CAULMERT LIMITED

Engineering, Environmental & Planning
Consultancy Services

Bryn Posteg Landfill Site

Sundorne Products (Llanidloes) Ltd

Amenity and Accident Risk Assessment

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1. INTRODUCTION

1.1 Background

1.1.1 This report is an amenity and accident risk assessment of the impact of the Bryn Posteg Landfill Site. Bryn Posteg Landfill Site in Llanidloes, Powys is operated by Sundorne Products (Llanidloes) Ltd Trading as Potters Waste Management (Potters) under Environmental Permit EPR/BU7766IC.

1.1.2 Bryn Posteg is an operational landfill which accepts biodegradable wastes. Anaerobic degradation of biodegradable waste results in the generation of landfill gas which is a potential risk to human health and to the environment and therefore needs to be monitored and managed.

1.1.3 Bryn Posteg Landfill Site is situated approximately 2.8km south-east of Llanidloes, Powys and is centred at National Grid Reference SN 971 822.

1.1.4 The site has been developed in the surface void associated with an old lead mine. The site was operated by Montgomery County Council, later Powys County Council, from 1982 until April 1997. Since April 1997, owned and operated by Sundorne products (Llanidloes) Limited. This company traded firstly as Evans Logistics and now as Potters Waste Management.

1.1.5 The site previously operated under a Waste Management Licence and was issued with a PPC permit in 2004 (now transferred to Environmental Permit). It is currently operating under Environmental Permit EPR/BU7766IC.

1.1.6 The site accepts municipal waste which consists of 60-70% household waste and 30-40% commercial trade waste.

1.1.7 The waste accepted at the site is processed in a Materials Recycling Facility (MRF). The outputs from the process are; metals which are screened out and recycled, oversized fraction (>80mm) which is landfilled, and fines (<80mm) which are composted for two weeks and subsequently landfilled.

1.1.8 The environmental impacts of the landfill on the local receptors were identified in the early nuisance and health risk assessment completed for the application of the landfill. As

guidance has since been amended and some issues with the landfill have recently been identified, an amenity and accidents risk assessment has been produced.

1.1.9 The risk assessment is based on the current infill levels at Bryn Posteg, which are higher than initially anticipated.

1.1.10 The assessment has been compiled in accordance with Natural Resource Wales' guidance.

2. RECEPTORS

2.1.1 Bryn Posteg landfill site is situated in a rural area with no close areas of dense population. The nearest town of Llanidloes is situated 2.8km to the north-west of the site. The closest properties to the site are: Bryn Posteg Farm (250 m west), Valley View (100 m north-west), Maes-Socyn (350 m south-west), Talan-Llwydiarth (450 m south-east), Rhoswen (200 m east), Pant (250 m east) and Penbryndu (300 m north), Tawelfa (310m north). The properties Valley View, Rhoswen and Pant are within 250 m of the site boundary.

2.1.2 The B4518 road is located adjacent to the south west of the site. To the north, north east and south east is predominantly agricultural land.

2.1.3 Nany y Bradnant stream is located adjacent north east of the site boundary. The nearest major watercourse is the River Dulas located approximately 1.5km west of the site.

2.1.4 Tylwch Road is located adjacent south west of the site.

2.1.5 There are no Sites of Special Scientific Interest (SSSI) within 1km of the site boundary or any other sensitive ecological designations.

2.1.6 There are no schools or hospitals within 500m of the site boundary.

2.1.7 There are no groundwater source protection zones located within 500m of the proposed site.

2.1.8 The receptor plan, drawing number 3428-CAU-XX-XX-DR-S-1805, shows the locations of receptors within a 500m radius of the landfill. These nearby receptors and any protected sites within a 1km radius of the area of the landfill are summarised in the table below:

Receptors		
Boundary of Landfill Site	**Land Use**	**Distance/Direction**
Northern Boundary	Agricultural land Residential	Adjacent 300m N
Eastern Boundary	Agricultural land Bryn-du Road Residential	Adjacent 300m E 200m E
Southern Boundary	Agricultural Residential Unnamed road	Adjacent 150m S 420m S
Western Boundary	B4518 Residential	Adjacent 350m W
Human receptors	Visitors and workers on landfill Residential within 500m	On site 150m S nearest point
Groundwater	Non-aquifer	N/A
Surface Water	Stream Afon Dulas	Adjacent NE 1.5km W
SSSIs	None within 1km	N/A

RISK ASSESSMENTS

2.2 Assessments for the operations

2.2.1 The operation relates to the landfill installation and associated activities.

2.3 Odour, noise and vibration, fugitive emissions, and accidents risk assessments

2.3.1 For each of the activities above, separate risk assessment tables have been completed for odour, noise and vibration, fugitive emissions and accidents, these are presented in the tables 1 to 4 below.

