NEVILL'S DOCK, LLANELLI, CARMARTHENSHIRE

APPLICATION TO VARY
PERMIT REFERENCE EPR/BM2381IQ

NOISE AND VIBRATION MANAGEMENT PLAN

APPLICATION REFERENCE EPR/BM2381IQ (V007)

ECL Ref: ECL.008.01.02/NVMP
Date: January 2019
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NOISE AND VIBRATION MANAGEMENT PLAN

NEVILL'S DOCK, LLANELLI, CARMARTHENSHIRE

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ACRONYMS / TERMS USED IN THIS REPORT

AMG	AMG Resources Limited
CCTV	Closed Circuit Television
DAA	Directly Associated Activities
EA	Environment Agency
EMS	Environmental Management System
EP	Environmental Permit
NRW	Natural Resources Wales
NVMP	Noise and Vibration Management Plan
PPMR	Planned Preventative Maintenance Regime

1. INTRODUCTION

1.1. REQUIREMENT FOR A NOISE AND VIBRATION MANAGEMENT PLAN

1.1.1. As part of AMG Resources Limited ("AMG") application to vary the conditions of its existing Environmental Permit EPR/BM2381IQ, a Noise and Vibration Management Plan ("NVMP") has been prepared. The NVMP will form part of AMG's Environmental Management System ("EMS").

1.1.2. AMG's main operations involve physical sorting, compaction and baling of scrap metals. Consequently, a permit variation is required to reflect this change. As part of the variation, AMP propose to accept a number of different waste types to be processed through baling, shredding or using a magnetic separator and the resultant material to be sold as a product. The possibility of noise and vibration emissions arising from this change has been addressed in this plan and subsequent mitigation measures outlined.

1.1.3. This EMP has been written to meet the requirements of the *Waste Treatments Best Available Techniques Reference Document* ("BREF") (October 2018), Natural Resources Wales ("NRW") guidance document '*How to comply with your environmental permit*' (Version 8, October 2014) and Environment Agency ("EA") Sector Guidance Note IPPC S5.06 '*Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste*' (Issue 5, 2013).

1.1.4. This NVMP addresses the following issues:

- the materials and/or activity which could produce noise emissions;
- identification of potential sensitive receptors;
- process controls and procedures;
- potential corrective actions; and
- record keeping.

1.1.5. The NVMP provides information on the potential noise emissions impacts from the installation and the mitigation measures to be implemented. These measures are linked to the installation's EMS and will include operational and control measures for normal, as well as abnormal conditions

1.1.6. The NVMP also provides a management framework comprising of proactive and reactive measures to manage and control potential fugitive releases from the installation. This proactive approach will facilitate the ongoing development of operational procedures and controls as part of an on-going commitment to improving environmental performance. Reactive procedures will also be established within the NVMP for the logging, evaluation and implementation of corrective actions in the unlikely event of any noise and vibration related complaints being received.

2. DESCRIPTION OF THE SITE AND PROCESS

2.1. SITE LOCATION AND SETTING

2.1.1. The installation is located at Nevill's Dock, Llanelli, SA15 2HD, and is centred on National Grid Reference 250504 198981.

2.1.2. The site is situated within a predominantly residential area to the east and north, with ongoing building developments for future housing and a school in close proximity. Access to the site is from New Dock Road (B4304) located to the south and east of the site.

2.1.3. The exact location of the installation, including the site boundary outlined in green, is indicated on the Site Location Plan (Drawing Reference ECL.008.01.01-001, which is contained within Appendix I of this document. The proposed 5.4. A(1)(b)(iv) Listed Activity will be located in a discrete area on the Installation site occupying an area of approximately 1 hectare. The boundary of the proposed 5.4. activity is outlined in red on the Site Layout Plan (Drawing Reference ECL.008.01.02-002, which is contained in Appendix I of this document.

