or potholes occur to reduce “clanking” of tipper bodies. Reversing alarms are also a source of noise.

#### **4.7 Vehicle Unloading**

Vehicles arriving at the site will be subjected to the Waste Acceptance Procedures and any loads which are not suitable for the site will be rejected.

All loads being tipped will be supervised by site staff and the driver instructed to tip the load slowly with the minimum amount of drop to the ground to reduce noise generation. Any waste arriving in skips will be tipped slowly to reduce the chance of noise being generated.

If upon tipping the waste is found to be unsuitable it will be loaded back onto the vehicle and rejected.

#### **4.8 Vehicle Loading**

Processed aggregates and soils/ subsoils and other wastes will be loaded onto vehicles either for use or to be sent for disposal/ recovery. Vehicles will be loaded with an excavator into the tipper body using the minimum drop required to reduce noise generation.

#### **4.9 Shredding**

Shredding operations may be carried out to reduce the bulk of some materials including wood and green waste. As only low volumes of these waste can be stored at any one time, shredding operations will be short duration events. Shredding will be carried out within the building which will attenuate any noise generated. Noise generation will be kept to a minimum by not overloading the shredder and turning off the plant when it is not being operated.

#### **4.10 Trommel**

The trommel in the waste processing building is operated when there is sufficient light material sorted within the waste processing building. The trommel is within the building. The process is not noisy and has been operated since 2004 with no noise issues being identified. Noise is kept to a minimum by operating the plant only when needed and by not overloading the plant.

## 5) Summary of Control Measures

The main management strategy is to prevent emissions of noise by reducing the sources of noise to a minimum and to reduce the generation of noise during operations.

Table 2 below contains the measures, which will be used to reduce sources of noise.

**Table 2 Summary of Noise Control Measures**

Area	Control Measures
Site Surfaces and Roads	Site roads will be maintained and re-graded when ruts or potholes appear.
Plant and Equipment Outside of Buildings	Plant will be maintained in accordance with the manufacturer's specification and will use silencers.  Switch off noisy plant when not in use.
Vehicle Unloading	Most vehicles delivering waste will be tipper lorries, although some deliveries will be in skips. For vehicles that tip waste and for skips drivers are instructed to tip slowly and reduce drop heights to reduce noise emissions.  Use of smart reversing alarms
Vehicle Loading	Loading of vehicles shall be done by site staff and the minimum drop from the excavator will be used to minimize noise generation. All vehicles leaving the site will be sheeted.  Use of smart reversing alarms
Site Management	There is a daily inspection process to note any works which are required to re-grade the site surfaces and remedial action taken when required.  Records are kept of plant maintenance/ repairs in accordance with the EMS  Staff trained to operate the plant and equipment in a manner which will reduce noise and dust emissions.  Considerate behavior by the workforce to avoid or minimize shouting, whistling etc



	<p>All the procedures will be reviewed and where improvements are identified then the procedures shall be updated and a record kept of the changes.</p> <p>Complaints procedure in place including complaints record</p> <p>Site opening hours restrict noisy operations by removing sources of noise in the evening and at night and on Sundays when sensitive human receptors are most likely to be aware of and affected by noise. The limited screening and crushing operations will also limit the number of times per month that sensitive receptors can be potentially exposed to noise generated by these activities.</p> <p>Auditory monitoring noise levels at different places and times in accordance with SOP No 12</p>
Action measures to be taken as appropriate taking into the level of noise and any complaints – decision by Management	<p>Cease noisy operations until problem can be resolved</p> <p>Enclosure or abatement eg acoustic screens if needed</p> <p>Replacement of plant</p> <p>Improved maintenance</p> <p>Improved silencing</p> <p>Employ a specialist contractor</p>

## 6) EMS – Noise monitoring

A series of Standard Operating Procedures (SOPs) are in place for all operations on the site. SOP No 6 - Daily Inspections and SOP No 12 - Noise Monitoring and Control have been produced to instruct staff of the requirements to reduce any impact from the site to within the permit conditions.

These procedures are included as part of the site EMS

## **7) EMS - Noise Complaints**

In the event of any complaint being received then SOP14 - Complaints shall be followed and the information recorded using the form QA/06 in the EMS.

## **8) Review**

In the event that excessive noise is being generated from the operations then this Plan shall be reviewed and any changes or operational improvements shall be made to reduce the risk of excessive noise in the future.

If the management are not able to resolve noise generation issues a suitably qualified consultant will be employed to undertake an assessment of the site and to recommend any measures which need to be taken to reduce the noise generated at the site. If necessary, a quantitative noise assessment will be undertaken.

The Management will implement the recommendations of the report.