ENVIRONMENTAL ACCIDENT MANAGEMENT PLAN

CARDIFF WASTE MANAGEMENT RESOURCE CENTRE
WATERSIDE BUSINESS PARK
LAMBY WAY
RUMNEY
CARDIFF
CF3 2EQ

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Information Sheet

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ENVIRONMENTAL PERMIT APPLICATION

ENVIRONMENTAL ACCIDENT MANAGEMENT PLAN

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1.0 INTRODUCTION

1.1 Scope and Background

1.1.1 An Environmental & Accident Management Plan (EAMP); supported by an accident risk assessment, has been prepared to identify any accident or emergency situations at the proposed Cardiff Waste Management Resource Centre which may have an effect on receptors located within close proximity of the facility boundary.

1.1.2 **Table 1** includes a list of the receptors within 1000m that have been identified through a desktop assessment of the locality.

1.1.3 Risks have been considered during the operational phases of both the proposed Hazardous Waste Transfer Station Installation Activity and the proposed Non-Hazardous Waste Transfer Station Operation.

1.1.4 The purpose of this EAMP is to:

- Outline the methodology for accident identification;
- List the accident scenarios identified;
- Provide the control measures in place to mitigate the identified accident scenarios;
- List the relevant controls and related EMS documents.

1.1.5 The EAMP documents will be reviewed annually and updated, if deemed necessary. Furthermore, additional updates will be made to the EAMP documents when there have been significant modifications to site operations or when there has been an environmental incident at the site.

1.1.6 Incidents and near misses will be recorded and investigated, and remedial and preventative measures will be undertaken in accordance with the accident management plan and the site management plan.

1.1.7 The assessment of risks from the facility arising from Environmental Accidents (and associated scenarios have been considered with reference to the following guidance documents:

- H1 Environmental Risk Assessment Part 1: Simple assessment of environmental risk for accidents, odour, noise and fugitive emissions.

Table 1: Identified potential receptors within 1000m of the facility

ID	Receptor Name	Receptor Type	Approximate distance from the operational area	Direction from the facility
1	Commercial/industrial Properties	Commercial and Industrial	Adjacent up to 1000m	All Directions
2	Great Western Railway Mainline	Railway Line	Adjacent	N
3	Cardiff HWRC	Industrial	220m	S
4	Residential Areas of Rumney	Residential	50m	N
5	Residential Areas of Pengam	Residential	800m	W
6	Parc Tredelerch	Recreational	40m	W
7	Rumney Hill Gardens	Recreational	890m	NW
8	Allotments	Recreational	520m	NE
9	Rhymney River SINC	Surface Water	570m	W, SW
10	Rhosog Fach Reen	Surface Water	235m	S, SE
11	Gwent Levels SSSI	Designated Habitat (Biological)	460m	E
12	Severn Estuary SSSI, Ramsar, SAC & SPA	Designated Habitat (Biological)	980m	S, SE
13	Lamby Way SINC	Designated Habitat (Biological)	110m	S
14	Lamby North SINC	Designated Habitat (Biological)	650m	WSW
15	Rhymney Grassland East SINC	Designated Habitat (Biological)	520m	WNW
16	Lamby Salt Marsh SINC	Designated Habitat (Biological)	960m	S
17	Rumney Primary School	School	490m	NW
18	Greenway Primary School	School	820m	N
19	Brightside Manor Care Home	Care Home	920m	NW
20	Rumney Primary Care Centre	Medical	500m	N
21	Surface Water Courses	Surface Water	500m – 1000m	ENE/SE
22	Public Roads	Highway	Adjacent up to 1000m	All Directions
23	Buttercups Day Nursery	Preschool	110m	S/SE

2.0 ENVIRONMENTAL ACCIDENT MANAGEMENT PLAN

2.1 Risk Assessment Methodology

2.1.1 The scoring methodology employed in the H1 Guidance is used as a framework for assessing the risk from various accident scenarios identified. The scoring system attributes a nominal score to the likelihood and consequence of an identified scenario, and then uses a matrix to identify whether the risk is acceptable. The scoring system is outlined below.

