

This form will report compliance with your permit as determined by an NRW officer

Site	Port Talbot Steelworks	Permit Ref	BL7108IM
Operator/Permit holder	Tata Steel UK limited		
Regime	Installation		
Date of assessment	29 th January 2020		
Assessment type	Procedure Review		
Parts of the permit assessed	See section 2		
Lead officer's name	Neil Herbert & Doug Cowie	Accompanied by	N/A
Recipient's name/position	Claire Grainger – Environment Manager (S.H.E. Dept)	Date issued	1 st April 2020

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation is captured in “Compliance Assessment Report Detail” (Section 2) and any actions you may need to take are given in the “Action(s)” (Section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	A	
B1 - Infrastructure - Engineering for prevention and control of emissions	N	
B2 - Infrastructure - Closure and decommissioning	N	
B3 - Infrastructure - Site drainage engineering (clean and foul)	N	
B4 - Infrastructure - Containment of stored materials	N	
B5 - Infrastructure – Plant and equipment	A	
C1 - General Management - Staff competency/training	N	
C2 - General Management - Management system and operating procedures	A	
C3 - General Management - Materials acceptance	N	
C4 - General Management - Storage, handling labelling, labelling and Segregation	N	
D1 - Incident Management - Site security	N	
D2 - Incident Management - accidents, emergency and incident planning	A	
E1 - Emissions - Air	N	
E2 - Emissions - Land and groundwater	N	
E3 - Emissions - Surface water	N	
E4 - Emissions - Sewer	N	
E5 - Emissions - Waste	N	
F1 - Amenity - Odour	N	
F2 - Amenity - Noise	A	
F3 - Amenity - Dust/ fibres/ particulates/ litter	A	
F4 - Amenity - Pests/birds/scavengers	N	
F5 - Amenity - Deposits on road	N	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	N	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	A	
G3 - Monitoring and Records, Maintenance and Reporting - Maintenance records	N	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	N	
H1 - Resource Efficiency - Efficient use of raw materials	N	
H2 - Resource Efficiency - Energy efficiency	N	

KEY: See Section 4 for breach categories, suspended scores will be indicated as such.
A = Assessed or assessed in part (no evidence of non-compliance), **N** = Not Assessed, **X** = Action only

Number of breaches recorded		Total compliance score (see section 5 for scoring scheme)
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If the number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Purpose of visit/assessment

- Update on the complaint issues reported to Tata Steel over the previous quarter of operation (October – December 2019).
- Update on Tata Steel's Air Quality Management Plan (AQMP¹) and other related topics pertaining to local air quality in Port Talbot.
- Other matters discussed during this visit included - Continuous casting: new 'burning booth' proposal.

Quarter 4 2019 complaints (Q3 2019/20)

Environmental complaints received during the fourth quarter (Oct – Dec) of 2019 have included: dust fallout, visual steelworks emissions (releases) and noise. In early October 2019, a short period of bleeder valve releases from both blast furnaces occurred in response to heavy rainfall and elevated moisture within the raw materials blend. These releases triggered associated complaints to Tata Steel and NRW.

The operator provided an update on their complaint investigations and data trending assessments. The SHE department interrogates all complaints received and analyses complaint data to identify any patterns/trends. This analysis can then be compared against plant data to better understand the activities and emissions which generate complaints.

Overall the number of complaints received by TATA during Q4 has dropped compared to the previous quarters. Dust fallout and visual emission complaints have reduced compared to the same period in 2019. Noise complaint numbers have increased and are discussed in more detail below. Analysis of the data continues and in 2020/21, Tata aims to introduce greater granularity to its complaints data analysis to allow a more accurate picture of overall complaint handling performance.

Noise complaints

NRW and Tata Steel continue to receive complaints about noise perceived to be from the steelworks. This has included complaints alleging a continuous droning noise, but also intermittent clanging/crashing noises at night.

The Sinter Plant and specifically the sinter cooler fans have been identified as a potential continuous noise source. At the time of this meeting, all five sinter cooler fans had been fitted with new silencers. Initial sound monitoring results reported by Tata Steel suggest this investment (£260,000²) has resulted in a 10dB drop in ambient sound levels in the vicinity of the sinter plant.