2.2. DESCRIPTION OF THE PROCESSES

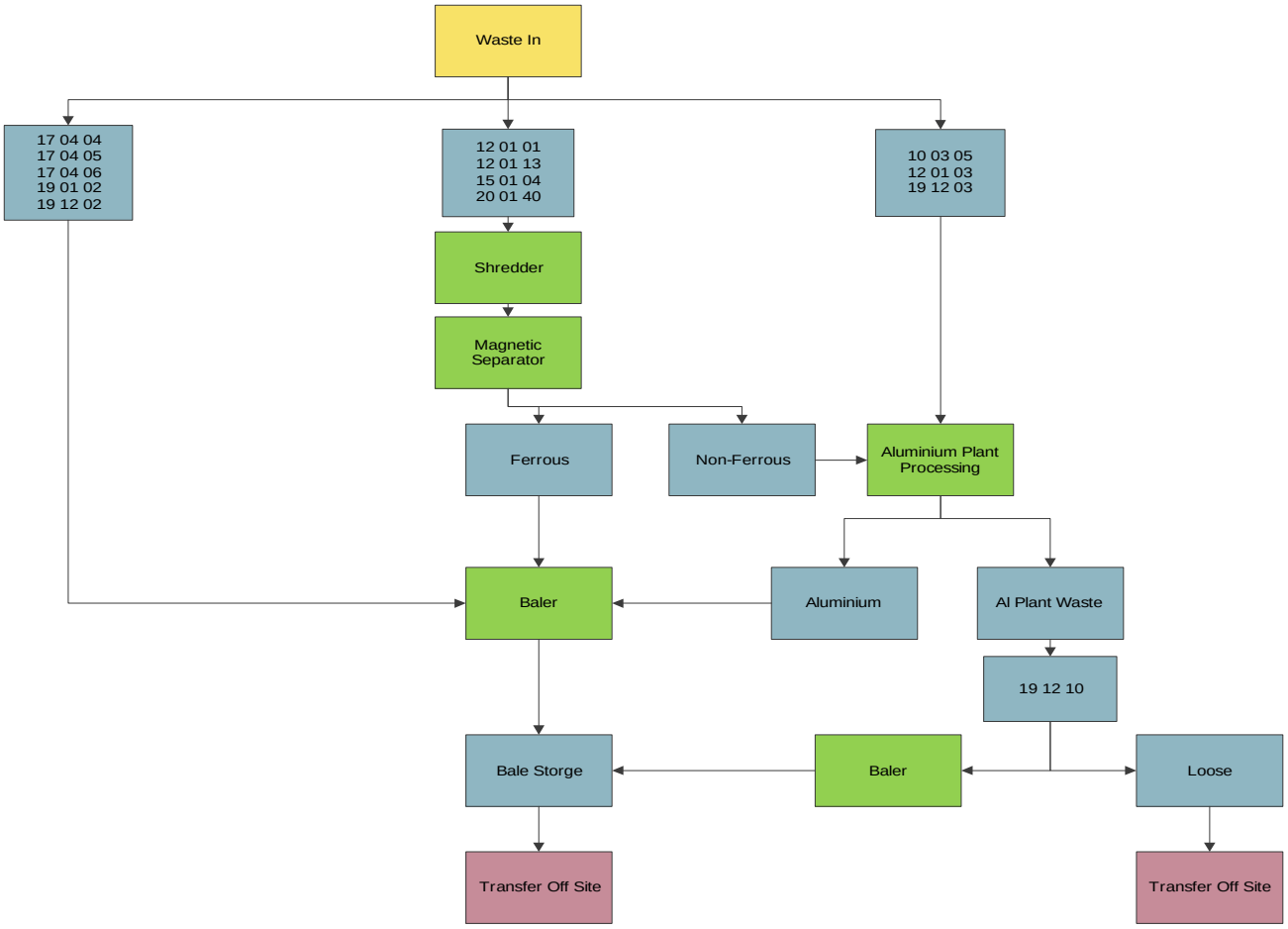
2.2.1. The current 2.2 Listed Activity, as well as the proposed 5.4. Listed Activity, under Schedule 1 are detailed in Table 1.

