Compliance Assessment Report CAR_NRW0044411

Permit being assessed: AB3095ZY.

For: Roath Dock, **held by:** Associated British Ports

At: Old Clipper Road, Cardiff Docks, Cardiff, CF10 4LY.

Type of assessment: Report/Data Review,

Reason: Other.

On: 23/05/2024.

Parts of permit assessed: 1.1.1. & 3.4.1.

NRW Lead Officer: Elysia Lovelock.

Report sent to: Thomas Butler, Operations SMS Manager, on 23/05/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
W1A - Waste - Management - General management	C3 Minor	1.1.1 & 3.4.1

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

Total non-compliances recorded	Total non-compliance score
1	4

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
W1A	Please review the information contained within this Compliance Assessment Report detailing the review of the sites Pest Management Plan and action the recommendations on how to address issues and prevent them from occurring and provide a revised Pest Management Plan for review by Natural Resources Wales. Providing a date (within 21 working days of receipt of this CAR) by which, a revised Pest Management Plan in accordance with permit conditions 1.1.1 and 3.4.1, can be provided to Natural Resources Wales for review.	24/06/2024

Criteria	Action needed	Complete by

Compliance 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

Pest Management Plan Review

Following attendance to site by Natural resources Wales on Friday 5th May 2023, in response to incident reports received by Natural Resources Wales concerning flies, CAR_NRW0041902 was issued to the Operator on 26th June 2023.

As per the action specified in the Compliance Assessment Report issued on 26th June 2023, the Operator provided a revised Pest Management Plan on 27th June 2023, 'Waste Monitoring and Inspection Procedure v4 draft'.

In accordance with the Fly Management guidance, an operator is obliged to prevent pests or use all appropriate measures to prevent pests that amount to pollution from their activities. Operators may need to update their Pest Management Plan with further measures to ensure they continue to meet condition 3.4.1.

Due to the specialist nature of Pests, the Pest Management Plan provided by the operator has since been reviewed by a Pest Management Consultant, who is a qualified Entomologist, on behalf of Natural Resources Wales, and provided the following assessment.

Pest Management Review & Pest Management Plan for Associated British Ports RDF Waste Storage Facility at Roach Docks, Cardiff

This report assesses the quality of flying insect pest risk management at the ABP RDF quayside waste storage facility at Cardiff Docks. The review provides proposals and guidance for a proactive approach to pest management by way of best practice and effective risk management to reduce the risk of flying insect activity and risk of fly dispersal from the site. This can be achieved by the implementation of a more proactive Pest Management Plan (PMP).

The objective is to reduce the impact of flying insects on the surrounding area by ensuring an effective and satisfactory integrated pest management programme is in place for flying insects; ensuring the site is compliant with good quality standards for waste management and to ensure requirements are met as set out under the waste handling permit for effective flying insect pest management.

Contents

3. FLYING INSECTS ASSOCIATED WITH WASTE

4. IMPROVEMENTS FOR THE SITE PEST MANAGEMENT PLAN

5. SUMMARY OR RECOMMENDATIONS FOR IMPROVEMENT

6. FLYING INSECT PEST MANAGEMENT PLAN FOR APB ROATH DOCKS

7. DOCUMENTS REQUIRED (example)

1. DOCUMENTS REVIEWED

The ABP Waste Monitoring and Inspection Procedure v4.

Natural Resources Wales 'Fly Guidance' – 'Fly Management and How to Comply with your Environmental Permit' V1

Compliance Assessment Report CAR_NRW0041902 26.06.23

Photographs of the RDF Quayside Storage facility

2. BACKGROUND ISSUE

It is understood that bales of waste material for RDF (Refuse derived fuel) were stored externally on the quayside at Roath Docks.

The planned storage time for waste material is 5 weeks however, any waste stored beyond this period significantly increases the risk of fly activity and fly dispersal from the site.

In May 2023 reports were received alleging that flies were dispersing from the ABP waste facility, effecting surrounding areas.

Natural Resource Wales visited the waste storage facility on the 5th May 2023 and concerns were raised regarding the quality of waste storage management - particularly regarding the quality of wrapping on bales of waste; the quality of the pest management plan for flying insects; the presence of waste exposed by damaged packaging emitting an odour and attracting flies and the possible impact this could have regarding high numbers of flies occurring on site.

The problem was exacerbated by the presence of 500 bales being left over from a previous shipment, resulting in an extended storage period of 10 weeks, instead of the usual 5 weeks for stored waste.

