



NEVILL'S DOCK, LLANELLI, CARMARTHENSHIRE

**APPLICATION TO VARY
PERMIT REFERENCE EPR/BM2381IQ**

EMISSIONS MANAGEMENT PLAN

APPLICATION REFERENCE EPR/BM2381IQ (V007)

EMISSIONS 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 |
| PPMR | Planned Preventative Maintenance Regime |

1. INTRODUCTION

1.1. REQUIREMENT FOR AN EMISSIONS MANAGEMENT PLAN

- 1.1.1. As part of AMG Resources Limited (“AMG”) application to vary the conditions of its existing Environmental Permit EPR/BM2381IQ, an Emissions Management Plan (“EMP”) has been prepared. The EMP will form part of AMG’s Environmental Management System (“EMS”).
- 1.1.2. As of November 2014, AMG modified the nature of operations carried out at their installation which involved the cessation of electrochemical tin recovery. At present, 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 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 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).
- 0.1.1. This EMP addresses the following issues:
- the materials and/or activity which could produce fugitive emissions;
 - identification of potential sensitive receptors;
 - process controls and procedures;
 - potential corrective actions; and
 - record keeping.
- 0.1.2. The EMP provides information on the potential fugitive 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.
- 0.1.3. The EMP 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 EMP for the logging, evaluation and implementation of corrective actions in the unlikely event of any fugitive emission 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. The installation occupies an area of approximately 7.7ha.
- 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.

2.2. DESCRIPTION OF THE PROCESSES

- 2.2.1. The proposed activities 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 |
|--------------------|---|---|---|
| A1 | 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. |

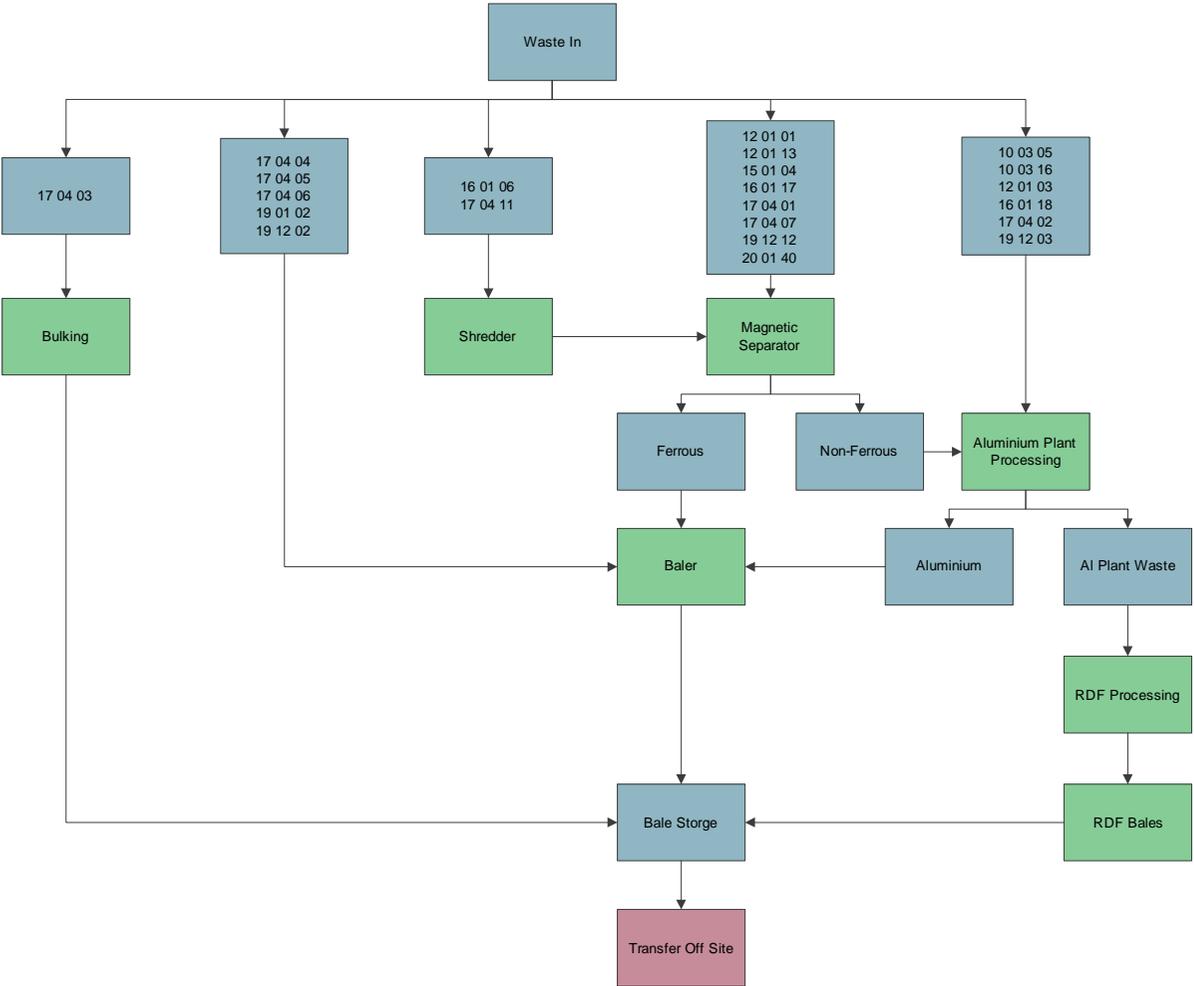
- 2.2.2. The proposed directly associated activities ("DAA") at the Installation are detailed in Table 2.