Likelihood categories

Category	Description	Score
Extremely unlikely	Incident occurs between once per 100 years and once every 1000 years	1
Very unlikely	Incident occurs between once per 50 years and once every 100 years	2
Unlikely	Incident occurs between once per 10 years and once every 50 years	3
Somewhat unlikely	Incident occurs between once per 5 years and once every 10 years	4
Fairly probable	Incident occurs between once per year and once every 5 years	5
Probable	Incident occurs at least once per year	6

Consequence categories

Category	Description	Score
Minor	• nuisance on site only (no off-site effects) • no outside complaint	1
Noticeable	• noticeable nuisance off-site e.g. discernible odours • minor breach of Permitted emission limits, but no environmental harm • one or two complaints from the public	2
Significant	• severe and sustained nuisance, e.g. strong offensive odours or noise disturbance • major breach of Permitted emissions limits with possibility of prosecution • numerous public complaints	3
Severe	• hospital treatment required • public warning and off-site emergency plan invoked • hazardous substance releases into water course with ½ mile effect	4
Major	• evacuation of local populace • temporary disabling and hospitalisation • serious toxic effect on beneficial or protected species • widespread but not persistent damage to land • significant fish kill over 5 mile range	5
Catastrophic	• major airborne release with serious offsite effects • site shutdown • serious contamination of groundwater or watercourse with extensive loss of aquatic life	6

Risk assessment matrix

Likelihood	Consequence					
	Minor	Noticeable	Significant	Severe	Major	Catastrophic
Extremely unlikely	1	2	3	4	5	6
Very unlikely	2	4	6	8	10	12
Unlikely	3	6	9	12	15	18
Somewhat unlikely	4	8	12	16	20	24
Fairly probable	5	10	15	20	25	30
Probable	6	12	18	24	32	36

Risk scores

Magnitude of risk	Score
Acceptable	6 or less
Acceptable if reduced as much as reasonably practical	8 to 12
Unacceptable	15 or more

2.2 Accident Risk Assessment & Management Plan

2.2.1 The Accident Risk Assessment contained within this document focuses on the key environmental risk sources and assesses the potential for them to move via a defined pathway and impact on an identified receptor

Sources of Environmental Hazards

2.2.2 The Accident Risk Assessment considered the activities associated with site operations have been identified as sources of potential environmental hazards. To ensure a comprehensive assessment, both normal and abnormal operational conditions were considered.

2.2.3 A complete breakdown of the identified sources of environmental hazards are presented in **Table 2**.

Pathways

2.2.4 The pathways to the identified receptors at risk from environmental pollutions from major accident/emergency scenarios have been listed below:

- **Groundwater** – Any pollutants allowed to enter the underlying ground could enter groundwater and flow towards watercourses.
- **Surface Water** – Any pollutants that could be transferred into surface waters.
- **Atmosphere** – Any pollutants that could be transferred via the air (odours, dusts noise) would travel in the direction of the prevailing winds and potentially impact the closest human receptors in that direction.

Key Receptor Sensitivity

2.2.5 Environmental pollutants released during an accident event should be prevented from leaving the site. Releases from the site may impact one of the following identified receptor types with a full list of the identified receptors is presented in **Table 1**. The identified receptor types consist of:

- Residential Properties.
- Commercial and Industrial Properties.
- Open Fields & Areas of Established Vegetation (including areas assigned Statutory and Non-Statutory Designations).
- Recreational Areas.

Identified Accident Scenarios

2.2.6 The scenarios contained within **Table 2** are the identified environmental accident scenarios that would result in a rapid response being required to deal with a situation arising on site and prevent uncontrolled release of material leaving the site and potentially causing a pollution event.

2.2.7 This EAMP should be read in conjunction with the Fugitive Emissions Risk Assessment and Management Plan (**Doc Ref. BF5023/06/FRA**) which provides information on the measures taken to monitor and control potential accident scenarios and prevent emissions occurring.