Photographs showing new noise abatement enclosures in place on some of the Sinter Plant Cooler Fans

Follow-up sound monitoring has been undertaken by Tata Steel to verify if the measured dB reduction (following installation of the fan silencers) is also reflected off-site. Whilst this report was being compiled, the operator has provided a summary of their noise monitoring findings.

It was noted that periods of perceived 'silence' reported by complainants – which on face value seems useful – might not always provide a useful indicator of potentially noisy steelworks activities. Different plant and equipment configurations may

¹ Steelworks Air Quality Management Plan for the Management of PM₁₀ and Fugitive Dust Emissions – version 11 – dated 16th January 2020

² Costing provided by the operator.

be active at the steelworks at any one time across a wide area (~30km²). This makes it very difficult to isolate specific noise sources of potential concern. The weather and prevailing wind direction are other variables which add to the complexity of any investigation.

One area where Tata Steel has requested additional support from NRW is the characterisation of noise complaints received via NRW's Incident Hotline. Consistent, specific descriptions of the perceived noise greatly help any follow-up investigation. NRW will review how it collects and records noise complaint information to ensure this is done as consistently as possible.

Tata Steel has been examining additional sound monitoring capability for its Safety, Health & Environment (SHE) Team based at Port Talbot. Some of the option under consideration involves the use of hand-held and/or static sound monitoring equipment and sensors which can be deployed in response to complaints. It is important that Tata now progress with this, as any initiative which enhances the SHE Team's ability to investigate and respond quickly to environmental complaints regarding the steelworks is very important. The ability to quickly deploy sound monitoring equipment would be especially welcome given the complex investigations usually needed to resolve noise complaints. Tata have also arranged for specialist noise training to be provided to a member of the SHE team. Whilst the training will take several months to complete, this is an important step to ensure on-site expertise is retained and should reinforce the operator's ability to properly investigate alleged noise complaints.

Steelworks Air Quality Management Plan¹ (AQMP): Revision 11 (dated 16th January 2020)

CAR report (ref: CAR_NRW0036011 (dated 6th June 2019)) discusses our most recent review of Tata Steel's overarching (high-level) AQMP for Port Talbot steelworks.

During this meeting, Tata Steel presented a copy of its Dry Weather Action Plan which has now been incorporated into Appendix 5 of the high-level steelworks AQMP. This completes the action identified in **CAR_NRW0036011**. This addition should help works areas and contractors act consistently and in a timely manner (to minimise fugitive emissions) when a set of defined dry weather criteria are met. **(Action complete)**

The Dry Weather Action Plan identifies a number of key processes which could potentially contribute to dust emissions during warmer weather. This includes storage and handling of raw materials at Tata Steel's stockyards. A latex-based dust suppressant is used to minimise wind-blown dust 'lift-off' from raw materials stockpiles. The circumstances which would trigger applications of latex dust suppressant include:

- Routine applications of dust suppressant following prescribed routes
- Reclaim of stockpiled raw material (latex applied immediately following reclaim)
- New raw material deliveries and stockpiles
- Response to daily visual checks which reveal areas of persistent dust lift-off

There is an established works area procedure for dust control and application of latex dust suppressant. The Dry Weather Action Plan supports this procedure and outlines additional actions, such as increasing the frequency of visual checks. Tata Group Environment are supporting Strip Products with the trial of cellulose-based dust suppressants. This type of suppressant is opaque white when applied to stockpiles and provide a simple visual aid when conducting daily checks to verify the application of dust suppressants.

Should Tata Steel need to activate its Dry Weather Action Plan, the SHE Team is asked to notify NRW by telephone or email. **Action ref: 1-0036482 Tata Steel**

Dust 'forecast' guidance has been developed by Tata Group Environment and incorporated as Appendix 3 of the high-level AQMP. The supporting software uses meteorological and air quality data to create a risk report or forecast for three areas which border the steelworks: Aberavon/Sandfields, Taibach and Margam. Live data from Local Authority air quality monitors is fed into the software and the resulting risk report is communicated to steelworks works areas, contractors and other stakeholders daily. This dust forecasting is done on a 'worst-case' basis.

A working copy of the Environment Department Daily Management Procedure was available for inspection. This document supports elements of the steelworks AQMP and includes rulesets and maps for the deployment of water bowsers and road sweepers across the site. The next review of this procedure is due in June 2020.