Table 1: Schedule 1 Activities

Activity Reference	Activity listed in Schedule 1 of the EP Regulations	Description of Specified Activity	Limits of Specified Activity
Listed Activity			
A1	S2.2. A(1)(a)	Producing non ferrous metals from secondary raw materials by metallurgical, chemical or electrolytic activities.	Chemical treatment of scrap metals and cans and electrolyte recovery of tin following electrolysis.
A8	5.4. A(1)(b)(iv)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving…treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.	From material entering site to final dispatch off site.

2.2.2. An overview of the proposed activities is provided in Figure 1 and the Site Layout Plan (Drawing Reference ECL.008.01.03-002) is provided in Appendix I of this document.

Figure 1: Process Flow Diagram



2.2.3. The main operations will be as follows:

- shredding;
- magnetic separation;
- bulking;
- baling;
- production of a refuse derived fuel; and
- storage of baled material prior to dispatch.

3. POTENTIAL SOURCES

3.1. The potential sources of noise and vibration emissions from the site include:

- movement of transport vehicles into and out of site;
- mechanical equipment, such as the hammer mill processing the raw material, which has the potential to give rise to a clatter sound; and
- external contractor vehicles when tipping of waste materials which can give rise to beeping during reversing, intermittent for 10-20 seconds as required for the health and safety of personnel.

4. POTENTIAL SENSITIVE RECEPTORS

4.1. CONSIDERATIONS FOR IDENTIFYING SENSITIVE RECEPTORS

4.1.1. To determine the severity of noise nuisance which may arise from the installation, the sensitivity of the receiving environment and potential receptors must be considered.

4.1.2. The degree of sensitivity in a particular location is based on the characteristics of the land use, including the reason why people are at the particular location (e.g. for work, recreation or residence). It is influenced by the meteorological conditions at the site and surrounding area. Additionally, the degree of sensitivity depends on the distance from the noise and vibration source as the closer the receptor is to the source, the higher the nuisance will be at the location.

4.1.3. A summary of the immediate environmental setting is provided in Table 2. Potential sensitive receptors within a 1km radius of the Environmental Permit ("EP") boundary are shown on the Sensitive Receptors Plan (Drawing Reference ECL.008.01.03-003), which is contained within Appendix I. It can be seen that the nearest receptors are local residents and also pupils, teachers and visitors to the school and industrial sites.

Table 2: Surrounding Land Uses

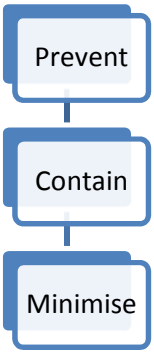
Boundary	Description
North	Ysgol Pen Rhos Primary School, residential areas, small recreational parks
East	Predominantly residential areas.
South	New Dafen River, a small industrial area, woodland and golf course and small residential areas adjacent to the Loughor estuary and Machynys Ponds.
West	Burry Inlet and Loughor Estuary

5. OPERATIONAL AND PROCESS CONTROLS

5.1. NOISE AND VIBRATION MANAGEMENT STRATEGY

5.1.1. AMG's NVMP strategy is to prevent any noise or vibration nuisance through good working practices and adhering to high housekeeping standards. A strategy based on the hierarchical structure shown in Figure 2 will be used at the Installation.

Figure 2: NVMP Strategy



5.2. EMISSIONS CONTROL MEASURES

5.2.1. The following general management techniques will be employed at the installation:

- staff will be suitably trained in the conditions of the permit and EMS;
- the site will be managed in accordance with an EMS which is reviewed regularly to ensure it remains appropriate and up to date; and

5.2.2. Table 3 details the environmental risk assessment undertaken for noise and vibration arising at the Installation. It can be observed that the control measures reduce the overall risk to insignificant.