Table 2: Accidents Management Plan (including Accident and Emergencies Risk Assessment Matrix)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Spillage during delivery, transfer of substances, overfilling of vessels or dispatch of waste materials.	Run-off, absorption to ground and airborne	Land, water (ground and surface), site personnel, site users, designated ecological conservation areas and local population.	4 (Somewhat Unlikely)	3 (Significant)	12 (Acceptable if reduced as much as reasonably practical)	1. All vehicles hauling waste to be sheeted or enclosed. 2. Leaks and spillages to be managed by the site's spillage procedure and contained drainage system. 3. All operations to be closely monitored to allow immediate deployment of mitigation measures in the event of a spillage 4. All wastes to be stored in containers/bays and/or suitably engineered areas of impermeable concrete. All treatment operations are to be conducted upon an impermeable concrete pad. 5. Daily visual inspections of concrete surfaces, and storage containers for signs of leaking will be carried out as well as signs of ponding, overflowing onto exposed surfaces and ineffective drainage. Any such incidents to be reported to the Site Manager (or nominated deputy). 6. Minor spills will be cleaned up immediately via spill kits. Resultant materials will be placed in a sealable container for off-site disposal to an appropriate facility, if necessary. 7. Where spillages of dry wastes occur, these are to be cleared by either manual or mechanical means, for example handpicking, sweeping, or shovelling, dependant on the size and location of the spillage. 8. If a major spillage of liquid occurs the following actions will be undertaken, where appropriate: ▪ Report the occurrence to the Site Operations Manager immediately; ▪ Trained facility operatives to take immediate action to try and contain the leak where it is safe to do so; ▪ If it is safe to do so, the cause of the spill or leak to be isolated and/or moved to a bunded area; ▪ Material such as clay or sandbags will be used to make a temporary containment bund to prevent the pollution of any surface water, land or groundwater. ▪ Access to the immediate area restricted until a disposal/clean up solution is implemented; ▪ If the spillage cannot be contained using approved methods, senior management will be contacted immediately, and specialist advice and help will be sought; ▪ If a vehicle is identified as leaking, wherever practicable, it is to be stored on an impermeable pavement within a bunded area, where the spillage can be contained until such time as a repair is affected. 9. Natural Resources Wales to be informed, as soon as practical, of major spillages, classed as being above 200ltrs, having due regard to first take appropriate measures to deal with any emergency in hand.	6 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Spillage of raw materials during delivery/ refuelling of plant/ equipment.	Run-off, absorption to ground and wider site operations.	Land, groundwater, water abstractions, designated ecological conservation areas and surface water.	6 (Probable)	1 (Minor)	6 (Acceptable)	1. All operational fuels and waste liquid tanks to be self-bunded and/or surrounded by bunds to a minimum of 110% of the tank's capacity. 2. All bund side walls and bases will be impermeable. 3. All refuelling operations will be conducted on impermeable surfaces with dedicated sealed drainage as well as the isolation of discharge. 4. Leaks and spillages to be managed by the site's spillage procedure and drainage system. 5. Absorbent spill kits to be available for use should any spillage occur. 6. Tank levels will be checked prior to a delivery/ordering dispatch to ensure sufficient capacity is available. 7. Minor spills to be cleaned up immediately, using spillage kits. Resultant materials to be placed in a sealable container for off-site disposal to appropriate facility, if necessary. 8. If a major spillage of liquid occurs the following actions are to be undertaken, where appropriate: ▪ Report the occurrence to the Site Operations Manager immediately; ▪ Trained facility operatives to take immediate action to try and contain the leak where it is safe to do so; ▪ If it is safe to do so, the cause of the spill or leak will be isolated and/or moved to a bunded area; ▪ Inert material such as clay or sandbags are to be used to make a temporary containment bund to prevent pollution of any surface water, land or groundwater. ▪ Access to the immediate area will be restricted until a disposal/clean up solution is implemented; ▪ If the spillage cannot be contained using approved methods, senior management will be contacted immediately, and specialist advice and help will be sought; ▪ If a vehicle is identified as leaking, wherever practicable, it is to be stored on an impermeable pavement within a bunded area, where the spillage can be contained until such a time as the vehicle is repaired. 9. Natural Resources Wales to be informed, as soon as practical of major spillages, classed as being above 200ltrs, having due regard to first take appropriate measures to deal with any emergency in hand.	3 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Spillage /emission of waste during site activities (including mixing, blending, bulking, repackaging and crushing /shredding of container drums)	Run-off, absorption to ground and wider site e.g. drains, airborne.	Land, ground and surface water, water abstractions, site personnel, designated ecological conservation areas and users and adjacent commercial /industrial land users.	4 (Somewhat Unlikely)	3 (Significant)	12 (Acceptable if reduced as much as reasonably practical)	1. Waste storage and processing will occur in Bays within covered bays, making the likelihood of fugitive emissions low. These also have sealed drainage systems. 2. All site activities will be completed by trained operatives in order to minimise the risk of accidents and mistakes. This training will be given in the site induction and subsequently as refresher training. 3. Site operations will be overseen by a Technically Competent Manager and chemists 4. Bulking vessels and equipment will be compatible with the waste. 5. All operational fuels and waste liquid tanks are to be self-bunded and/or surrounded by bunds to a minimum of 110% of the tank's capacity. 6. All bund side walls and bases will be impermeable. 7. Leaks and spillages are to be managed by the site's spillage procedure and drainage system. 8. All operations to be closely monitored to allow immediate deployment of mitigation measures in the event of a spillage 9. Absorbent spill kits to be available for use should any spillage occur. 