Table 2: DAA

| Activity Reference | Activity listed in Schedule 1 of the EP Regulations | Description of Specified Activity | Limits of Specified Activity |
|---------------------------------------|---|-----------------------------------|------------------------------|
| Directly Associated Activities | | | |
| D1 | Production of a refuse derived fuel | | |
| D2 | Storage of baled material prior to dispatch | | |

- 2.2.3. An overview of the activities is provided in Figure 1 and the Site Layout Plan (Drawing Reference ECL.008.01.02-002) is provided in Appendix II of this document.

Figure 1: Process Flow Diagram



- 2.2.4. 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 dust emissions from the site include:
- movement of transport vehicles into and out of site;
 - tipping of waste materials;
 - storage of the waste materials prior to processing;
 - the main operation and processing activities, including shredding and baling material and using the magnetic separator; and
 - loading of finished product.

4. POTENTIAL SENSITIVE RECEPTORS

4.1. CONSIDERATIONS FOR IDENTIFYING SENSITIVE RECEPTORS

- 4.1.1. To determine the severity of dust 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 dust 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 3. Potential sensitive receptors within a 1km radius of the Environmental Permit ("EP") boundary are shown on the Sensitive Receptors Plan (Drawing Reference ECL.008.01.02-003) contained within Appendix III. It can be seen that the nearest receptors are local residents and also pupils, teachers and visitors to Ysgol Pen Rhos and industrial sites.

Table 3: Surrounding Land Uses

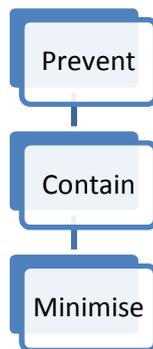
| Boundary | Description |
|----------|--|
| North | Ysgol Pen Rhos Primary School, residential areas, small recreational parks |
| East | Predominantly residential areas. |
| South | New Dafen River, a small industrial area, woodland and golf course and small residential areas adjacent to the Loughor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

5. OPERATIONAL AND PROCESS CONTROLS

5.1. EMISSION MANAGEMENT STRATEGY

5.1.1. AMG’s EMP strategy is to prevent any dust 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: EMP 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
 - a good housekeeping regime will be implemented through the site buildings and storage areas.
- 5.2.2. Table 4 details the environmental risk assessment undertaken for dust arising at the installation. It can be observed that the control measures reduce the overall risk to insignificant.