During the site visit, flies were observed swarming around the holes on the damaged wrapping and it is possible that this not only provided ideal breeding conditions for house flies and blue bottles, but could also result in increased fly numbers and possible dispersal of flies from the site.

It is noted that the berth was cleared of all bales of stored waste on the 7th/8th May 2023, but there were concerns that the pest management plan in place is not sufficient to prevent the risk of fly dispersal from the site and this could cause a nuisance in the future.

To ensure that ABP remain compliant with Permit conditions 3.4.1 and 1.1.1, to avoid the presence of pests that may cause hazard or nuisance outside the boundary of the site, a more proactive approach to pest management is required and a more 'risk-based approach' to pest management should be adopted at this site.

This review contains additional measures that could be considered as part of the pest management plan.

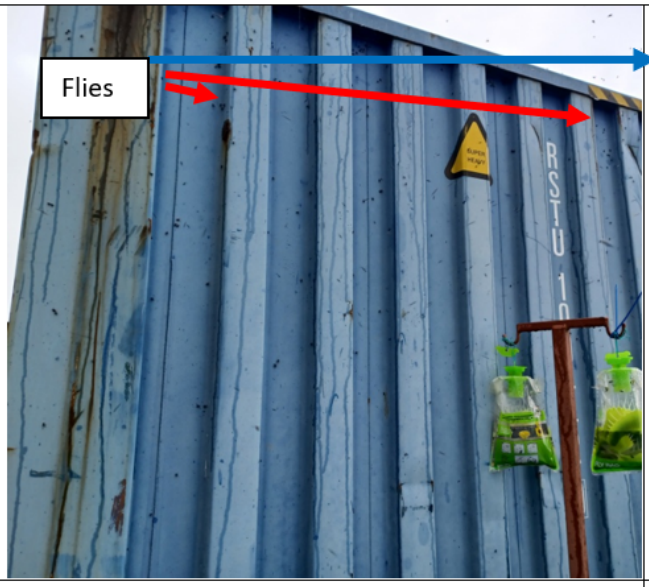
It assigns responsibility and highlights areas where improvements can be made.

Photos provided from by the regulation officer of the Quayside Waste Storage area:



Damaged bales of waste attract flies and allow them to breed in the waste. Any damaged bags must be repaired as soon as possible. To reduce the risk of flying insect activity Diatomaceous earth could be liberally applied to the surface of the exposed waste material. This would create a 'dust barrier' that would kill any maggots, pupae or adult flies that come into contact with the dust. It would kill insects trying to exit the bale and would kill any flies trying to pass through to access the waste. The dust is chalk based and is not an insecticide.


Large numbers of flies were present on the outer surface of the waste bales. Also, large numbers of flies were airborne flying between the bales of waste. A knock down treatment could be applied directly to alighted or airborne flies here.

	
Flies were alighted on the external walls of a container. Also many flies were flying around the container. Knock down treatments could be applied directly to alighted or airborne flies here.	Multi catch traps are deployed in the Waste Storage yard. Traps should also be deployed along the fence line adjacent to neighbouring properties and also along the boundary line downwind of the prevailing wind.

3. FLYING INSECTS ASSOCIATED WITH WASTE

		
House Fly (Musca domestica)	**Blue bottle & Green Bottle Flies - Blowflies (Calliphoridae)**	**Fruit Fly (Drosophila spp.)**
The plastic wrapping on bales creates a warm micro climate for fly development. Females can live up to 1-3 months and can produce 4-5 batches of 100-150 eggs. Larvae thrive at 17 to 32°C and at optimal temperatures of 17 to 32°C they complete their development in four to 13 days. At temperatures of 12 to 17°C larvae can complete development in 14 to 30 days.	Blue bottles can live up to 6 weeks during which time they mate repeatedly. Females lay up to 500 eggs on decaying meat or excrement. Eggs hatch in less than a day. Larval development time is 10 days. Full life cycle development time is temperature dependent and can range from 7 days in hot conditions to 6 weeks.	Fruit flies can live up to 40-50 days. Females can lay up to 800 eggs at 20-25 per day on organic material, residues or waste. At 30°C development time from egg to adult stage can be 8 days.

4. IMPROVEMENTS FOR THE SITE PEST MANAGEMENT PLAN

To contain and to control flying insect activity on site - particularly during peak periods of activity between March-October, a robust and flexible pest management plan should be in place. The Pest Management Plan must be able to identify and respond to any sudden changes or seasonal changes in flying insect activity. Responses should be immediate, appropriate, and carried out in a targeted way, to control flying insect activity.

