Cyfoeth Naturiol Cymru
Natural Resources Wales

Compliance Assessment Report CAR_NRW0038986

Permit being assessed: AB3296HT. For: Unit 12F, held by Install Waste management Limited At: Atlantic Trading Estate , Barry, CF63 3RF. **Type of assessment carried out:** Site Inspection, Reason: Routine. On 21/07/2021 between 11:00 and 11:30. Parts of permit assessed: all **NRW Lead Officer:** Magda Leonowicz, accompanied by Yeliz Marshall. **Report sent to**: Dean Horgan, Site Manager and TCM on 04/04/2023.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
C1 - General Management - Staff competency/training	C3 Minor	.1.4 requires the operator 'to comply with an approved competence scheme'.
C4 - General Management - Storage, handling labelling and Segregation	C3 Minor	Permit condition 2.1.1 states that 'the operator is only authorised to carry out the activities specified in Schedule 1, Table S1.1'. Table S1.1 states: 'all waste must be stored and treated on an impermeable surface with sealed drainage system to sealed sump' and 'all waste must be stored and treated within a building'.
D2 - Incident Management - Accidents, emergency and incident planning	C2 Significant	Condition 3.5.1. states the following: 3.5.1 The operator shall manage and operate the activities in accordance with a written fire prevention plan using the current, relevant fire prevention plan guidance
C2 - General Management - Management	Ongoing (O)	Condition 3.5.1 The

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
system and operating procedures		operator shall manage and operate the activities in accordance with a written fire prevention plan using the current, relevant fire prevention plan guidance.

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
3	39

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
C1	Provide details of a Technically Competent Manager for the site and evidence of their relevant qualifications.	31/01/2022
C4	Remove all waste stored outside of the building on site.	31/01/2022
D2	Ensure all stockpile dimensions are in line with the Fire Prevention And Mitigation Plan Guidance, including heights, lengths and appropriate separation distances between stockpiles. Reduce stockpile heights to below 4 metres.	14/01/2022
C2	Submit a Fire Prevention and Mitigation Plan written in line with the Fire Prevention and Mitigation Plan Guidance Version 2.	31/01/2022

Action criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

Compliance Assessment Report – Install Waste Management Limited (EPR/AB3296HT)

Inspection

Senior Waste Regulation Officer Yeliz Marshall and Waste Regulations Officer Magda Leonowicz inspected Unit 12F, Atlantic Estate, Barry on the 21st July 2021. The inspection was announced, and the purpose was to introduce Magda as a new Compliance Officer for the site and to carry out a routine inspection of the site. We met with the Site Manager and TCM Dean Horgan upon arrival at the site, who provided a walkover tour of operations. During the walkover officers inspected waste activities. The weather during the inspection was dry and hot.

The site was fully operating during the visit and there were several breaches noted, please see below:

Compliance Breaches

1. C1 - General Management - Staff competency/training - Technical Competency Qualification is out of date

Permit condition 1.1.4 requires the operator *'to comply with an approved competence scheme'.*

The Wamitab Certificate held by Dean Hogan expired on 21.01.2021 – a **Category 3** breach is being scored for this non-compliance.

Action:

See attached Regulation 36 Notice.

2. C4 - General Management - Storage, handling labelling, labelling and segregation - Waste stored outside the building

Permit condition *2.1.1* states that *'the operator is only authorised to carry out the activities specified in Schedule 1, Table S1.1'.*

Table S1.1 states: *'all waste must be stored and treated on an impermeable surface with sealed drainage system to sealed sump'* and '*all waste must be stored and treated within a building'*.

A **Category 3** breach against this permit condition is being scored, storage of the following waste was being undertaken outside the building: stockpiles of construction and demolition waste, pile of wood waste, waste tyres and mixed waste in skips.

Due to the lack of prevention procedures and management plans, storing waste outside of the building may result but not limited to emissions of dust and noise outside the site boundary.

The permit allows for storage and treatment of waste within a building only on an impermeable surface with sealed drainage. The area outside the building was not assessed (i.e type of surface or drainage system) at the permit application stage, therefore we are not able to assess the level of risks arising from this activity.

Action:

See attached Regulation 36 Notice

If you wish to store waste outside you will need to vary your permit.