On-site ambient PM₁₀ monitoring: 2019

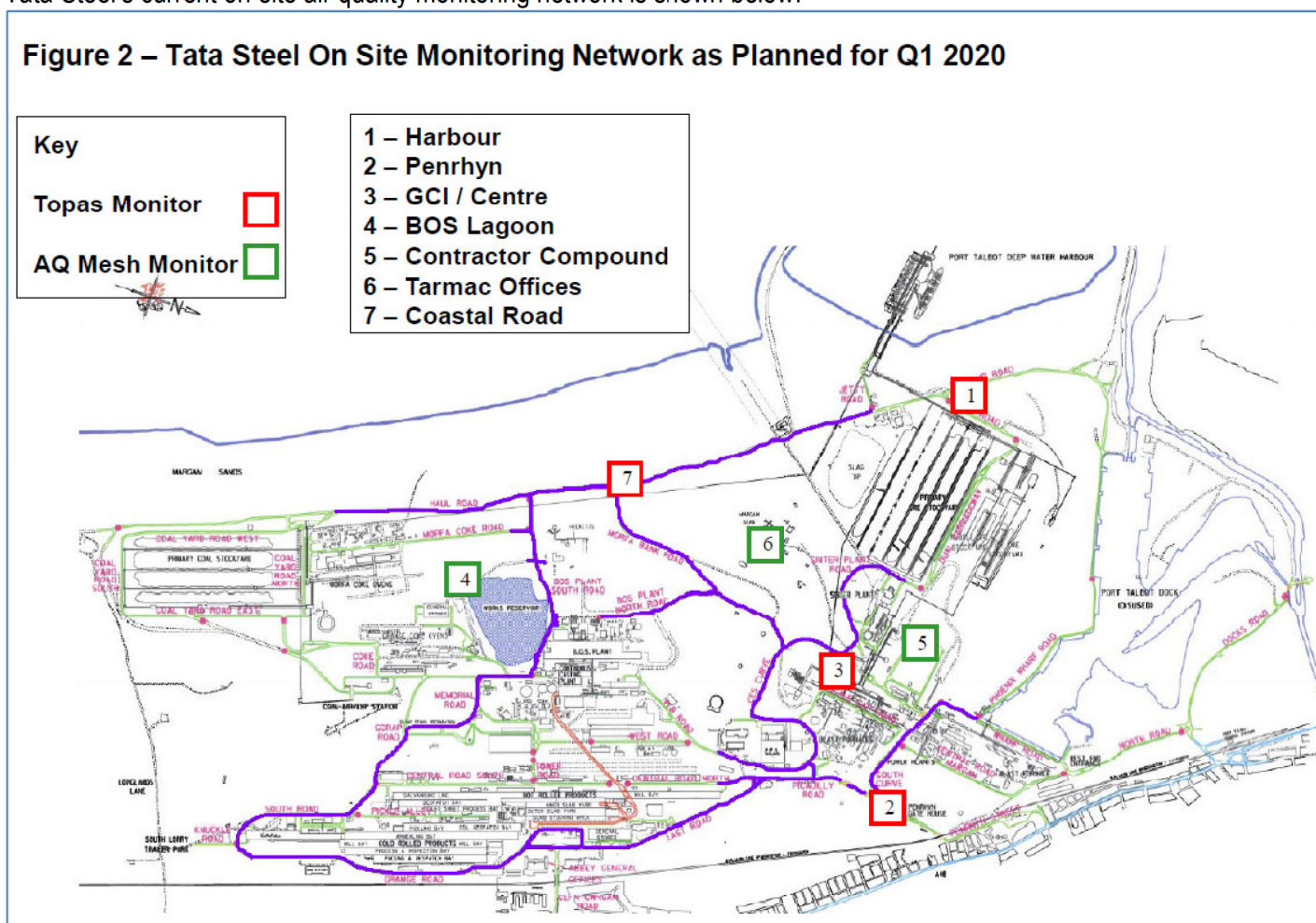
NRW has commenced its review of Tata Steel's quarterly ambient PM₁₀ monitoring reports for 2019. Three reports were available at the time of inspection and the fourth report in draft pending submission by 31/01/2020. Since our inspection we have received the full set of reports which have highlighted the following (not exhaustive):