Table 4: EMP Risk Assessment and Control Measures

| Potential Source | Identified Receptor(s) | Pathway | Control Measures | Probability of Exposure | Consequence | Overall Risk |
|--|--------------------------------------|-----------------|---|---|---------------|-----------------|
| Vehicle movements | Human population in surrounding area | Releases to Air | <p>All vehicles transporting material must be sheeted or enclosed as curtain sided vehicles until arrival at site until removed for visual inspection of all loads.</p> <p>All vehicles will be limited to 10 kph on site</p> <p>All traffic will use a designated route on site to reduce vehicular movements on site. Dust suppression measures will be employed if necessary depending on weather conditions.</p> <p>Good standard practices will be adopted, such as avoiding abrupt changes in alignment and regular clearing, wetting and maintenance of yard surfaces.</p> <p>The site entrance will be visually inspected daily to ensure that muddy or loose debris is not present and therefore, will not be carried onto the public highway from site.</p> | Unlikely. Control measures should prevent any dust nuisance from reaching the identified receptors. | Dust nuisance | Not significant |
| Tipping of waste material | Human population in surrounding area | Releases to Air | <p>Any tipping activity will be supervised by an AMG competent person.</p> <p>Drop heights will be controlled during all tipping of waste materials to reduce dust generation.</p> <p>Material will only be offloaded in the dedicated tipping areas which are located a significant distance from the site boundary to prevent any fugitive emissions to air reaching sensitive receptors.</p> | Unlikely. Control measures should prevent any dust nuisance from reaching the identified receptors. | Dust nuisance | Not significant |
| Storage of waste materials prior to processing | Human population in surrounding area | Releases to Air | <p>Minimisation of the height at which waste is handled should reduce the distance the dust could be blown and dispersed by winds.</p> <p>Reducing storage volumes should reduce the surface area over which the particulates can be mobilised.</p> <p>The waste storage areas have been positioned a significant distance from the site boundary to prevent any fugitive emissions to air reaching sensitive receptors.</p> <p>Depending on weather conditions, suppression measures will be employed if required on stockpiles emissions.</p> | Unlikely. Control measures should prevent any pest nuisance from reaching the identified receptors. | Dust nuisance | Not significant |

Table 4: EMP Risk Assessment and Control Measures (Cont.)

| Potential Source | Identified Receptor(s) | Pathway | Control Measures | Probability of Exposure | Consequence | Overall Risk |
|--|--------------------------------------|-----------------|--|---|---------------|-----------------|
| Main operations and processing activities – bulking, baling, magnetic separator activities | Human population in surrounding area | Releases to Air | <p>All main operations and processing activities will be undertaken within the confines of a building.</p> <p>All machinery will be maintained in good working as per the Planned Preventative Maintenance Regime (“PPMR”). Any malfunction or breakdown leading to fugitive emissions will be dealt with promptly and operations modified or suspended until normal working practices can be restored.</p> <p>A daily visual inspection shall be undertaken to monitor any fugitive emissions and instigate any control measures, such as dust suppression, if necessary.</p> <p>An example of the daily site monitoring check sheet is provided in Appendix III.</p> | Unlikely. Control measures should prevent any dust nuisance from reaching the identified receptors. | Dust nuisance | Not significant |
| Loading of finished product | Human population in surrounding area | Releases to Air | <p>All loading of finished product will be supervised by an AMG competent person.</p> <p>Even loading of vehicles will be undertaken to prevent any loss of material.</p> | Unlikely. Control measures should prevent any pest nuisance from reaching the identified receptors. | Dust nuisance | Not significant |

6. COMPLAINTS

6.1. RESPONSE TO COMPLAINTS

- 6.1.1. If a dust 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 visual signs of dust can be observed at the present time;
 - viewing Closed Circuit Television (“CCTV”) footage at the time of the event if specified within the complaint,;
 - 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, such as increasing the frequency of water suppression techniques.

6.2. RECORDS

- 6.2.1. EMP 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 dust source and an assessment of the impact on the receptors; and
 - identification of any circumstances, which compromise the ability to prevent dust 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.