2.3.2 Possible hazards (i.e. odour sources, sources of noise or vibration, sources of fugitive emissions that could be harm the environment or escape beyond the permit boundary and possible sources of accidents that could harm the environment) have been identified. For each possible hazard, an assessment of the risk that poses to potential receptors has been carried out; taking into account the control measures in place.

Table NHT-1: Odour risk assessment

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm/nuisance?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Landfill gas release from the landfill and from gas management infrastructure	Residential receptors within 500m Users of surrounding roads	Air Prevailing south westerly wind	Preventative measures include: • Landfill gas extraction system to collect the generated landfill gas • The gas plant has an automatic control system to optimise the combustion process and minimise emissions. • Gas abstraction rates are regularly adjusted on the basis of methane concentration, gas pressure and oxygen level. The quantity of emissions from gas flare and engine is monitored as per the Landfill Gas Management Plan. • The gas extraction system is regularly maintained and managed • Extraction points, leachate wells/sumps and in-waste boreholes are covered/sealed to prevent fugitive emissions • Adequate compaction and covering of waste around extraction wells, monitoring points and leachate risers	**Likely** History of odour complaints	Nuisance	**Medium Risk**

			• A landfill gas risk assessment and management plan is in place which outlines the measures to be taken in the event of a malfunction of the landfill gas infrastructure. • An odour management plan is in place If particular sources of odour are identified, they will be referred to the Site Manager immediately and dealt with in accordance with the Odour Action Plan.			
Waste Acceptance	Residential receptors within 500m Users of surrounding roads	Air Prevailing south westerly wind	• Weighbridge personnel are trained to recognise different waste types. • Any odourous loads which cannot be handled by the Operator are not accepted onto the site premises • All waste deliveries with be brought to the site via an approved delivery route from Tylwch Road in sheeted waste wagons • Adequate odour sealing should be provided by the producer/haulier • Dusty waste delivered in plastic bags • If waste bags are ruptured during landfilling and compaction the waste will be covered with non-dusty waste loads prior to compaction and capping • The Operator will maintain regular dialog with waste producers on adequate odour control measures (e.g. rubber seals on doors, fully enclosed bins or solid sheets on open skips) • On arrival at the site the majority of waste loads are taken directly to the MRF	**Likely** History of odour complaints	Nuisance	**Medium Risk**

			If particular sources of odour are identified, they will be referred to the Site Manager immediately and dealt with in accordance with the Odour Action Plan.			
Storage and treatment processing of waste	Residential receptors within 500m Users of surrounding roads	Air Prevailing south westerly wind	Preventative measures include: • No compost movement will be initiated on Fridays and/or the day immediately prior to Public Holidays to ensure no disturbed composted waste is left over a weekend • The final composted product will be disposed of as malodorous i.e. will be rapidly buried • All waste loads sent to a landfill tipping area will be buried within the same working day • Any malodorous wastes will be buried rapidly at the lowest point of the operational area and covered with non-odorous waste • Odour from fresh waste will be further minimised by thorough compaction of waste and provision of adequate daily cover. • The alternative operational area will be used during unfavourable weather conditions further away from the local sensitive receptors where practicable • Rapid containment of the completed landfill areas with temporary cap using cohesive mineral material and a	**Likely** History of odour complaints	Nuisance	**Medium Risk**

			progressive capping of the completed cells with engineering cap. If particular sources of odour are identified, they will be referred to the Site Manager immediately and dealt with in accordance with the Odour Action Plan.			
Leachate extraction and treatment	Residential receptors within 500m Users of surrounding roads	Air Prevailing south westerly wind	Preventative Measures include: • Leachate extraction system in place • Electric pumps to pump leachate • Preventative maintenance of electric pumps • Replacement pumps on site in the event a pump breaks down At the control panels there are warning lights that light up should levels of leachate exceed the levels that the float switches are set at. The pumps are inspected on a monthly basis. The levels of leachate within the sumps are monitored by the automatic switches. These switches are set so that the pumps will switch on and off when the leachate levels rise and fall. • Treatment of leachate in a lagoon (aerated biological treatments). • Discharge of the treated leachate to foul sewer. • Inspection of pumps on a monthly basis. Regular maintenance of pumps,	**Likely** History of odour complaints	Nuisance	**Low Risk**