Table 3: NVMP Risk Assessment and Control Measures

Potential Source	Identified Receptor(s)	Pathway	Control Measures	Probability of Exposure	Consequence	Overall Risk
Vehicle movements- beeping from reversing	Human population in surrounding area	Site is close enough to receptors for noise to be potentially audible	Site vehicles will be kept to a minimum with all vehicles limited to 10 kph on site. A vehicle route designed to reduce the need for vehicular movements on site will also be in place and hence will reduce the intermittent beeping generated during reversing manoeuvres as required for the health and safety of all workers.	Unlikely. Control measures should prevent any noise or vibration nuisance from reaching the identified receptors.	Noise or vibration nuisance	Not significant
Main operations and processing activities – bulking, baling, magnetic separator activities	Human population in surrounding area	Site is close enough to receptors for noise to be potentially audible	All main operations and processing activities will be undertaken within the confines of a building. In addition site activities are only undertaken during the day and weekday operational hours are 6.30am to 5.30pm, with no operations taking place on weekends or public bank holidays. All site plant and equipment will be covered by the Planned Preventative Maintenance Regime ("PPMR") contained within the EMS) to ensure adequate maintenance of any parts of the plant or equipment whose deterioration may give rise to increases in noise. A site inspection will be undertaken daily by the General Site Manager and/or Maintenance Manager, monitoring any noise within the installation boundary. This will be recorded on the Daily Site Monitoring Check sheet, an example of which is provided in Appendix II. All AMG personnel will be trained in noise management and the prompt reporting of any abnormal noise so that it can be rectified.	Unlikely. Control measures should prevent any noise or vibration nuisance from reaching the identified receptors.	Noise or vibration nuisance	Not significant
Tipping of waste material	Human population in surrounding area	Site is close enough to receptors for noise to be potentially audible	Any tipping activity will be supervised by an AMG competent person with drop heights controlled during all tipping of waste materials to reduce the generation of noise and vibration. Material will only be offloaded in the dedicated tipping areas which are located a significant distance from the site boundary to reduce any noise and vibration emissions which may reach sensitive receptors.	Unlikely. Control measures should prevent any noise or vibration nuisance from reaching the identified receptors.	Noise or vibration nuisance	Not significant

6. COMPLAINTS

6.1. RESPONSE TO COMPLAINTS

6.1.1. If a noise or vibration complaint is received at the installation, the incident will be fully investigated which may include the following:

- undertaking a site inspection to establish whether any noise or vibration can be observed at the present time;
- viewing Closed Circuit Television ("CCTV") footage to determine if tipping, processing or vehicle movements were occurring at the time to try and establish the potential origin of the noise and/or vibration;
- speaking with operators on site at the time of the event who may be able to provide further information regarding the occurrence or the noise and/or vibration;
- reviewing the daily site monitoring check sheet to confirm checks have been completed and to note whether any abnormal activities or observations were recorded; and
- discussions with operators to establish any changes to normal operating conditions.

6.1.2. Corrective and preventative measures will be implemented if the complaint is substantiated and followed up if deemed necessary.

6.2. RECORDS

6.2.1. NVMP records are kept in accordance with the procedures established in the Non-Conformance and Corrective and Preventative Action Procedure –EAP09, as part of the EMS.

6.2.2. The type of information that will be recorded relates to:

- an overview of the complaint received, what they relate to and any remedial action taken;
- sensitive receptors in particular the type of receptors, location relative to the suspected noise or vibration source and an assessment of the impact on the receptors; and
- identification of any circumstances, which compromise the ability to prevent noise and vibration nuisance and a description that will be taken to minimise the impact.

6.2.3. Any external or internal non-conformances raised against the requirements of the Environmental Permit or other relevant legislation, are recorded on an Improvement Action Form – SD01. These are then followed up by the Site General Manager, as appropriate, to address the concern identified and to prevent occurrence or re-occurrence. Details are recorded on the improvement action report, to ensure they are effectively closed out. These are reported/reviewed as part of Management Review meetings.