3. D2 - Incident Management - accidents, emergency, and incident planning

Following our site visit and upon further inspection of your Fire Prevention & Mitigation Plan (FPMP), it has come to our attention that the current operations and your FPMP does not comply with your environmental permit and the approved FPMP Guidance. Due to the significant amount of detail required for a compliant FPMP and the reasons outlined below **Category 2** breach is being scored at this time for non-compliance with **the permit condition 3.5.1.**

Condition 3.5.1. states the following: *3.5.1 The operator shall manage and operate the activities in accordance with a written fire prevention plan using the current, relevant fire prevention plan guidance.*

It is reasonably foreseeable that should a fire occur it would cause a significant impact on the environment and/or human health, the reasons are summarised as follows:

- A stockpile of wood waste stored outside with no appropriate separation distances and exceeding the dimensions specified within the Fire Prevention & Mitigation Plan Guidance V 2.0.
- The stockpiles of mixed waste and mixed green waste were piled high towards the ceiling, overflown the bay walls and mixing.
- It was estimated the stockpiles were over 4 metres in height which is the maximum height any stockpiles can be in line with FPMP guidance. These will therefore need to be reduced and storage of waste within the building must be carried out in line with relevant sections of the FPMP.
- The submitted FPMP dated 30/01/2020 has not been written in line with the Fire Prevention and Mitigation Guidance, Version 2.0.
- Fire water containment – you have not stated how the firewater would be contained during and after the event of fire. Firewater runoff may be harmful to the surrounding environment and human health.
- If the fire occurs at the site, it may spread over the adjacent buildings and pose a high risk of harm to people working on those sites.

Action:

See attached Regulation 36 Notice.

If action is not taken regarding this compliance breach, there is potential for an escalation in the level of breach recorded during future compliance visits.

4. Fire Prevention Plan (FPMP)

We have assessed your current Fire Prevention & Mitigation Plan (dated December 2019 – see the attached) against version 2 of NRWs guidance (published August 2017, as attached with this CAR form). There is still more information needed within it and the FPMP must be revised. Please see below:

1. Site Plan

FPMP Guidance requires you to include a site plan to your FPMP.

- you must include a site plan(s) drawn to scale showing:

- layout of buildings (including access points, fire exits & location of utilities)
- areas where hazardous materials are stored (location of gas cylinders, process areas, chemicals, piles of combustible materials, oil & fuel tanks)
- main access routes for fire engines (typical FRS vehicle access requirements are below) & any alternative access points around the site perimeter to assist fire fighting
-location of hydrants and water supplies
- any watercourse, borehole or well located within or near the site
- areas of natural and unmade ground
- the location of plant, protective clothing and pollution control equipment and materials
- drainage systems, foul and surface water drains, and their direction of flow and outfall points
- the location of drain covers and any pollution control features such as drain closure valves and firewater containment systems
- location of “off- site” emergency information pack with site plan (as specified above)
- location of sensitive receptors within 1km of your site –
- **Human receptors** include hospitals, nursing homes, schools, residential areas, places of work, transport networks.
- **Environmental receptors** include source protection zones, surface waters, potable abstractions, groundwater, protected habitats, fisheries
- location of the **quarantine area**
- assembly point for staff and visitors to site
- compass rose showing north and the prevailing wind direction

Action:

Provide a site plan that includes the above features and is drawn to scale. Please note the FPMP must be a one document and site plan must be a part of a FPMP.

2. Common Causes of Fires and Preventative Measures

In your FPMP you have provided some common causes of fire, but you may consider more options indicated below. If you think any of those do not apply to your site, state why not. These are:

- **Self-combustion** - (e.g. due to chemical oxidation in stored waste material) what measures you will put in place to monitor and control this issue and help prevent the risk of fire

- **Plant or equipment failure** - You need to ensure that you:
    - have a maintenance and inspection programme for static and mobile plant and equipment
    - fit vehicles with fire extinguishers, dust filters, spark arrestors and where practicable all bucket loaders are to be fitted with rubber strips to prevent sparks when the bucket comes into contact with hardstanding etc.
    - keep mobile plant that is not being used away from combustible waste.

- Damaged or exposed electrical cables - Electrics on site should be fully certified by a qualified electrician and you must have written procedures in place that set out the regular maintenance.

- **Reactions between wastes** - You should ensure that you have written procedures within your management system for waste acceptance checks to prevent reactions between incompatible or unstable wastes, including lithium batteries.

- **Build-up of loose combustible waste, dust and fluff** - Your plan should state how regularly you will inspect and clean the site to prevent the build-up of loose combustible waste, dust and fluff within buildings & around the site.

- **'Tramp' metal** that finds its way into moving machinery and causes localised 'hot spots'. Prevent metal getting into moving machinery by pre-sorting and/or extraction by a magnet/eddy current separator, especially when ignitable or explosive materials are present.

- **Cylinders stored at the site** – should be stored in the correct manner when either in/or not in use. Cylinder storage locations should be identified on the site plan.

- **Leaks and spillages of oils and fuels** - You need to prevent fuels and combustible liquids leaking or trailing from site vehicles and ELVs. For example, this includes from vehicles:
- being tracked around the site
- before or after the de-pollution process

You must ensure that any materials used to absorb combustible liquids are correctly disposed of to reduce the risk of a potential fire situation.