10. Minor spills to be cleaned up immediately, using spillage kits. Resultant materials to be placed in a sealable container for off-site disposal to appropriate facility, if necessary. 11. If a major spillage of liquid occurs the following actions are to be undertaken, where appropriate: ▪ Report the occurrence to the Site Operations Manager immediately; ▪ Trained facility operatives to take immediate action to try and contain the leak where it is safe to do so; ▪ If it is safe to do so, the cause of the spill or leak will be isolated and/or moved to a bunded area; ▪ Inert material such as clay or sandbags are to be used to make a temporary containment bund to prevent pollution of any surface water, land or groundwater. ▪ Access to the immediate area will be restricted until a disposal/clean up solution is implemented; ▪ If the spillage cannot be contained using approved methods, senior management will be contacted immediately, and specialist advice and help will be sought; ▪ If a vehicle is identified as leaking, wherever practicable, it is to be stored on an impermeable pavement within a bunded area, where the spillage can be contained until such a time as the vehicle is repaired. 12. Natural Resources Wales to be informed , as soon as practical, of major spillages, classed as being above 200ltrs, having due regard to first take appropriate measures to deal with any emergency in hand.	3 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Damage to containment facilities for stored raw materials.	Run-off, absorption to ground and site drains.	Land, groundwater, water abstractions, designated ecological conservation areas and surface water.	5 (Fairly probable)	1 (Minor)	5 (Acceptable)	1. All operational fuel tanks will be double skinned or surrounded by bunds to a minimum of 110% of the tank's capacity. 2. The effective capacities of all bunds will be maintained. 3. All refuelling operations will be conducted on impermeable surfaces with dedicated sealed drainage with isolation of discharge possible. 4. Integrity of fuel storage tanks and bunding systems will be inspected daily as part of Operation & Maintenance Checks – Any damage will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 5. Any repairs will be affected as soon as possible or within 5 working days (subject to replacement material availability). Mitigation measures will be undertaken immediately if there is a possibility of pollution. 6. Absorbent spill kits will be available for use should any spillage occur. 7. Minor spills will be cleaned up immediately via spill kits. Resultant materials will be placed in a sealable container for off-site disposal to an appropriate facility, if necessary. 8. If a major spillage of liquid occurs the following actions are to be undertaken, where appropriate: ▪ Report the occurrence to the Site Operations Manager immediately; ▪ Trained facility operatives to take immediate action to try and contain the leak where it is safe to do so; ▪ If it is safe to do so, the cause of the spill or leak will be isolated and/or moved to a bunded area; ▪ Inert material such as clay or sandbags are to be used to make a temporary containment bund to prevent pollution of any surface water, land or groundwater. ▪ Access to the immediate area will be restricted until a disposal/clean up solution is implemented; ▪ If the spillage cannot be contained using approved methods, senior management will be contacted immediately, and specialist advice and help will be sought; ▪ If a vehicle is identified as leaking, wherever practicable, it is to be stored on an impermeable pavement within a bunded area, where the spillage can be contained until such a time as the vehicle is repaired. 9. Natural Resources Wales to be informed , as soon as practical, of major spillages, classed as being above 200ltrs, having due regard to first take appropriate measures to deal with any emergency in hand.	3 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Damage to storage facilities for incoming waste pending bulking/ transfer causing potential waste emissions.	Run-off, absorption to ground and site drains, airborne.	Land, groundwater, water abstractions, designated ecological conservation areas and surface water, adjacent commercial/ industrial land users	4 (Somewhat Unlikely)	3 (Significant)	12 (Acceptable if reduced as much as reasonably practical)	1. All treatment and storage operations conducted on impermeable concrete which has low infiltration capabilities. General surface run off directed to a specific surface water management system. 2. Storage areas will be checked to ensure required capacity is available and that they remain in suitable condition and are fit for purpose. 3. Condition of material storage infrastructure reviewed daily as part of Operation & Maintenance Checks – Any damage will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 4. Any repairs will be affected as soon as possible or within 5 working days (subject to replacement material availability). Mitigation measures will be undertaken immediately if there is a possibility of pollution. 5. Good housekeeping will be promoted to keep waste confined to storage areas.	6 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Major fire or explosion.	Airborne	Site personnel, site users, local population, designated ecological conservation areas and air quality.	2 (Very Unlikely)	4 (Severe)	8 (Acceptable if reduced as much as reasonably practical)	1. No fires are permitted on site. 2. Immediate action will be taken to extinguish all fires if safe to do so. 3. Plant and equipment will be operated in accordance with manufacturers and company guidelines and procedures. 4. Plant will be inspected daily as part of Operation & Maintenance Checks – Any damage will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 5. Any repairs will be affected as soon as possible or within 5 working days (subject to replacement material availability). Mitigation measures will be undertaken immediately if there is a possibility of potential for ignition. 6. Firefighting equipment will be available and maintained, and site operators will be trained in their correct use. 7. Smoking will not be permitted on the site. 8. The combustion risk of waste types stored on-site which have been identified as potentially combustible; including incidental contaminants (e.g. wood and plastic) is low. 9. All waste identified as having combustible properties will be proactively monitored by site personnel for potential combustion indications and will be 'conditioned' to limit combustion potential. 10. Combustible waste to be stored in accordance with Natural Resources Wales Guidance and Health & Safety Executive Guidance Notes (particularly HSG51; HSG71; HSG76; HSG140; HSG176 & CS21). 