			• pipework system, compressor and leachate lagoon to avoid potential down-time problems. • Sealing all elements of the active extraction system and leachate monitoring points at all times. A Leachate Management Plan is in place at the site.			
Engineering works disturbing old waste	Residential receptors within 500m Users of surrounding roads	Air Prevailing south westerly wind	• Any odour-prone engineering works, such as excavation into previously deposited waste, extension and maintenance of LFG or leachate extraction systems etc. will be pre-planned in order to minimise the scale and duration of any odour releases. • The duration of such works will be as short as possible and works will be carried out in small sections to reduce the exposure. Any exposed areas of odour prone works will be covered overnight. • Re-excavation of old waste including retro drilling operations or cap removal at the site will only be permitted when absolutely necessary and will be subject to a risk assessment prior to the commencement of works. • Routine odour monitoring surveys of the site boundary will be carried out • Odour monitoring surveys are actioned in response to odour complaints	**Likely** History of odour complaints	Nuisance	**Low Risk**

Table NHT-2: Noise risk assessment and management plan

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Noise from incoming and outgoing traffic, landfilling operations and engineering works	Residential receptors within 500m Users of surrounding roads	Air	Measures to mitigate against excessive noise from site activities are detailed in noise management plan include: • Containerised engine with built in noise attenuation measures • Any site vehicles and equipment will be maintained in accordance with manufacturers' specifications. • Preventative maintenance of all equipment including gas and leachate extraction systems. Actions in the event of excessive noise detected outside the site: • The site manager should be informed. • The source of noise should be identified and the activity should be stopped until appropriate measures to reduce noise levels from that activity are implemented. Appropriate measures needed will depend on the reason for the excessive noise generation.	**Unlikely**: Low level noise may be audible from the proposed activities beyond the site boundary. The noise is likely to be intermittent traffic noise.	Noise from tipping operations may cause annoyance to people in nearby industrial premises and residential properties.	**Low risk.**

Table NHT-3: Fugitive emissions risk assessment

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
To Air						
Landfill activities	Residential receptors within 250m Users of surrounding roads	Air - via wind borne dust and particulates. Prevailing south westerly wind.	Measures to mitigate against dust emissions affecting areas beyond the site boundary: • Water bowsers will be used when required to wet the excavated material and control dust during cell profiling and capping • In-situ clay used for cell profiling will be naturally damp and will not produce dust if utilised promptly • Correct matching of machines to prevent overloading of dump trucks • A crawler loader or similar will spread inert material over dusty material as a daily cover • Under adverse weather conditions tipping operations will be transferred to a sheltered tipping area within the active cell to minimise as much as possible the potential for dust emission • Areas watered and left inactive if soil cover cannot be restored immediately	**Unlikely**. If dust management plan is followed	Potential breathing problems for site staff. Human health effects from fine particulates (<10 µg). Potential to impact upon health of residents within 250m	**Medium**

			• Screening bund built along Tylwch Road along western and southern perimeter of the landfill extension • Tree and shrub hedge planted along bund to further screen out landfill site and reduce dust propagation. Actions in the event of excessive dust detected outside the site. • The site manager should be informed. • The source of dust should be identified and, if appropriate, the activity should be stopped until appropriate measures to reduce dust emissions from that activity are implemented. Appropriate measures needed will depend on the reason for the excessive dust generation.			
Haul and access roads	Residential receptors within 250m Users of surrounding roads		• Preventative Maintenance includes: • Watering of haul roads during dry weather • A road sweeper will be available to regularly sweep the access road of excess dirt and debris. The wheel wash unit will be located adjacent to the site offices complex to remove dirt from the vehicles leaving the site. • All operators vehicles will be fitted with upward facing exhausts and radiator cowl. The use of vehicles with upward pointing exhausts and radiator cowls is moderately effective in reducing potential dust emissions.	**Unlikely**. If management plans followed	Human health effects from fine particulates (<10 µg). Nuisance for road users	**Medium**

