

Compliance Assessment Report

Report ID:
CAR_NRW0026799

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

Site	Felinfach Effluent Treatment Plant		Permit Ref	BP3135EB		
Operator/Permit holder	Sensient Flavours Ltd					
Regime	Installations					
Date of assessment	25/05/2016	Time in	10:00	Out	13:00	
Assessment type	Audit					
Parts of the permit assessed	1 Management; 2 Operations; 3 Emissions and Monitoring; 4 Information					
Lead officer's name	Cowie, Douglas					
Accompanied by						
Recipient's name/position	Byron Williams/ Effluent Treatment Plant Manager		Date issued	20/01/2017		

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 - Infrastructure - Specified by permit	A	
B3 - Infrastructure - Site drainage engineering (clean and foul)	A	
B5 - Infrastructure - Plant and equipment	A	
C2 - Infrastructure - Management system and operating procedures	A	
F1 - Infrastructure - Odour	A	
G1 - Infrastructure - Monitoring of emissions and environment	A	
G2 - Infrastructure - Records of activity, site diary/journal/events	A	
H2 - Infrastructure - Energy efficiency	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Site description

The Felinfach Effluent Treatment Plant (ETP) is located at Felinfach Industrial Estate, Ceredigion and processes and treats effluent from two nearby manufacturing sites: Sensient Flavors Ltd and Volac International Ltd. The ETP is operated jointly by a Consortium of Sensient and Volac and is permitted as an installation under Section 5.4 (The disposal, recovery or a mix of disposal and recovery of non-hazardous waste) of the Environmental Permitting Regulations (EPR).

The permitted installation comprises: a primary effluent treatment unit with balance tank; a dissolved air flotation (DAF) plant; anoxic pre-mixing (selector tank); a conventional activated sludge unit and gravity sludge settlement tanks. The treated effluent is discharged into the coastal waters of Cardigan Bay.

Purpose of visit/assessment

A general inspection of Felinfach ETP was undertaken with particular attention placed on operating techniques, site drainage and effluent volumes, waste emissions and environmental monitoring.

The relevant permit conditions are listed under Sections 1.1, 2.3, 3.3, 3.5 and 4.1 of the Consortium's permit.

Person(s) present

Sensient and Volac Consortium

Byron Williams

Paul Skyme (Volac)

Tim Pink (Sensient)

NRW

Doug Cowie

Site inspection

A number of interventions and changes were noted whilst walking the site with the operator.

A new flow-weighted auto-sampler has been installed and commissioned and is now operational (see below photos). The operator has provided written confirmation of this by email, addressing the previous action noted in CAR 5958. NRW is satisfied that Improvement Condition (IC)1 of the operator's permit can now be discharged.



A small sludge thickening unit has been brought online and appears to be functioning well. A temporary sludge line is in place for the time being but the operator is seeking to install a more permanent connection to the ETP sludge tanks. The thickener is located inside the structure that houses the Dissolved Air Flotation (DAF) unit.

The sludge thickening unit and its temporary connection should be monitored regularly to ensure any damage or malfunction is detected and repaired as early as possible. The inspecting officer will review the arrangements at the next inspection. Photos of the thickening unit are shown below.



Waste coding/classification and sludge storage capacity was discussed. The ETP currently has around 1000m³ sludge storage capacity. The first half of 2016 has seen a drop of around 35% in the amount of sludge generated per day (~90m³/day down to ~60m³/day). This reduction should provide a few extra days of sludge storage capacity at the ETP in the event of any landspreading availability problems. The operator is advised to review its waste contingency plans to ensure the land bank available for sludge spreading is large enough. Incident management including waste contingency planning will be the focus of a future compliance audit at the ETP.

List of Wastes (EWC) code 19 08 12 (sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11) is now used to classify the ETP sludge which is spread to land by the Consortium's landspreading contractor. 19 08 12 is listed as a non-hazardous mirror entry code in Technical Guidance Note WM3 and is normally appropriate for non-hazardous sludges from industrial waste water treatment plants.

The operator has confirmed that both the Consortium and its landspreading contractor are willing to use code 19 08 12 to classify the ETP sludge. We will make further enquiries to verify that this waste code appears in the contractor's mobile plant permit and any agreed deployments. The

outstanding action from CAR 5953 will remain open until NRW is satisfied that there is a clear audit trail demonstrating that the transfer and recovery of sludge from Felinfach ETP is being done in accordance with the applicable regulations.

A new 110kW blower unit was installed at the ETP in December 2015. This new unit augments the existing blowers and improves the performance and reliability of the aeration equipment fitted to the secondary effluent treatment stage. The diffusers have also been replaced with more energy-efficient units. These changes mean the overall power use for the ETP has reduced by approximately 36% - a considerable financial saving for the Consortium. The new blower is shown at the left-hand side of the photo below.



Clean and dirty water separation

The Consortium is leading an initiative to rationalise the site drainage at Sensient and Volac and to identify clean surface water inputs to the effluent treatment system. At present a significant amount of roof water and yard water enters the foul drainage system serving the factories. Diverting this away from the ETP could potentially reduce the volume of untreated effluent entering the system by as much as 400m³.