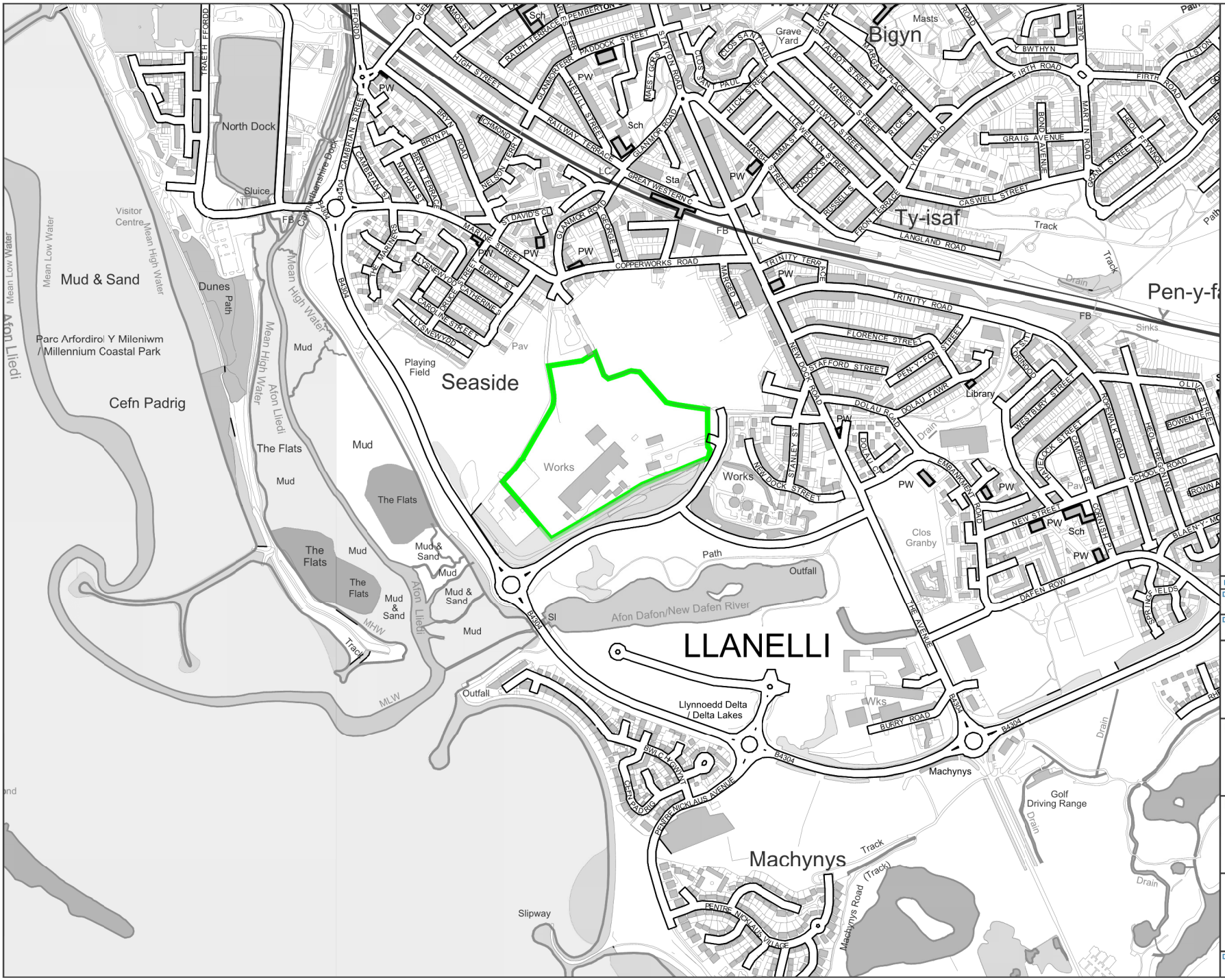
7. NVMP REVIEW

7.1. The continuing effectiveness of the NVMP will be reviewed annually by the Site General Manager and Environmental Representative for the site.

7.2. The reviews will take into account compliance records, complaints history, site records and any recent sensitive developments on neighbouring land. The plan will be amended as necessary, including any changes to the control measures.