Following this review, a number of recommendations have been made to improve the quality of flying insect pest management. There is a need for a more proactive pest management programme and for a greater level of clarity and transparency regarding the pest control documentation, and for the management and control of flying insects on site.

There is a need for a greater level of awareness and a closer engagement by ABP management regarding the presence and changing levels of flying activity on site.

A greater level of flying insect pest awareness is required by both management and site employees and a greater understanding of the potential causes or sources for fly activity that may occur on site. By process of more frequent inspections, increased monitoring and control, it should be possible to minimise the risk of fly dispersal from the site (currently there is no satisfactory pest management plan in place to manage this risk).

This report recommends the frequent application of ‘organic’ pesticide treatments to knockdown flying insects and recommends the use of products which are not neurotoxins; of natural origin, non-residual and can either be applied by a pest control contractor or by suitably trained personnel within ABP. The likely frequency of the treatments would suggest it is more practical and more cost effective for

the Operator to carry out immediate knockdown treatments, but the task can be carried out by the pest control contractor.

5. SUMMARY OF RECOMMENDATIONS FOR IMPROVEMENT

Item	Area for improvement	Recommendation
1	**Pest Management Plan**	A more proactive pest management plan for periods when waste is stored on the quayside.
2	**SSPRA**	A site Specific pest risk assessment is unique to each site. It sets out risk of pests occurring, possible impact on adjacent areas, and indicates how the risk will be managed by way of monitoring, best practice and treatments (if required).
3	**Inspections/Visits (For March-October)**	Reports required for periods when stored waste is present: Daily: x 2 checks daily to identify areas of fly activity and to record nil/low/med/high levels or activity observed. Treatments should then be carried out in areas where fly activity has been found. Weekly: A weekly review of fly activity, treatments carried out, issues that have arisen and any outstanding actions still required. Annual: An annual review to assess the quality of the pest management programme. To determine if it is compliant and effective. Also to develop the pest management programme by way of process for the continual development of the site.
4	**Training**	As a minimum, ABP employees should receive pest awareness training for the management and control of flying insects and for rodent management. If carrying out any treatments, training in the use and application of non-neurotoxin/'Organic' pesticide is required. Training can be provided by approved bodies in the pest control industry, suppliers or by the pest control contractor. Refresher training for site personnel is recommended every couple of years.
5	**Monitoring**	Levels of flying insect activity change according to season and according to temperatures. The recording of flying insect activity is required to help to highlight changing trends in flying insect activity; to help identify 'hotspots' and to provide a guide for targeted treatments. It will also justify *when* to treat. Seasonal pest trend data will help to identify the peak months of the year for fly activity. The gathering of flying insect data is an important part of due diligence and helps to demonstrate that management are aware of the changes in flying insect activity occurring on site.
6	**Reporting**	Brief reports should comment on the presence or absence of fly activity; highlight any issues found (such

		as damaged bales with exposed waste); comment if treatment is required.
7	**Treatments**	Treatments highlighted in this report can either be carried out by suitably trained ABP employees or by a pest control contractor.
8	**Documentation**	It is important that the documentation reflects the pest activity present on site. It must be transparent and clearly show that fly activity is being closely managed with regular inspections; targeted treatments and clearly show actions carried out.
9	**Integrated Pest Management**	To implement a proactive, integrated pest management plan, a culture focussing on fly management should be embraced by all. Site personnel should report any damaged bales and management should ensure that they are quickly treated with DE and sealed. By adopting best practice for the rotation and storage of RDF waste, combined with frequent inspections and treatments using 'Organic', non-neurotoxin products, not only will this help to control flying insects, it will reduce the impact the waste storage facility has on the environment and surrounding area.