11. Incompatible material will be stored apart. 12. Highly flammable material will be separated by bay walls of concrete construction which will have a fire resistance of at least 120 minutes. 13. Presence of fire detection (i.e. smoke alarms with audible signals) and suppression systems; 14. Site induction and working practices will ensure that employees are trained in fire hazard identification and fire prevention (e.g. the use of fire extinguishers) and emergency procedures i.e. fire assembly point location, head counts etc.; 15. Establishment of a quarantine area for the isolation of burning material (if safe to do so); 16. In the event of a fire the alarm will be raise, the Fire Rescue Service will be notified immediately and NRW advised as soon as practicably possible. 17. Access routes will always be kept clear to ensure accessibility for emergency service vehicles. 18. Records of fire incidents to be kept on-site together with summary of remedial action taken. 19. To minimise the risk of arson, the site will have perimeter fencing and the gates will be locked shut outside of operational hours. CCTV will be present with signs stating so on the perimeter fencing and gates to deter possible intruders. 20. Further specific details on Fire Prevention and Management presented in **Doc Ref:BF5023/07**	6 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Failure to contain firewater.	Run-off, absorption to ground and site drains.	Land, groundwater, water abstractions, designated ecological conservation areas and surface water.	2 (Very Unlikely)	3 (Significant)	6 (Acceptable)	1. In the unlikely event of a fire in the operational area, all firewater to be contained on site with suitable containment controls emplaced as necessary, utilising the engineered drainage storage tank. 2. The Sustainable Drainage System servicing the external areas of the site is fitted with a flow control valve at the consented discharge point which shall be shut to prevent discharge of firewater from the site. 3. Firewater falling on surfaces to be contained as above. Contained firewater to be tested and removed from site to an appropriate treatment/disposal facility. 4. Stocks of firewater containment equipment (including bunds and mats) will be maintained on site. 5. Further specific details on Firewater containment is presented in **Doc Ref:BF5023/07/FPMP**	3 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Flooding.	Saturation of ground, rising groundwater levels and via site drainage.	Land (commercial, industrial, agricultural, and residential), surface waters.	2 (Very Unlikely)	3 (Significant)	6 (Acceptable)	1. The site lies in a very low risk flood zone where flooding from rivers or the sea is very unlikely. The site has a less than 0.1% (1 in 1000) chance of flooding occurring each year. The land to the south is situated within a Medium Risk Designated area (1-3.3% probability). 2. Site and general informal drainage will be checked daily as part of Operation & Maintenance Checks to ensure it is in good condition and free from blockages and ponding. Any damage or ponding will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 3. Any equipment with a water supply will be maintained as appropriate to ensure it does not malfunction and cause a leak. 4. Any repairs to the site drainage system or equipment with a water supply will be affected as soon as possible or within 5 working days (subject to replacement material availability). Mitigation measures will be undertaken immediately if there is a possibility of flooding.	3 (Acceptable)
Loss of power.	Airborne.	Local population, land, surface water, groundwater, and water abstractions.	3 (Unlikely)	1 (Minor)	3 (Acceptable)	1. There are no major process plant items which rely on mains power. 2. If power/water is lost for a sufficiently long period of time where it has the potential to affect ancillary functions outside of the main operations (e.g. weighbridge) then alternative means of power generation/water supply will be sought.	2 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Vandalism/ breach in security.	Over land.	Site personnel, site users, plant, and equipment.	4 (Somewhat unlikely)	2 (Noticeable)	8 (Acceptable if reduced as much as reasonably practical)	1. The facility has security fencing which will extend around the perimeter of the site. 2. All gates associated with the facility are lockable and are to be located shut whenever the site is closed. 3. CCTV will be installed and operated across the site and monitored continuously. Signs will be installed on the site perimeter fencing and gates to alert potential trespassers or vandals of the presence of CCTV in order to deter their illegal entrance to the site. 4. Site security infrastructure will be inspected daily as part of Operation & Maintenance Checks – Any damage will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 5. Any damage to the integrity of the boundary, gates or any other security structure, where practicable, will be repaired by the end of the working day. If it is not possible to make repairs within a working day, temporary repair measures will be implemented. Final repairs will be carried out within 7 working days of the damage being detected or any other such period as agreed in writing with the NRW. All damage and repairs (temporary or permanent) are to be recorded in the Site Diary. 6. All visitors to the site (including personnel) must report to the site office to sign in and sign out on exit.	3 (Acceptable)
Operator error.	Airborne and over land.	Local and distant human population, surface water, groundwater, and water abstractions,	4 (Somewhat Unlikely)	1 (Minor)	4 (Acceptable)	1. Technically competent people oversee the management of activities at the site, in accordance with the fit and proper person requirements. 2. Training (including refresher training) will be given to all site staff on the environmental permit, health and safety and incident response procedures. 3. Site staff will be trained on site equipment/plant prior to first use and supervised by a technically competent person. 4. Employment of existing Standard Operating Procedures developed in accordance with published best practice and Health & Safety Executive Guidance (SOP 05 – Bulking in Transfer Stations and SOP 06 – Laboratory Smalls Packing Procedure)..	3 (Acceptable)
Cross-connected drains.	Drainage systems.	Surface water, groundwater, and water abstractions.	4 (Somewhat Unlikely)	1 (Minor)	4 (Acceptable)	1. Suitably qualified engineers will ensure that all drains are installed to approved designs.	2 (Acceptable)