APPENDIX I
DRAWINGS

SITE LOCATION PLAN (ECL.008.01.03-001)
SITE LAYOUT PLAN (ECL.008.01.03-002)
SENSITIVE RECEPTOR PLAN (ECL.008.01.03-003)



LEGEND

ENVIRONMENTAL PERMIT BOUNDARY

Rev	Date	Details	Chkd

Date	Scale	Drawn by	Checked by	Approved by
11/07/2018	1:10K @ A4	GTB	SJ	SB

Drawing Status

ISSUED

Environmental Compliance Ltd.
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Client

A M G Resources Ltd

Project Title

AMG RESOURCES Ltd
NEVILLS DOCK
LLANELLI
SA15 2HD

Drawing Title

SITE LOCATION PLAN

Drawing Number	Rev
ECL.008.01.03-001	-

LEGEND

- ENVIRONMENTAL PERMIT BOUNDARY
- 5.4 ACTIVITY BOUNDARY
- BUILDINGS
- BUILDINGS FOR DEMOLITION
- RAMP
- CONCRETE HARDSTANDING
- MADE GROUND
- VEGETATED AREA
- SITE ROADWAYS
- Bh BORE HOLES
- SUBSTATION
- RED DIESEL TANK
- S SOAKAWAY
- I 3 STAGE OIL/WATER INTERCEPTOR
- SURFACE WATER DRAINAGE SYSTEM
- W SURFACE WATER DISCHARGE POINT
- 1 MAGNETIC SEPARATION
- 2 MOBILE BALER
- 3 FIXED BALER
- 4 MAGNETIC SEPARATOR WASTE 19 12 10
- 5 SHREDDER
- 6 STORAGE AREA FOR 17 04 04, 17 04 05, 17 04 06, 19 01 02, 19 12 02
- 7 STORAGE AREA FOR 10 03 05, 12 01 03, 19 12 03
- 8 STORAGE AREA FOR 17 04 04, 17 04 05, 17 04 06, 19 01 02, 19 12 02
- 9 SEPARATED FERROUS
- 10 DE-TINNERS MUD SHED - QUARANTINE AREA FOR PEST MANAGEMENT

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Drawing Title: SITE LAYOUT PLAN