6. RECOMMENDED FLYING INSECT PEST MANAGEMENT PLAN FOR ABP ROATH DOCKS

Pest Type	Area	Risk	Control Programme		Escalation Response	Critical Review
			Control Measure	Monitoring		
Flying insects Adult flies (External) Houseflies Calliphoridae (Bluebottles & Greenbottles) Fruit flies	External waste storage areas & Perimeter fence line	**High**	**A risk of fly development and fly dispersal is present.** Therefore, control of both adult flies and fly larvae is required. Regular (daily) visual inspections and knockdown treatments (using non-neurotoxin products), are carried out.	**Both ABP site operatives and the pest control contractors are responsible** for assessing and recording levels of flying insect activity. **Frequent assessments of flying insect** activity in all waste storage areas: **Visual**	**Any areas of excessive flying insect activity must be investigated for root cause or source of activity.** The cause or source must be removed. **Any dense gatherings of alighting flies must be identified and treated** – the same day.	**If flying insect activity is high- risk or causing nuisance, and previous measures for control have failed**, an independent technical review of pest management is required. **The root cause or source for the flying**

			To reduce the risk of flying insect activity, good quality standards and best practice must be in place for waste storage, hygiene and cleaning on site. **Good housekeeping** covers a range of measures including: the timely removal of bales of stored bales of RDF (ideally within 4 weeks); removal of litter; checks on incoming bales to inspect for signs of damage or infestation; inspections of stored bales for signs of damage – particularly as rats may damage packaging around the base of the stored bales. **Employee / Operator Training:** ABP personnel should have received pest awareness training for identifying flying insect	**checks on the outer surface of waste bales**, for signs of adult flies on alighting surfaces, in flight and or around the base of stored bales of RDF. **Visual checks for evidence of damaged or broken packaging** that may cause flies to breed or to exit from bales of waste. Fly alighting counts are carried out for flies landing in a 1 metre square area. Fly counts should be rated as Nil; Low; Medium or High and pest trend data should be produced to show trend analysis for seasonal fly activity. The information obtained will also provide a visual aid and indicate the level of external flying insect activity present in	**Where possible non-chemical means of control should be carried out** – such as removal of infested material or faster rotation of stored waste. In addition to scheduled treatments, additional, targeted 'Organic' pesticide treatments should be carried out in the affected area. **A technical review** of pest management for flying insect activity should be carried out to ensure that appropriate monitoring and control measures are in place to control the problem and to prevent a recurrence. **A site system review** must be carried out to ensure that appropriate hygiene, cleaning,	**insect activity** must be investigated and established. **The site processes and the Site Pest Management Plan must be reviewed** and updated. **In the event of complaints of flying insect activity dispersing from the site and causing nuisance** in neighbouring areas adjacent to the site, increased treatments will be carried out and an Independent Technical Review will be done and an independent assessment will evaluate fly activity. It may include an evaluation of both the site and properties affected (where adhesive glue boards will be used to determine the quantity and type of flying

			activity and on recognising high-risk areas. They also should have received health & safety training for flying insect pest management and the safe use of any (non-neurotoxin) pesticide products approved for use on site. **Reducing risk of fly harbourage** by keeping ground surfaces and areas around the perimeter of the building clean and free of residues and accumulated debris. **Control measures:** The use of pyrethrum or pyrethrin / neurotoxin insecticides must be avoided. 'Organic' non-residual knockdown fly treatments can be carried out using natural products that will kill flies but have no impact on the environment or	localised areas of the site. If sudden peaks in fly activity or if unseasonably high numbers of flies are detected, additional interventions can be made to reduce levels of internal flying insect activity immediately and in a timely manner. Frequent resting counts of flies may also be carried out on squares marked onto walls (of shipping containers etc), to determine the level of flying insect activity. Between March – October the frequency of these assessments should be completed and documented at least twice within each 24-hour period.	waste rotation and waste management measures are in place to control the problem and to prevent a recurrence. **If necessary, additional, novel interventions should be considered** to reduce the presence of flying insect activity or potential risks to adjacent areas, arising from the presence of flying insect activity. The Site Specific Pest Risk Assessment (SSPRA) must be reviewed and updated annually either by ABP or the pest control contractor.	insect activity occurring). This assessment will be carried out by a qualified entomologist. **SSPRA** As a result of any complaint or serious incident regarding flying insect activity, the Site Specific Pest Risk Assessment (SSPRA) must be reviewed and updated to prevent a recurrence.

			marine life. These products have a mechanical action on the body of the insect, kill quickly and because they have a physical and not chemical effect, there is no risk of resistance in flies to the product. There are Natural 'Organic' products that are available. Inspections for flying insect activity should be carried out daily during March – October. External knockdown treatments should be applied to active fly alighting surfaces on the bales of stored recyclate and outer surface of shipping containers twice daily. Non-chemical methods of control can also be applied to damaged bales that are awaiting repair. This can be			

			applied on a preventative basis to reduce the risk of flies breeding or being attracted to damaged bales. It will also control any fly/maggot activity inside the bale trying to escape into the outside areas. Diatomaceous earth (DE) should be liberally applied to open or damaged plastic wrapping. Or on the dry ground around the base of the bale if maggots, pupae or flies are present. Essentially a very fine chalk product, this inert powder helps to desiccate any eggs, larvae, pupae or adult flies. For damaged packaging, it will provide a natural barrier preventing and killing insects that come into contact with the product – either on the inside or outside of the bag.			