3. Storage Times and Self-combustion Factors

Some of the waste that are permitted at the site are prone to self-combustion. The FPMP Guidance states: '*Many materials can self-combust under certain conditions, and the risk generally increases when materials are stored for prolonged periods…*'

'Materials that are at risk of self-combustion if stored for more than 3 months are:
- green material, compost, wood and wood products,
- paper and paper products,
- general/mixed waste including residual waste, RDF and 'fines'
- tyres (whole or processed)
- smaller size or graded materials either stored or mixed
- material that has not had potential hazards removed before stacking e.g. exposed rust (which can generate heat)
- treated materials which are not cold before storage (treatment processes can generate heat)'.

'If you are storing materials at risk of self-combustion for longer than 3 months you must demonstrate what additional measures you will take, including monitoring the piles to reduce this risk. ***You must include this information in your FPMP.'***

Action:

Provide storage times and self- combustion factors for each type of waste that is permitted at the site. For more information on storage times refer to the point *7. Storage Times and Self-combustion Factors* of the FPMP Guidance.
To help prevent self-combustion taking place you should consider adopting the following general fire prevention principles:

- reduce risk factors (e.g. exposed metal content, proportion of 'fines', mixing of materials and heat generated during treatment)
- minimise stacks sizes (small stacks with appropriate separation are safer than one larger one)
- control moisture levels
- demonstrate good stock rotation for all stored materials and show how this is monitored and implemented daily
- store material in its largest form prior to processing e.g. do not undertake preparatory treatments such as size reduction of green waste unless you are intending on submitting the waste to the treatment process immediately
- monitor and control sub-surface temperature and moisture content with a suitable thermal device (thermal probe/thermal camera) and ensure that this is capable of reaching all parts of a stack (if materials are stored in plastic wrapping you must demonstrate a sampling and testing protocol to ensure a representative number of bales (minimum 10%) are assessed during monitoring
- routinely turn stacks
- detect and control hotspots within stacks (**Note:** steam is a good indicator of self-heating)
- define the maximum storage time of all materials on site and show how this will be monitored and controlled

- minimise external heating during hot weather by shading from direct sunlight

4. Managing Waste Material Stacks and Separation Distances

Your FPMP does not include the information about managing stacks and separation distances. As your permit allows for storing waste in the building only, use the section: *Waste Stored Within a Building p.31*. However, you should also consider the principles included in the section 8 *Managing Waste Material Stacks and Separation Distances* of the FPMP Guidance as a starting point.

Action:

Revise your FPMP to ensure storage of waste is carried out in line with the FPMP Guidance.

5. Enclosing Stacks Using Bays and Walls

As you store waste using bays and walls, you must include this information in your FPMP. This information has not been included.

In your FPMP You should be able to demonstrate:

- full and frequent stock rotation and how this will be monitored and recorded
- protection from wind
- how you intend to check temperature and moisture content of all the material within the bay so that the entire volume of the stack receives representative checks
- the construction of the walls in terms of how they offer a thermal barrier and enable cooling
- how stock capacity will be managed and controlled (using first in first out concept)
- how you will ensure segregation of materials
- how calculation of flame height and radiation has been taken into account in
- preventing the spread of fire between stacks
- prevention of brands or lighted material moving outside the bay walls
- prevention of bridging across or around walls
- how a ‘freeboard’ space of 1m at the top and sides of the walls will be physically retained at all times in accordance with the latest available guidance
- the frequency and method of turning stacks
- how the **quarantine area** will be used and how materials will be moved during an incident.

Action:

Revise your FPMP to add the information on storing waste using bays and walls. For more information relate to the point *11. Enclosing Stacks Using Bays and Walls*

6. Waste Stored Within a Building

As your permit requires you to store waste in the building only, the information on waste stored within a building must be included in your FPMP. This section has not been included. You should adopt the following general principles for fire prevention and mitigation of fires at all times:

Ensure waste stack sizes and separation distances are appropriate to the risk. **Table 2** can be used as a starting point but not absolute guidance for internal storage.

Consider the use of fire walls/bunkers.

- Separation between internally stored wastes and building walls, plant & other equipment within buildings will need to be considered. In general fires in internally stored wastes are far more likely to spread to buildings and plant than for externally stored wastes. As a result, your insurer is likely to place more emphasis on internal storage than external storage fire management.
- You should seek advice from your insurer to ensure that you have met any requirements for fire detection and fire suppression.
- If you are storing wastes internally in large quantities, such as in warehousing, then you should seek competent advice on the precautions to be taken. These will depend on the type of building used, the types of waste being stored and what fire precautions are already in place. This is a specialised area, and the general standards applied to the warehousing of goods may not be appropriate to the internal storage of wastes.
- If the building is heated this could affect the potential for self-heating of the waste and should be taken into account when assessing self-heating risks.
- You must ensure that all escape routes, fire exits, alarm call points and fire extinguishers are kept clear and free from waste at all times
- Ensure electrical equipment and heaters are kept free from waste, including dust and packaging materials.
- Waste storage areas should be fire compartmented away from office areas.
- Waste storage areas should have some means of clearing smoke from the building, such as openable skylights or roller shutter doors, to aid firefighting.