- A transboundary influence on three PM₁₀ exceedance days which occurred during Q2 2019;
- Seven PM₁₀ exceedance days in 2019 had localised influence(s) which could have been associated with steelworks activities;

- Potential steelworks PM₁₀ sources in 2019 include the blast furnaces, granulated coal injection (GCI) plant, blast furnace slag handling and processing, metal recovery plant and the sinter plant. *This broadly corresponds to the 'heavy end' of the steelworks and is an area NRW regularly visits as part of its compliance inspection programme.*
- No positive correlation between steelworks production levels in 2019 and elevated PM₁₀ levels at on-site and off-site air quality monitors;
- Despite an increase in steelworks production during 2019 (compared to 2018), the annual average PM₁₀ concentration decreased at the official Fire Station AURN monitor;
- On-site monitoring network data capture and reliability issues (average data capture of 64% in 2019);
- Trialling of alternative air quality monitoring devices and reconfiguration of the on-site monitoring network.

Alongside its existing monitors, Tata Steel has proactively been trialling a new type of air quality monitor which uses a network of small sensors to detect PM₁₀. Initial trial results have been encouraging, although the applicability and suitability for different steelworks locations will need to be carefully considered at the end of the trial period. The sensors could conceivably be adapted to measure other parameters e.g. noise, however further study and testing is necessary to confirm this.

Tata Steel's current on-site air quality monitoring network is shown below:



NRW notes that the former Harbour Jetty monitor has moved to the Coastal Road [7], owing to wireless connection problems at its former location. It is suggested that the performance of this monitor in its new location is evaluated after a period of stable and continuous operation e.g. in Q3/Q4 2020. Tata Steel is asked to consider if any additional monitoring locations near the eastern boundary of the steelworks would add value to the network, for example a monitor at or near the Abbey General Offices (AGO). The present on-site network does not extend to this part of the steelworks. Residential areas directly east and north-east of the AGO have consistently been a source of amenity complaints, and nearby air quality monitors (Dyffryn School, Twll yn y Wal) have periodically recorded elevated PM₁₀ levels. **Action 2 0036482 Tata Steel** It is appreciated there is a cost associated with additional monitors and there may be also site-specific considerations to resolve before any final decision is made.

Dust deposition monitoring & analysis

As well as the measurement of PM₁₀, Tata Steel has proactively trialled new devices which are able to measure visible dust

deposition levels within the steelworks. Ambient dust deposition is already measured off-site by NPTCBC using a network of monitors within communities which border the steelworks. Tata's initial trial results have been encouraging although the deposition data can be affected by moisture e.g. rainfall.

Analysis of the deposition data captured by Tata's on-site monitors (in combination with PM₁₀, meteorological and off-site deposition data) may allow certain processes and/or sources to be eliminated from ongoing investigations into the origins of dust fallout in Port Talbot. Therefore, we request further information about Tata Steel's trial outcomes and the data collected so far. This should be submitted in writing to the regulating officers and the suggested format is a short report. Alternatively, the quarterly ambient PM₁₀ monitoring reports could be amended to include an additional section on dust deposition. **Action 3- 0036482 Tata Steel**

Continuous casting: new 'burning booth' proposal

Tata Steel is considering an operational change at its continuous casting (concast) plant to increase the resilience of this production activity.

The concast plant solidifies molten metal (steel) into a semi-finished strand or slab for subsequent processing at the rolling mills. Special moulds are used to cool and shape the molten steel. The moulds are periodically taken out of service and sent off-site for maintenance and repair, which includes the use of flame torches for welding and removal of accumulated metal deposits.

Tata proposes to set up an enclosed area at the concast plant allowing on-site mould maintenance & repair. Fumes from welding, cutting and burning activities would be captured by ducting attached to the enclosure or 'booth' and then passed through a filter before being discharged to air. Such an activity could require changes to Tata Steel's installation permit e.g. the addition of a new air emission point.

Based on the information provided during our visit, NRW believes a permit variation is necessary to accommodate the proposed change at the concast plant. At this stage it is unclear what type of variation would be needed, however this proposal is unlikely to constitute a substantial change and in our view is either a normal or a minor technical variation. Tata Steel should refer to our published permitting guidance and charging scheme and apply for the necessary permit change(s). If the operator is already seeking a permit variation for other reasons, for an installation of this size it is normally cost-effective to combine multiple variation requests into a single application.