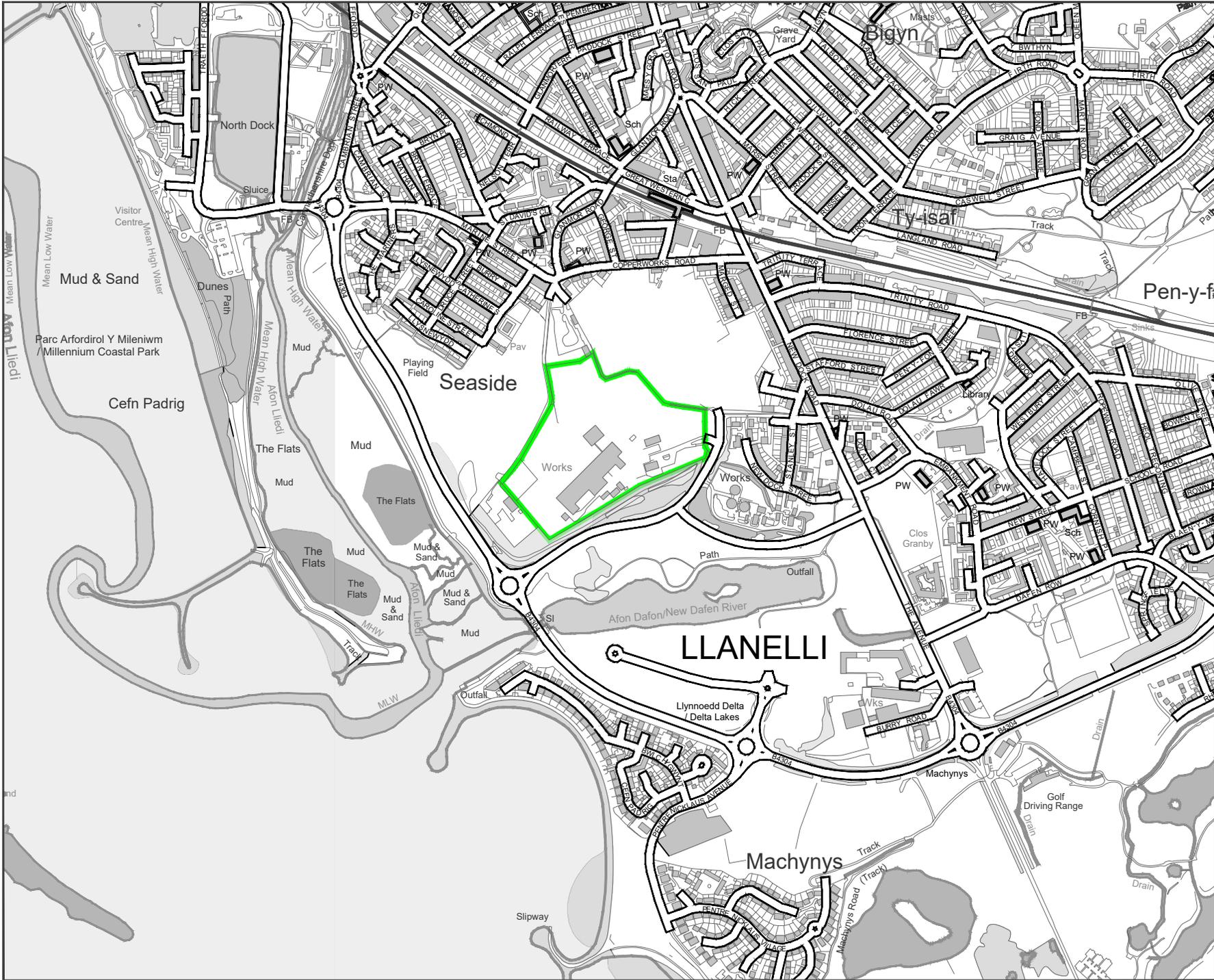
7. EMP REVIEW

- 7.1. The continuing effectiveness of the EMP 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