			• The design of haul roads avoid sharp corners or steep gradients, which would encourage sharp braking. The layout of haul roads will be such to distance them from the sensitive receptors. Access to the active cell will be along a central core road, which will mean that haul roads are orientated as far as possible from residential housing. • The regular grading of site haul roads removes loose material from the surface, it also increases fuel efficiency and minimises "wear and tear" on the vehicles and mobile plant. It is also a highly effective method of dust control as it removes loose debris and mud, one of the main potential sources of dust. • Waste transported to the site in covered refuse compactor lorry and skip tyre type lorries • Delivery to site is via paved access road to the weighbridge and wheel wash area • Actions in the event of excessive dust detected outside the site. • The site manager should be informed. • The source of dust should be identified and, if appropriate, the activity should be stopped until appropriate measures to reduce dust emissions from that activity are implemented. Appropriate measures needed will depend on the reason for the excessive dust generation. •			

Stockpiles of waste	Residential receptors within 250m Users of surrounding roads		• Stockpiles will be graded to minimise windblown dust and normally be kept damp by the application of water in sprays, as and when necessary • All long-term screening mounds retained for longer than one growing season will be seeded to grass at the earliest opportunity and adequately maintained for their active life. • Location of stockpiles to take advantage of shelter from the prevailing wind. The operator proposes to retain for as long as possible stockpiles on the outskirts of the site extension, which would allow works to be undertaken in relatively sheltered location. This will reduce ground level wind speed and thus potential for dust emissions towards houses Pant and Rhoswen. • If a screening and crushing plant are used in an identified sensitive area it will be covered by a tarpaulin to localise dust emissions and the processed material will be sprayed before stockpiling. Discharged heights to be minimised where practicable. • Actions in the event of excessive dust detected outside the site. • The site manager should be informed. • The source of dust should be identified and, if appropriate, the activity should be stopped until appropriate measures to reduce dust emissions from that activity	**Unlikely**. If management plans followed	Human health effects from fine particulates (<10 µg). Nuisance for road users	**Medium**

			are implemented. Appropriate measures needed will depend on the reason for the excessive dust generation.			
To Water						
Runoff from site surfacing into surface water	Surrounding surface water ditches	2 discharge points for surface water at the site Surface water drainage system. Surface water	Preventative measures include: • Surface water is channelled through a flocculation system and into settlement lagoons, runoff from the lagoons is then discharged to surface water • All potentially polluting liquids shall be provided with secondary containment. • Regular surface water monitoring at the discharge points from the site • Whenever any works to or discharge from tanks or vessels are taken place in the external area, bunding will be provided to contain any minor spillages. Bunds will be sufficient to contain the quantity of any potential spillage from the particular operation. • Daily site inspections will include checks to see that waste are only deposited in their correct storage areas. <u>Planned Preventative Maintenance</u> programme in place for all critical equipment and infrastructure, which will include impermeable surfacing	**Unlikely**. Given the waste storage arrangements, the run-off is unlikely to contain contaminants that may negatively affect the surface water. (Accidental spillages are dealt with in Table 4 below)	Contamination of local surface water	**Low risk.**

Pests						
Rats	Residential receptors within 500m Users of surrounding roads	Over ground	The management plan for the site will include procedures to minimise the risk of pest infestations from all the operations on site. The measures will include: • use of pest control contractor on regular basis; • ensuring any containers with high content of food or other putrescible wastes are despatched as soon as possible; • General housekeeping.	**Likely**. Types of wastes and the high turnover are likely to potentially attract rats Higher landfill levels may increase the risk of rats	General nuisance and health risk from rats being vectors for human pathogens (e.g. weil's disease)	**Medium**
Pests e.g. flies	Residential receptors within 500m Users of surrounding roads	Air	The management measures listed above to control rats will also be efficient in reducing the risk of fly infestations.	**Likely:** Flies may be anticipated due to the nature of the wastes accepted Higher landfill levels may increase the risk of flies	General nuisance	**High**
Litter from off-loading wastes	Residential receptors within 500m Users of surrounding roads	Air - via wind	Appropriate measures include: • Wastes compacted in landfill as soon as possible • fencing surrounding site boundary; • clearing litter arising from the activities from affected areas outside the site.	**Likely**. Litter may escape the site from time to time but likely to be in relatively small quantities and only during high winds and will be collected.	Nuisance to nearby receptors	**Low risk**