Action:

Provide an amended FPMP to include the above section. For more information refer to our FPMP Guidance p.31 and **"Fire Safety Risk Assessment - Factories and Warehouses".**

7. Waste Stored in Containers

If you store waste in containers that can hold more than 1,100 litres, each one must be accessible so any fire inside it can be extinguished. Examples of these types of containers include skips, roll-on roll-off skips, or shipping containers. Shipping containers should be stacked no more than 2 containers high and secured with a lock outside of operational hours.

Action:

If you store waste in containers, you must include the above section in your amended FPMP. For more information refer to the FPMP Guidance *13. Waste Stored in Containers p.32.*

8. Seasonality and Waste Stack Management

In this section of your FPMP you stated that the seasonality is not applicable because waste stacks are continuously being moved and always fall within time schedules.

The FPMP Guidance states: '*You should demonstrate that your waste stack management is viable and that you are able to prove the suitability of materials, the resilience of the supply chain and end user outlets.*

You should provide a technical assessment that shows you have confidence that your proposal will be viable in foreseeable market conditions.

You should be able to demonstrate how you will follow the principle of "first in, first out" so that wastes are stored for no longer periods than indicated in Table 1.'

Action:

Provide the above information in your revised FPMP.

8. Monitoring and Turning of Stacks

In this section of your FPMP you have stated: Thermal monitoring to be considered.
We need more information about monitoring and turning of stacks in your FPMP.

Action:

Provide the amended FPMP that includes information about Monitoring and Turning of Stacks required by the FPMP Guidance. For more information on what to include in this section, refer to the section 16. Monitoring and Turning of Stacks

8. Fire Detection

In your FPMP you stated that annual fire checks of the site are carried out.

The FPMP Guidance states: '*You should ensure that you have adequate procedures in place to detect a fire in its early stages so you can reduce its impact'*

For mor information on what to include in this section of your FPMP, refer to the section 17. Fire Detection of the FPMP Guidance.

Action:

In your revised FPMP provide what adequate procedures are in place to detect a fire.

18. Fire Suppression Systems

This section has not been included in your FPMP**.**

Action:

Provide the above section, in your revised FPMP. For more information, refer to the section

18. Fire Suppression Systems of the FPMP Guidance.

19. Firefighting Strategy

The information about firefighting strategy included in your FPMP is not written in line with the point *19. Firefighting Strategy* of the FPMP Guidance.

Action:

Revise your FPMP to add the information required by the FPMP Guidance in this section.

20. Water Supplies

The Water Supplies section in your FPMP is not written in line with the FPMP Guidance section *20. Water* Supplies.

Action:

Revise your FPMP to include required information in the point *20. Water Supplies* of the FPMP Guidance.

21. Managing Water Run-off

The information about the methods of managing water run-off available at the site included in your FPMP is not satisfactory.

Action:

Revise your FPMP to include sufficient information in the point *21. Managing water run- off* of the FPMP Guidance.

22. Designated Quarantine Area

In your FPMP you have stated that the location of the quarantine area has been shown on the site plan. However, the site plan has not been included in the provided FPMP. Note that the FPMP must be a one document and a site plan must be included within it.

The FPMP Guidance states: '*The quarantine area should be within the permitted boundary area of the site and should be large enough to both:*
- hold at least 50% of the volume of the largest stack,
- have a separation distance of at least 6 metres around the quarantined waste (this can be decreased if concrete bunkers/walls will be used).

You should set out in your FPMP the location of this area and the volume of waste that it can hold.'

For more information on quarantine area refer to the point *22. Designated Quarantine Area* of the FPMP Guidance.

23. During and After an Incident

This point has been included in your FPMP and accepted, thank you.

24. Reviewing and Monitoring your Fire Prevention & Mitigation Plan

The information provided in this section of your FPMP does not include circumstances that would warrant a review of your FPMP. Refer to the point *24. Reviewing and Monitoring your Fire Prevention & Mitigation Plan* of the FPMP Guidance and provide this information.

Action:

Revise your FPMP to include the above section.

Summary

Thank you for your time. If you have any queries regarding this Compliance Assessment Report please contact myself on magda.leonowicz@naturalresourceswales.gov.uk .

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) order

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

What are suspended scores?
In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry and Waste action criteria (used in section 1 and 2):

A: Permitted activities
- A1 Specified by permit

B: Infrastructure
- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management
- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management
- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions
- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity
- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting
- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency
- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.