SITE LOCATION PLAN

(ECL.008.01.02-001)



LEGEND
 ENVIRONMENTAL PERMIT BOUNDARY

| Rev | Date | Details | Chkd |
|-----|------------|---|------|
| | 11/07/2018 | Scale 1:10K @ A4 Drawn by GTB Checked by SJ Approved by SB | |

Drawing Status: **ISSUED**

ECL Environmental Compliance Ltd.
 Unit G1, The Willowford,
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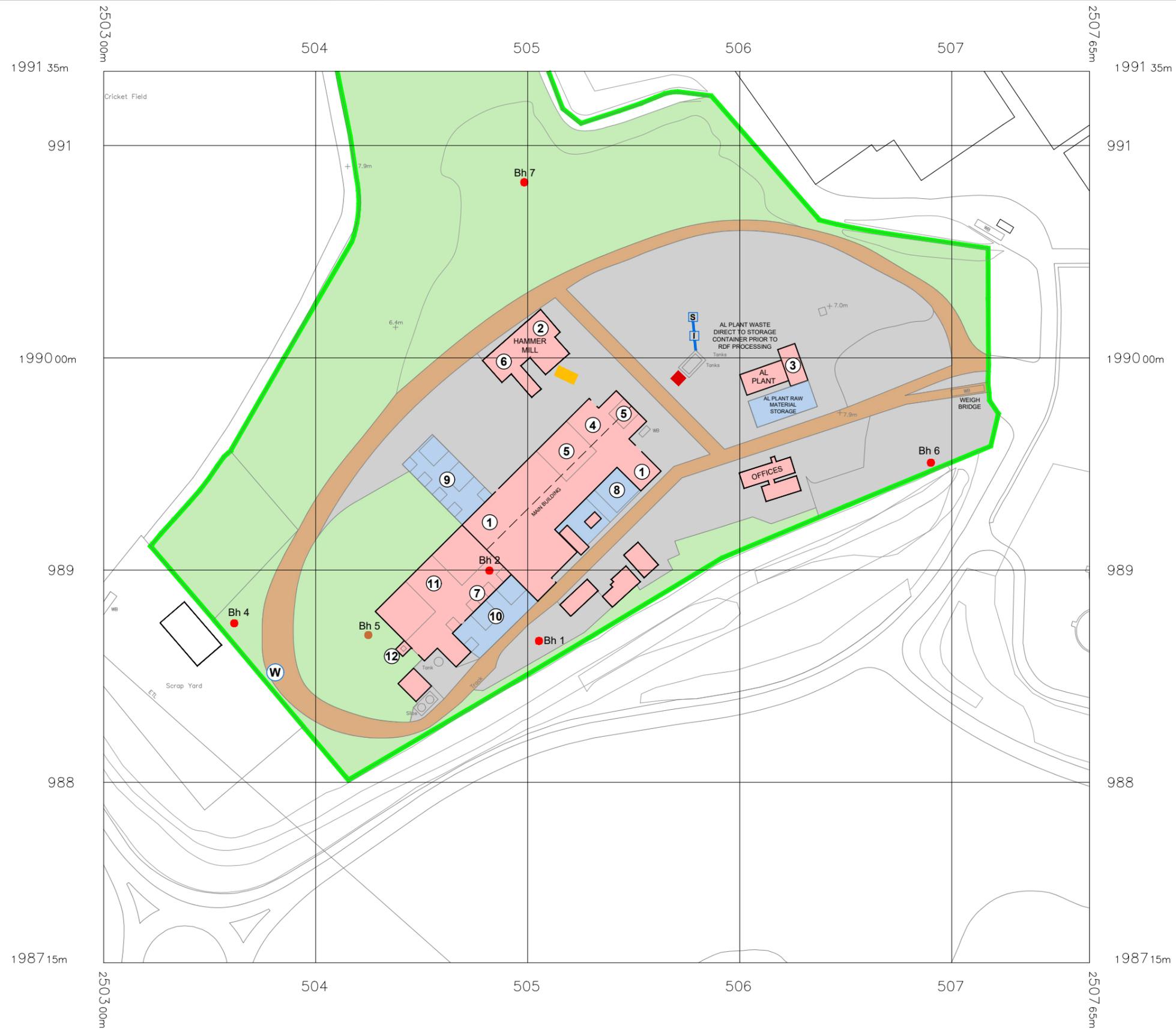
Client: **AMG RESOURCES**
A M G Resources Ltd