The initiative is still at an early stage but the following potential interventions have already been identified:

- Diversion of factory roof water through a new outfall into the Afon Aeron
- Construction of a new surface water sump with an overflow to a nearby watercourse
- Reinstatement of inactive or blocked surface water drains
- Introducing a common identification system for different drains e.g. triangular surface water drain covers, square foul drain covers

An oil interceptor should be considered for any new discharge of surface water from clean yard areas used by vehicles and other fuel-powered plant and machinery. Vehicle washing areas should have their own enclosed drainage systems as the use of detergents and cleaning products can render oil interceptors ineffective.

Recycling of roof water/rainwater harvesting for use in Sensient and Volac's production processes or for cleaning purposes has been considered, but food hygiene standards and constraints are likely to rule this out as a realistic option.

The Consortium agreed to draft a plan summarising its intentions for the inspecting officer's consideration. The Consortium's initiative is commendable and we look forward to receiving its

plan for further comment.

Odour check

The inspecting officer note localised sewage/wastewater odours within the ETP permit boundary, but these were assessed to be no more than CICS Category 3 (minor) in terms of their environmental impact. These odours were what the officer would normally expect to encounter at this type of installation. No off-site odours were detected that could be attributed to activities at Felinfach ETP.

Permit charges

A query was raised with the inspecting officer regarding the annual EPR (permit) subsistence charges for Felinfach ETP. NRW has invoiced the Consortium for three annual charges (2014/15, 2015/16 and 2016/7) totalling around £27,000.

EPR permit subsistence charges were payable to the Environment Agency (EA) prior to the formation of NRW and the implementation of our own income and charging mechanisms. The operator should confirm if any subsistence charges levied since 2014 have already been paid to the EA. When this is confirmed the inspecting officer can pursue the operator's query with NRW's Income Team.

If this query has been resolved since our inspection, the operator should advise the inspecting officer accordingly.

Food and Drink Industry Sector: regulatory objectives

The inspecting officer provided an overview of NRW's main regulatory objectives for the Food & Drink Industry Sector in 2016/17:

- Review of site accident management plans including flood risk assessment
- Review of primary and secondary containment for potentially polluting materials
- Review of odour management and control measures

The following are also areas of focus and interest for Food and Drink installations:

- Resource efficiency and greenhouse gas reduction
- Amenity impacts (noise, odour, dust, litter, pests)

Although Felinfach ETP is a waste treatment installation, the effluent is supplied solely from two other installations for which the Food & Drink industry objectives are relevant. These objectives will be considered for and may be the focus of future ETP inspections.

The European Commission's Best Available Techniques (BAT) reference document or 'BREF' for the Food, Drink & Milk (FDM) sector is not yet in draft. Once the draft is published, Sensient and Volac will need to assess their techniques against BAT as outlined in the draft FDM BREF. The anticipated publication date of the draft FDM BREF is the end of January 2017. Further information about the FDM BREF and the review process can be found here:

<http://eippcb.jrc.ec.europa.eu/reference/>

For Felinfach ETP, NRW will also consider the Best Available Techniques Associated Emission Levels (BAT-AELs) contained in the EC Waste Treatment BREF, which is currently a working draft document (Draft 1, December 2015). The draft Waste Treatment BREF can be viewed here: http://eippcb.jrc.ec.europa.eu/reference/BREF/WTbref_1812.pdf

BAT 15 (Chapter 6, pages 895-896) of the Waste Treatment BREF confirms the BAT-AELs currently being considered for direct discharges to water from waste treatment installations. We are mindful that these BAT-AELs may change as the draft Waste Treatment BREF is developed further.

NRW will also consider the ecological status of the receiving waterbody (Afon Aeron) and any

applicable content from the FDM BREF when setting limits for the ETP discharge. It is possible that effluent treatment standards and emission limits may be tightened for certain key parameters e.g. phosphate. The additional monitoring undertaken by the Consortium to meet the requirements of IC2 should provide additional characterisation of the effluent which will be valuable when the FDM and Waste Treatment BREF reviews are completed.

Conclusions

An auto-sampler is now operational at Felinfach ETP and IC1 can be discharged.

The new sludge thickening unit and its temporary connection should be monitored regularly until a more permanent connection is installed.

The operator is advised to review its waste contingency plans to ensure the land bank available for ETP sludge spreading is large enough.

NRW will carry out further checks to ensure waste code 19 08 12 can be used legitimately and the transfer and recovery of sludge is being done in accordance with the applicable regulations. New aeration equipment has led to a reduction in power use at the ETP and financial savings for the operator.

The operator is leading an initiative to identify and reduce clean water inputs from Sensient and Volac to the ETP. NRW looks forward to receiving the operator's plan for further comment.

An odour check was undertaken and no off-site odours that could be attributed to the ETP activities were detected.

The operator should advise the officer if the permit charging query has now been resolved with NRW's Income Team.

An overview of the Food and Drink Industry Sector objectives and the focus of future ETP inspections was provided. The latest information regarding the FDM and Waste Treatment BREF reviews was also shared with the operator.

[ENDS]

EPR Compliance Assessment Report

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Operator/Permit holder	Sensient Flavours Ltd	Date	25/05/2016

Section 3 – Enforcement Response

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.

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			

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 (eg. 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.