Summary and further actions required

- Environmental complaints received during the fourth quarter (Oct – Dec) of 2019 have included: dust fallout, visual steelworks emissions (releases) and noise. Tata Steel will aim to introduce greater granularity to its internal complaints data analysis to allow a more accurate picture of overall performance.
- Noise complaints have been an area of specific interest. Following the installation of fan silencers at the sinter plant, Tata Steel has submitted a summary report.
- We are pleased to see clear evidence of ongoing continuous improvement and development of the high-level steelworks AQMP, and the quarterly air quality reports required by the installation permit. The introduction of the Dry Weather Action Plan and dust forecast guidance is welcomed. A further compliance visit will take place in 2020 (date to be confirmed and also now subject to COVID-19 restrictions) to look at how these procedures are applied in practice.
- Should Tata Steel need to activate its Dry Weather Action Plan, the SHE Team is asked to notify NRW by email.
Action ref: 1- 0036482
- Tata Steel is asked to consider if any additional monitoring locations near the eastern boundary of the steelworks would add value to the network. **Action 2 - 0036482**
- Tata Steel has trialled new devices which are able to measure visible dust deposition levels within the steelworks. NRW requests further information about Tata Steel's trial outcomes and the data collected so far. This should be submitted in writing to the regulating officers and the suggested format is a short report. Alternatively, the quarterly ambient PM₁₀ monitoring reports could be amended to include an additional section on dust deposition. **Action 3 - 0036482**
- Based on the information provided during our visit, NRW believes a permit variation is necessary to accommodate the proposed change at the concast plant. Tata Steel should refer to our published permitting guidance and charging scheme and apply for the necessary permit change(s). It may be cost-effective to combine multiple variation requests into a single application.

Persons present (either in part, or for the full duration of meeting)

Tata Steel	
Claire Grainger	Environment Manager (SHE)
Beverley Jenkins	Lead Environmental Engineer (SHE)
Andrew Townsend	Lead Environmental Engineer (SHE)
Georgina Brooks	Environmental Engineer (SHE)
Mark Clayton	Environmental Engineer (SHE)
John Crofts	Steel & Slab (Continuous Casting)
Stewart Reid	Steel & Slab (Continuous Casting)
NRW	
Neil Herbert	Technical Specialist
Douglas Cowie	Senior Officer – Industry Regulation

Note: Novel Coronavirus (COVID -19)

During the compiling of this report an escalation in the threat posed by the novel coronavirus (COVID – 19) pandemic, has resulted in the imposition of several stringent measures across the United Kingdom.

These measures to control and reduce the spread and impact of the disease are having an impact on both NRW's and the operator's normal operating practices. At the time of writing all routine regulatory visits have been suspended by the regulator. The situation is dynamic and extremely fluid however these restrictions are expected to remain in place for several weeks if not longer. During this pandemic there will be a continued expectation that operators continue to meet the conditions of their permits. Where the operator has identified an issue that is likely to result in permit non-compliance or increased environmental risk, the operator is expected to speak to the regulator at the earliest opportunity.

End of section 2

This form will report compliance with your permit as determined by an NRW officer

Site	Port Talbot Steelworks	Permit Ref	BL7108IM
Operator/Permit holder	Tata Steel UK limited	Date	29 th January 2020

Section 3 – Enforcement Response

Only one box should be ticked

You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/ advised	Due Date
See Section 1 above			
		Action ref: 1- 36482 Operator to notify NRW by email if they need to activate the site Dry Weather Action Plan.	Following each notification event
		Action 2 - 36482 Tata Steel to consider if any additional monitoring locations near the eastern boundary of the steelworks would add value to the network.	30 April 2020
		Action 3 - 36482 Tata Steel has trialled new devices which are able to measure visible dust deposition levels within the steelworks. NRW requests further information about Tata Steel's trial outcomes and the data collected so far. This should be submitted in writing to NRW as a short report or as an addendum to the quarterly ambient PM ₁₀ monitoring reports (i.e. an additional section on dust deposition).	30 April 2020

Where the operator is unable to meet the deadlines specified in this table they should liaise with regulator immediately.

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this reports should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.