				Higher landfill levels may increase the risk of litter		
Mud/debris from waste storage area	Residential receptors within 500m Users of surrounding roads	Deposited by vehicles with dirty wheels	The whole site is hard surfaced. Internal site roads to be kept free of waste.	**Unlikely**: Hard surfacing reduces the risk of mud/debris and facilitates cleaning the site.	Low level nuisance to other road users, and debris on the road will be a nuisance rather than a safety issue.	**Low risk**

Table NHT-4: Accidents risk assessment

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Fire	Surface water Air. Residential receptors within 500m Users of surrounding roads	The drainage system Air	Fires could occur as a result of arson, self-combustion or from sources of ignition. Preventative measures include: • Maintain tidy site and restrict storage of combustible materials. • No smoking policy. • Site security to prevent vandalism and arson attacks. • Emergency vehicles will be able to gain access to the site at all times whilst the site is operational. • Equipment available to put out small fires. • All staff involved in waste handling will be inducted in the emergency procedures including the fire action plan. Actions in the event of fire:	Even with measures in place to prevent the occurrence of fires, it is possible that fires could break out. However, measures in place to prevent the fire spreading or to limit its consequences will significantly reduce the probability of receptors being affected by a fire.	Smoke, local nuisance, risk of fire spreading to other areas or premises	**Low** as long as control measures in place management procedures adhered to.

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			• Where it is safe to do so, site staff will use on-site firefighting equipment to extinguish fires. • Where a fire may have been caused by electricity or is close to electrical equipment, electricity to that area should be switched off and isolated. • Clear directions will be given to the fire service and a member of staff will wait at the entrance to the site to direct the service to the site on arrival, to ensure that the speediest service is provided. • Members of the public will be evacuated and prevented from entering the site until the incident is dealt with. • The emergency procedure will include incident reporting. As part of the environmental management system, incidents will be reviewed by management on a regular basis to identify whether lessons can be learnt and procedures improved.			

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Flooding	Underlying soil. Groundwater. Surface water. Residential receptors within 500m Users of surrounding roads	Flood water. The drainage system.	**Preventative measures**: • A flood risk assessment was undertaken for the planning consent • The site will be surrounded by security fence which will prevent most waste materials escaping the boundary. • Bunds will also prevent most waste materials escaping, and/or the ingress of water into the cells • Materials with hazardous properties (e.g. fuel, hazardous liquids) are contained in sealed containers unlikely to leak as a result of partial submersion. **Actions** in the event of flooding: • In the event of flood warnings for the area, the site manager or technically competent manager should consider the possibilities of moving waste materials or any other materials with hazardous properties • Where flooding could reach areas where electrical equipment is used, electricity to	**Unlikely.** The site is not located in a flood risk zone from surface water or ground water. No history of flooding problems.	Contamination of surface waters or surrounding areas with waste materials could, depending on the properties of the waste, affect water quality or be unsightly.	**Low.**

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			that area should be switched off and isolated. • After flood waters have receded, the areas outside the site should be inspected and any materials which have escaped the boundary should be picked up.			