Project Title
 AMG RESOURCES Ltd
 NEVILLS DOCK
 LLANELLI
 SA15 2HD

Drawing Title
 SITE LOCATION PLAN

| Drawing Number | Rev |
|-------------------|-----|
| ECL.008.01.02-001 | - |

APPENDIX II SITE LAYOUT PLAN (ECL.008.01.02-002)



- LEGEND**
- ENVIRONMENTAL PERMIT BOUNDARY
 - BUILDINGS
 - CONCRETE HARDSTANDING
 - MADE GROUND
 - VEGETATED AREA
 - SITE ROADWAYS
 - BORE HOLES
 - SUBSTATION
 - RED DIESEL TANK
 - SOAKAWAY
 - 3 STAGE OIL/WATER INTERCEPTOR
 - SURFACE WATER DRAINAGE SYSTEM
 - SURFACE WATER DISCHARGE POINT
 - 1 MAGNETIC SEPARATION
 - 2 MOBILE BALER
 - 3 FIXED BALER
 - 4 RDF PROCESSING, COMPACTION AND BALING
 - 5 RDF STORAGE AREA
 - 6 SHREDDER
 - 7 BULKING & STORAGE AREA FOR EWC CODE 17 04 03
 - 8 STORAGE AREA FOR WASTES WITH EWC CODES 17 04 04, 17 04 05, 17 04 06, 19 01 02, 19 12 02
 - 9 STORAGE AREA FOR EWC CODES 16 01 06, 17 04 11, 12 01 13, 15 01 04, 16 01 17, 17 04 01, 17 04 07, 19 12 12, 20 01 40
 - 10 STORAGE AREA FOR EWC CODES 10 03 05, 10 03 16, 12 01 03, 16 01 18, 17 04 02, 19 12 03
 - 11 BALE STORAGE AREA
 - 12 FORT KNOX BUILDING PRECIOUS METAL TEMPORARY STORAGE