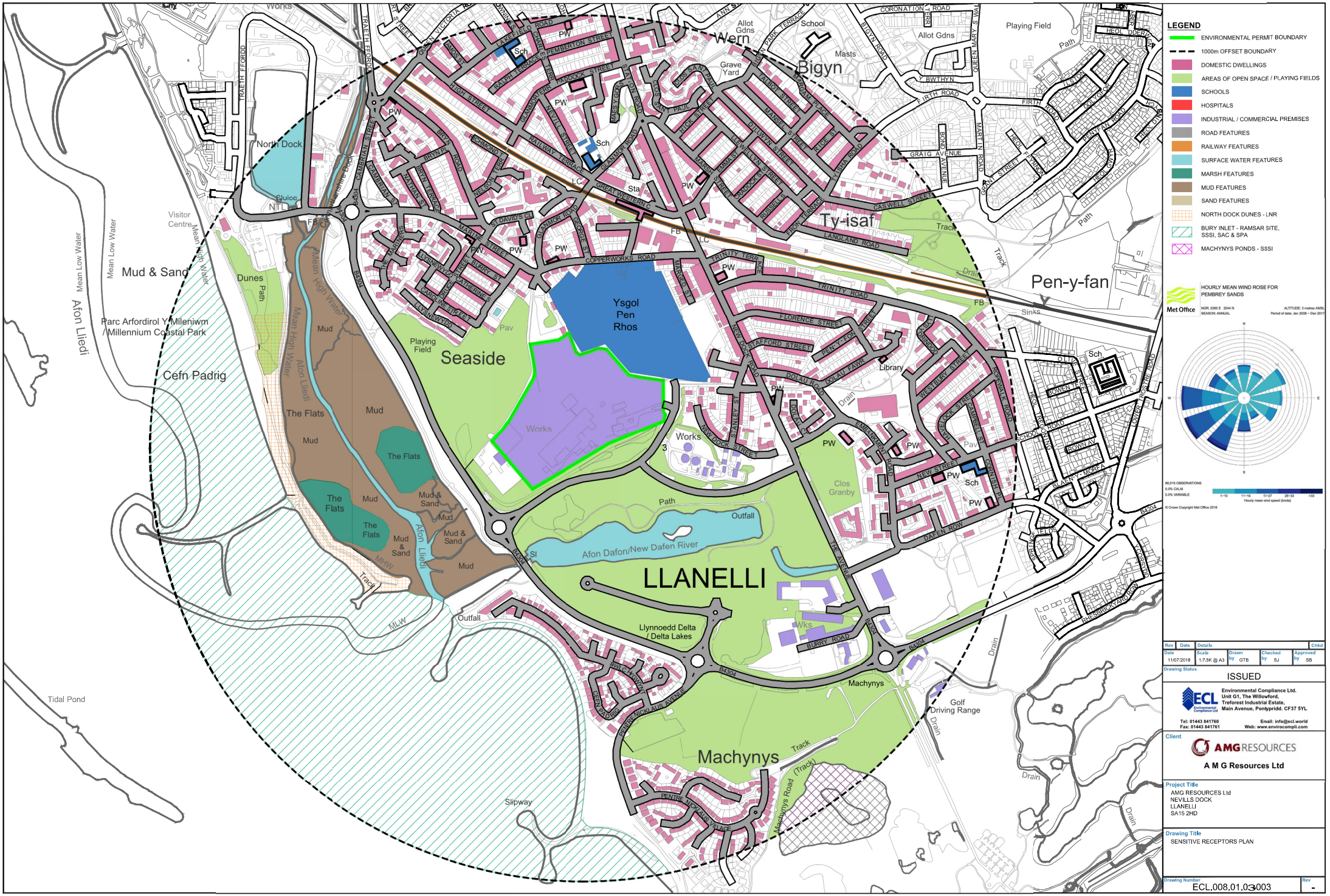
Rev	Date	Details	Chkd

Date	Scale	Drawn by	Checked by	Approved by
17/12/2018	1:2000 @ A3	GTB	SJ	SB

Drawing Status: ISSUED

Drawing Number: ECL.008.01.03-002

Rev: -



LEGEND

- ENVIRONMENTAL PERMIT BOUNDARY
- 1000m OFFSET BOUNDARY
- DOMESTIC DWELLINGS
- AREAS OF OPEN SPACE / PLAYING FIELDS
- SCHOOLS
- HOSPITALS
- INDUSTRIAL / COMMERCIAL PREMISES
- ROAD FEATURES
- RAILWAY FEATURES
- SURFACE WATER FEATURES
- MARSH FEATURES
- MUD FEATURES
- SAND FEATURES
- NORTH DOCK DUNES - LNR
- BURY INLET - RAMSAR SITE, SSSI, SAC & SPA
- MACHYNYS PONDS - SSSI

HOURLY MEAN WIND ROSE FOR PEMBREY SANDS

Met Office

NGR: 2305 E 2044 N
SEASON: ANNUAL
ALTITUDE: 3 metres AMSL
Period of data: Jan 2008 – Dec 2017

86,515 OBSERVATIONS
0.0% CALM
0.0% VARIABLE

1–10 | 11–16 | 17–27 | 28–33 | >33
Hourly mean wind speed (knots)

Rev	Date	Details	Ckkd

Date	Scale	Drawn by	Checked by	Approved by
11/07/2018	1:7.5K @ A3	GTB	SJ	SB

Drawing Status: ISSUED

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A M G Resources Ltd

Project Title:
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LLANELLI
SA15 2HD

Drawing Title:
SENSITIVE RECEPTORS PLAN

Drawing Number: ECL.008.01.03.003
Rev: -

APPENDIX II
DAILY SITE MONITORING CHECKSHEET

DAILY SITE MONITORING CHECKSHEET

ASPECT	COMMENTS	ACTION TAKEN	RESPONSIBLE PERSON
Meteorological Conditions			
Details of Operations			
Visual Observations			
Dust Suppression			
Presence of pests/litter or mud			
Presence of noise and/or vibration			
Any Other Comments:			

Name: _____ Signature:_____ Date:_____