3. CONCLUSION

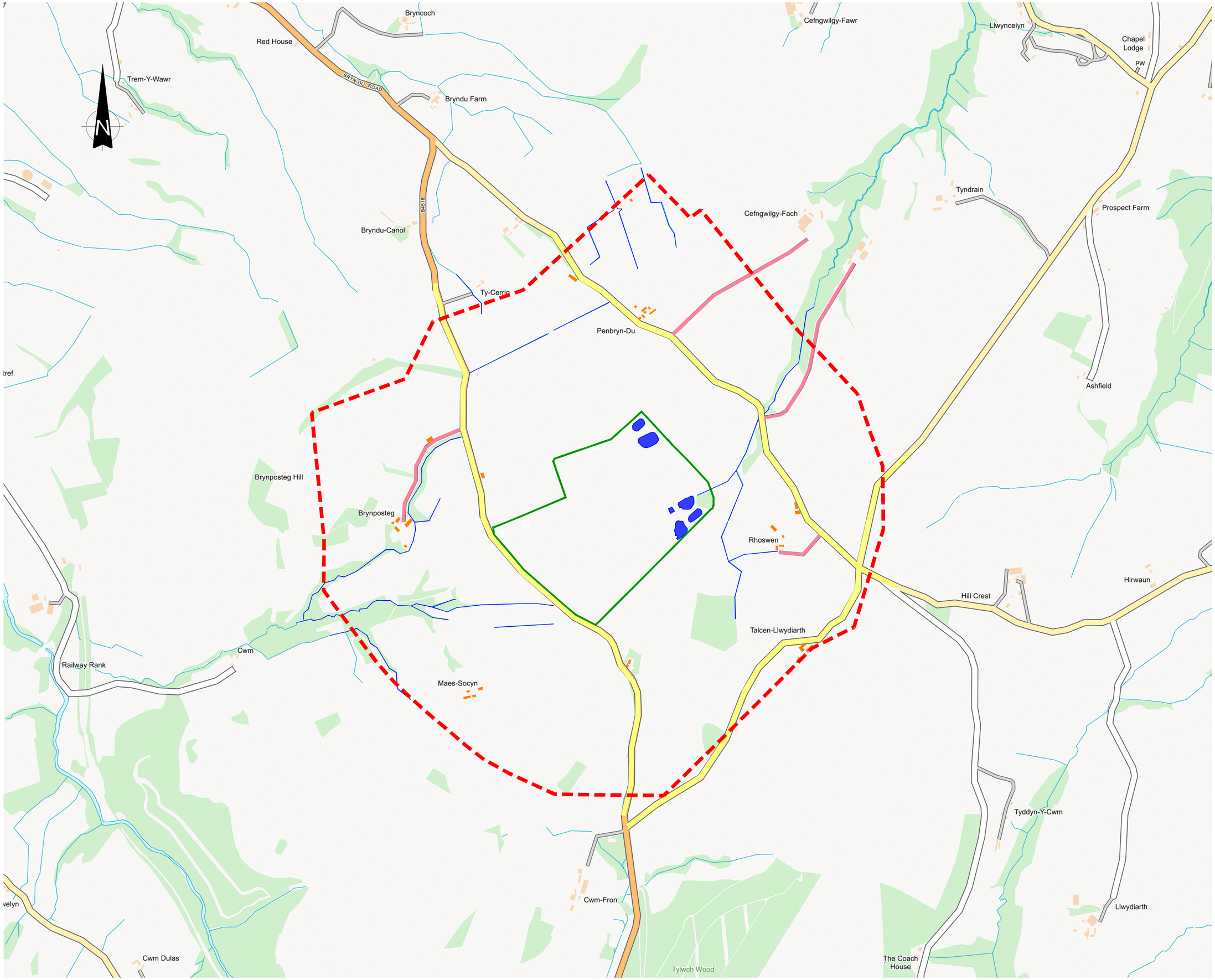
3.1.1 The risk assessments above enable identification of appropriate mitigation measures to control the amenity and accident risks from the proposed activities. Identified risk mitigation measures are incorporated within the management system for the site.

3.1.2 The amenity and accident risk assessment indicates that provided the identified risk mitigation measures, which are identified in the tables above, are implemented, the risk of nuisance or pollution from fugitive emissions or accidents is medium.

3.1.3 The nature and overall magnitude of the risks pertaining to the site have not changed significantly, either as a result of the over-tip and the increased height of the site, or the period of increased leachate levels that the site experienced.

4. REFERENCES

1. Environment Agency (2011): Amenity & accident risk from installations and waste activities.



NOTE

1. DO NOT SCALE FROM THIS DRAWING, WORK FROM FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.

2. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING WILL BE ALLOWED WITHOUT THE PRIOR PERMISSION IN WRITING.

3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

- PERMIT BOUNDARY
- 500m OFFSET
- SURFACE WATER
- RESIDENTIAL
- ROAD MAJOR
- ROAD MINOR

REV	MODIFICATIONS	BY	RE	AP	DATE
P1	ISSUED FOR COMMENT	EJD	NW	JC	22.01.18

POTTERS WASTE MANAGEMENT

PROJECT:

BRYN POSTEG LANDFILL SITE

TITLE:

500m RECEPTOR PLAN

DRAWN BY	DATE	
EJD	22.01.2018	
REVIEWED BY	SCALE @ A1	JOB REF:
NW	1:5000	3428
AUTHORISED BY	ISSUE	REVISION
JC	S1	P1

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