Hazard	Pathway	Receptor	Probability	Consequence	Risk (without control measures)	Risk Management Measures	Residual Risk (following mitigation)
Emissions from plant or equipment due to abnormal conditions.	Airborne and over land.	Local human population, land, surface water, groundwater, designated ecological conservation areas and water abstractions.	4 (Somewhat Unlikely)	2 (Noticeable)	8 (Acceptable if reduced as much as reasonably practical))	1. All machinery used on site will be operated and maintained in accordance with manufacturers' recommendations; 2. All operational areas will be underlain with a suitable concrete, tarmac or hardstanding surface as is appropriate to the environmental risk posed by that part of the overall operation. 3. All machinery will be subject to regular checks and maintenance. 4. Mobile and static plant/equipment will be inspected for damage/leaks before and after use as part of daily Operation & Maintenance Checks – Any damage identified will be recorded on the check sheet and reported to the Site Manager or Nominated Deputy. 5. Any piece of plant/equipment identified as defective to be removed from active use and repaired as soon as practicably possible.	4 (Acceptable)
Inadequate waste acceptance procedures.	Transported by vehicle.	Site operatives and site users.	3 (Unlikely)	3 (Significant)	9 (Acceptable if reduced as much as reasonably practical)	1. All wastes will undergo pre-acceptance and acceptance procedures in accordance with Biffa Standard Operating Procedures (SOP 01 - , SOP 02 – Waste Acceptance at Transfer Stations & SOP 04 – Non-Conformance and Waste Rejection) which are informed by relevant Duty of Care Requirements and Health & Safety Executive Guidance. 2. All site chemists will have knowledge of the Environmental Permit and on the types of waste accepted and prohibited at the site. 3. Accompanying paperwork will be scrutinised to ensure the details are correct and that all fields are completed. 4. All waste loads will be visually inspected during deposit in the waste reception areas. 5. Any non-conforming wastes will be segregated as soon as possible and stored in the quarantine area awaiting removal off site.	4 (Acceptable)