			The product can be applied by using a pneumatic dry duster, a handheld 'puffer' applicator or applied liberally with a brush onto the surface of the damaged bale. This product is not toxic, and it is important to ensure sufficient DE is deployed to protect the damaged surface area on a bale. Non-chemical control measures & daily inspections can be carried out between March -October, during dry weather. **Interception:** Multi catch fly-bait traps are used to intercept flies in the waste storage yard. Multi catch traps should also be deployed along the perimeter fence line to intercept flies before they pass into adjoin properties and they should			

			also be concentrated along the boundary line downwind of the prevailing wind direction.			

7. DOCUMENTS REQUIRED (Example)

1. **A dedicated folder for Pest Control/Pest Management** containing all relevant documentation relating to pest management. It should contain all relevant H&S documentation and all other documentation relating to pest management. This will improve the transparency of the pest management on site.

2. **A Site Specific Pest Risk Assessment for all pests** that could occur on site. The document should detail monitoring methods and means of control to reduce the risk of specific pests occurring on site. The document should be reviewed and updated annually, following any changes to the processing or storage of waste, or following any critical fly-related incidents that have occurred.

3. **A daily site report sheet.** This could be a single sheet with boxes for observations and comments for each daily site inspection carried out.

4. **A weekly report sheet** with comments regarding fly activity, observations recommendations and any other pest-related issues.

5. **An Annual Technical Report** reviewing conditions and the Pest Management of the site.

6. **A pesticide usage summary sheet** to show ALL pesticide applications carried out on site.

   Example:

   A Pesticide Usage Summary Sheet Template/Example

COMPANY NAME PESTICIDE REGISTER

PESTICIDES USED ON SITE

Name of Pesticide & Active Ingredient	HSE No. or Product Ref.	Target Organism	Where used	Quantity used KG /Ltrs	% Conc or dosage	Method of Application	Date used	Time used	Operator Signature
		Carabid beetles	Warehouse wall floor junctions	5L	125ml / 4.8L	Surface spray	26.11.20	4pm	

8 PRODUCT INFORMATION

There are products available that are natural 'Organic' products.

Summary

Whilst we acknowledge the swift action taken by the operator following the visit by Natural Resources Wales to resolve the issue observed on site. Following review of the Operator's Pest Management Plan, it currently does not satisfy the requirements of the relevant guidance or permit conditions 1.1.1. and 3.4.1. Therefore, following review of the operator's Pest Management Plan, a breach has been recorded on this occasion as the plan does not sufficiently manage the risk posed.

BREACH: A category 3 breach of conditions 1.1.1. and 3.4.1 has been recorded under Compliance Criteria W1A - General Management.

ACTION REQUIRED: Please review the information contained above, actioning the recommendations on how to address issues and prevent them from occurring and provide a revised Pest Management Plan for review by Natural Resources Wales.

ACTION DUE: Provide a date by which, a revised Pest Management Plan in accordance with permit conditions 1.1.1 and 3.4.1, can be provided to Natural Resources Wales.

DUE: Please advise of a date, within 21 working days of receipt of this Compliance Assessment Report.

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.

If your assessment result in Section 1 is suspended, what does this mean?
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 Waste compliance criteria (used in section 1 and 2):

1. Management
- W1A – General management
- W1B – Energy Efficiency (MCP/SG facilities only)
- W1C – Avoidance, recovery and disposal of wastes produced by the activities

2. Operations
- W2A – Permitted activities
- W2B – Waste recovery plan
- W2C – Operating techniques
- W2D – The site
- W2E – Waste acceptance
- W2F – Technical requirements
- W2G – Improvement programme
- W2H – Pre-operational conditions

3. Emission and Monitoring
- W3A – Emissions to water, air or land
- W3B – Emissions of substances not controlled by emission limits
- W3C – Odour
- W3D – Noise and vibration
- W3E – Monitoring
- W3F – Pests
- W3G – Fire

4. Information
- W4A – Records
- W4B – Reporting
- W4C – Notification

Enforcement response
Any non-compliance with a permit condition 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 twenty 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 to 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.