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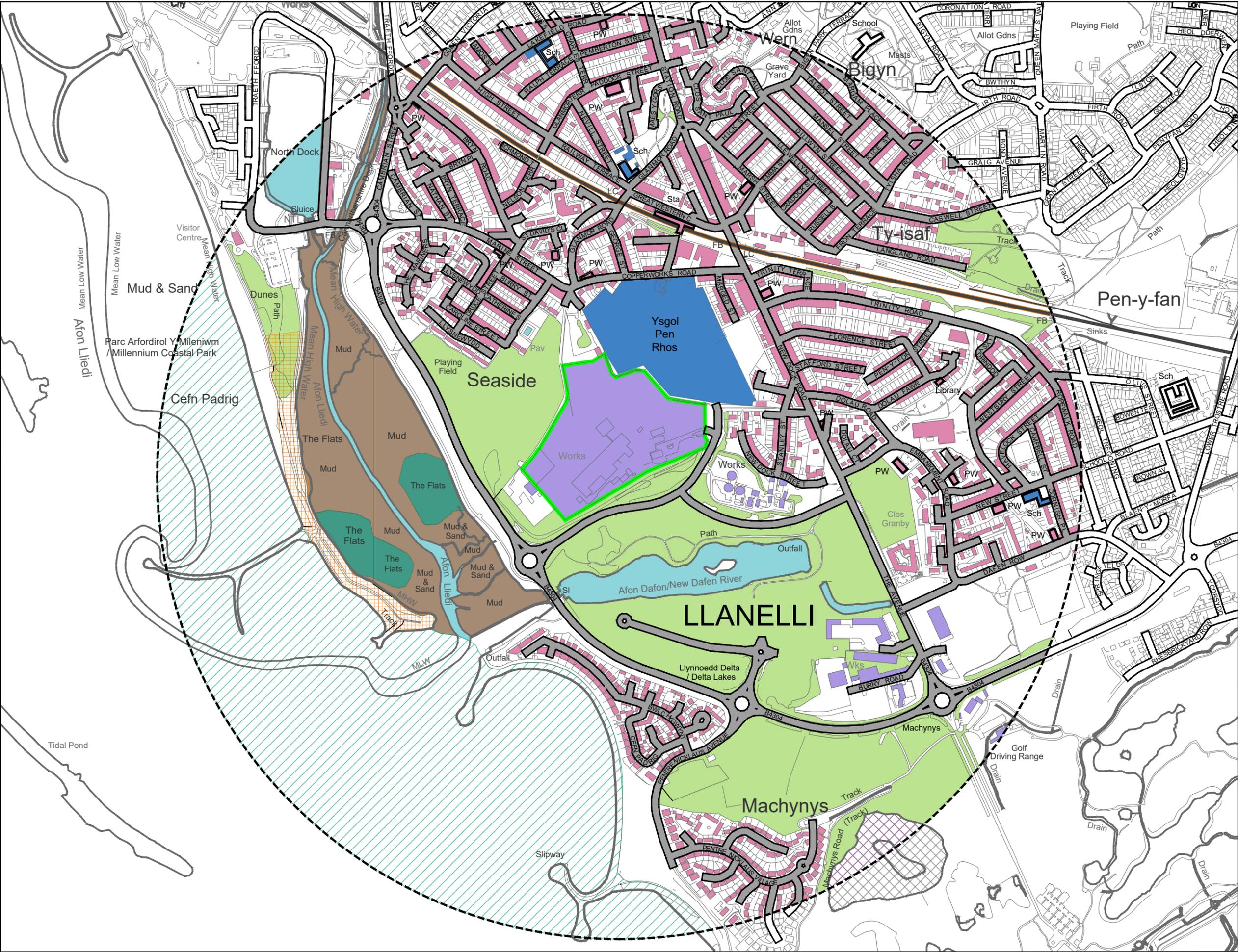
Drawing Title
 SITE LAYOUT PLAN

| Rev | Date | Details | Drawn | Checked | Approved | Chkd |
|----------------|-------------|--------------|---------------|----------------|----------|-------------------|
| 15/03/2018 | 1:2000 @ A3 | Drawn by GTB | Checked by SB | Approved by SB | | |
| Drawing Status | | | | | | ISSUED |
| Drawing Number | | | | | | ECL.008.01.02-002 |
| | | | | | | Rev |
| | | | | | | - |

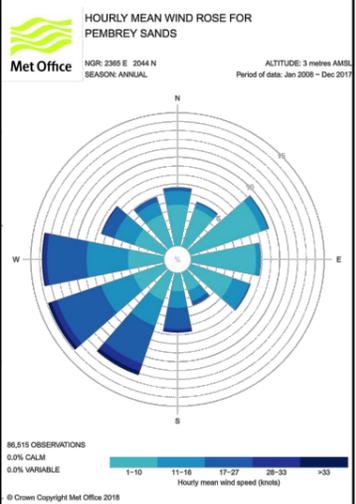
APPENDIX III

SENSITIVE RECEPTOR PLAN

(ECL.008.01.02-003)



- 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



| Rev | Date | Details | Drawn | Checked | Approved | Chkd |
|-----|------------|--------------------|--------|---------|----------|------|
| | 11/07/2018 | Scale: 1:7.5K @ A3 | by GTB | by SJ | by SB | |

ISSUED

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Client

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 A M G Resources Ltd

Project Title
 AMG RESOURCES Ltd
 NEVILLS DOCK
 LLANELLI
 SA15 2HD

Drawing Title
 SENSITIVE RECEPTORS PLAN

| Drawing Number | Rev |
|-------------------|-----|
| ECL.008.01.02-003 | - |

APPENDIX III 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: _____