2.3 Emergency Contact

2.3.1 Emergency call out numbers are posted on the Site's Entrance Sign. These numbers include the Site Office Telephone Number, the Emergency Contact Number and Natural Resources Wales Telephone Number. The site operates a 24-hour call out system.

2.3.2 In the event of any significant environmental emergency/incident NRW will be notified by telephone by a representative of Biffa. Prior to this notification, the representative of Biffa will have due regard for the incident at hand and any remediation actions required/implemented to ensure the safety of site personnel and the immediate environment.

2.3.3 Details of any significant environmental incident will be confirmed to NRW in writing by e-mail or fax, on the next working day after identification of the incident.

2.3.4 This confirmation will include: the time and duration of the incident, the receiving environmental medium or media where there has been any emission as a result of the incident, an initial estimate of the quantity and composition of any emission, the measures taken to prevent or minimise any further emission and a preliminary assessment of the cause of the incident.

2.3.5 Any incident notified to NRW will be investigated, and a report of the investigation sent to NRW. The report will detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken to bring the incident to an end. The report will also set out proposals for remediation and for preventing a repetition of the incident.

2.4 Follow-up Actions

2.4.1 Following any on-site emergency, accident or significant near miss, the following will be undertaken:

- Replenish accident response equipment (incl. spill kits and fire extinguishers) as required;
- Inspect the areas of the site affected by the incident and arrange for necessary repairs;
- Investigation into the cause of the incident and how to prevent re-occurrence;
- Review of EAMP and relevant Standard Operation Procedures and update as required.

3.0 CONCLUSION

3.1.1 All risks have been categorised as either ‘acceptable’ or ‘acceptable if reduced as much as reasonably practicable’. Of the hazards categorised as ‘acceptable if reduced as much as reasonably practicable’ there are a significant number of mitigation measures available that effectively nullify the hazard identified. Therefore, it is considered after this review that the waste facilities activities and associated risks are unlikely to have any adverse effects on the receptors within the vicinity of the waste facility boundary.