

Compliance Assessment Report

Report ID:
CAR_NRW0026804

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 Flavors Ltd & Volac International Ltd				
Regime	Installations				
Date of assessment	25/05/2016	Time in	10:00	Out	13:00
Assessment type	Check Monitoring/Sampling				
Parts of the permit assessed	2 Operations; 3 Monitoring; 4 Information				
Lead officer's name	Cowie, Douglas				
Accompanied by					
Recipient's name/position	Byron Williams/ Effluent Treatment Plant Manager	Date issued	15/02/2017		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. 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	
E3 - Infrastructure - Surface water	A	
E5 - Infrastructure - Waste	A	
G1 - Infrastructure - Monitoring of emissions and environment	C4	4.2.2
	X	
	C4	4.2.3
G2 - Infrastructure - Records of activity, site diary/journal/events	A	
G4 - Infrastructure - Reporting and notification to Natural Resources Wales	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	2	Total compliance score (see section 5 for scoring scheme)	0.2
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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 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 piped to Aberaeron where it is discharged into the coastal waters of Cardigan Bay.

Purpose of visit/assessment

Condition 3.5.1 of the permit requires the operator to undertake the monitoring in Schedule 3 Table S3.1 (emissions to water [other than sewer] and land). The relevant monitoring parameters, limits, frequencies and methods are specified in Table S3.1.

Condition 3.1.2 requires that the limits given in Schedule 3 shall not be exceeded.

Condition 4.2.3 requires the monitoring results to be submitted to NRW within 28 days of the end of the appropriate reporting period specified in Schedule 4 Table S4.1 of the permit. The operator is required to submit all monitoring results on the forms specified in Schedule 4 Table S4.4.

Condition 4.2.5 requires quarterly waste returns for the installation to be reported to NRW within 1 month of the end of every calendar quarter. The returns should be submitted using the forms made available by NRW for this purpose.

Condition 4.2.2 requires a report or reports on the performance of the permitted activities over the previous year to be submitted to Natural Resources Wales (NRW) by 31 January each year. The report must include as a minimum the information outlined in Conditions 4.2.2(a) – (c). The annual production/treatment data set out in Schedule 4 Table S4.2 and the performance parameters set out in Schedule 4 Table S4.3 must be submitted using the forms specified in Schedule 4 Table S4.4.

Monitoring returns and reports for the following reporting periods have been assessed in this CAR form:

- August 2014 – July 2015 annual returns – emissions to water (other than sewer) and land
- Jan – Dec 2015: 4 x quarterly waste returns
- Annual performance reports for 2015

Improvement Condition 2 (specified monitoring of emissions to water) and annual reporting required for the European Pollutant Release and Transfer Register (E-PRTR) – formerly known as the Pollution Inventory (PI) – are also discussed in this report.

Person(s) present

Sensient and Volac Consortium

Byron Williams

NRW

Doug Cowie

Permit compliance assessment

Felinfach ETP was originally commissioned in 2000. The plant was permitted as a waste installation in July 2014 following changes to the EPR Regulations. 2015 has seen the first full year of operation since the permit was issued and the accrual of a complete set of monitoring data for the treated effluent discharge at emission point W1.

Emissions to water (other than sewer) and land

The operator submitted the annual returns (August 2014 – July 2015) on 19 August 2015 using the appropriate forms. The monitoring period starts from 1 August each year.

There are monthly sampling requirements for a number of substances (copper, lead, cadmium, mercury, phosphate, ammonia and nitrogen) which do not yet have emission limit values (ELVs). These substances are subject to an improvement condition (IC2) requiring a 12-month programme of sampling, which is discussed in more detail later in this report.

We have assessed the operator's annual submission and note that the results recorded at W1 in 2015 are compliant with the permitted limits.

The measurements for effluent flow and pH are recorded as daily on the return. The permit requires these parameters to be monitored continuously. The operator is asked to clarify what type of monitoring is currently in place for these two parameters.

Some of the information required by form Water1 is missing from 2015's return:

1. The sample date and time (for discontinuous monitoring) and the percentage of the process operating time covered by the results (for continuous monitoring) have not been stated in the penultimate column of reporting form Water1 (see note 3 on the reporting form).
2. The uncertainty associated with the reported results has not been stated in the final column of reporting form Water1 (see note 4 on the reporting form). For continuous monitoring, sampling uncertainty may be a value specified by the instrument manufacturer. For discontinuous monitoring (sampling) the results can either be reported as measured or sampling error can be removed before reporting the figures to NRW. We ask the operator to be clear about sampling error/uncertainty when reporting monitoring data to NRW.

Because of these omissions the operator has not complied with Condition 4.2.3(c) of the permit. We have recorded one CCS Category 4 score in response to this permit non-compliance. Although we consider this to be a technical breach with no environmental impact, the operator is reminded that form Water1 must be completed in full to avoid future non-compliance scores.

Compliance summary: One CCS Category 4 score has been recorded for non-compliance with Condition 4.2.3(c) (incomplete monitoring data in respect of sample date and time and sampling uncertainty).

Improvement Condition (IC) 2

IC2 requires the operator to monitor the discharge from emission point W1 for the following parameters:

- Metals - Copper (Cu), Lead (Pb), Cadmium (Cd) and Mercury (Hg)
- Nutrients - Phosphate, Ammonia and Total Nitrogen.

IC2 as it appears in the operator's permit is shown below:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall install and commission a flow weighted autosampler to collect samples of the treated effluent discharged from emission point W1 in order to meet the terms of conditions 3.5.1 and 3.5.3 of this permit.	31 st July 2015
IC2	The operator shall monitor the discharge from emission point W1 for the following parameters: Metals - Copper (Cu), Lead (Pb), Cadmium (Cd) and Mercury (Hg) Nutrients - Phosphate, Ammonia and Total Nitrogen. Each of these parameters shall be sampled and measured once per month for a period of 12 months. The monitoring shall be conducted in line with the test methods stipulated in the Environment Agency Monitoring Technical Guidance Note M18: "Monitoring of Discharges to Water and Sewer". The monitoring results and details of the analytical methods used shall be submitted in writing to Natural Resources Wales. Emission limit values may subsequently be set in table S3.1 for these parameters following Natural Resources Wales review of the monitoring results. The monitoring results may also be used to inform the Best Available Techniques Reference Document (BREF) permit review process.	31 st August 2015

The Consortium submitted a response to IC2 on 19 August 2015, but NRW has assessed this submission to be incomplete. Following on-site discussion it was confirmed that the necessary monitoring data has in fact been recorded (but not submitted) and this was available for inspection. Below is a table summarising the results for each parameter during the period from August 2014 up to and including July 2015.

EPR/BP3135EB: IC2 monitoring results at W1 between August 2014 - July 2015														
Parameter	Max value	Mean value	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15
Copper ug/l	4.15	4.150	<4	<4	<4	<4	<4	<4	<4	<4	4.15	<4	<4	<4
Lead ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury ug/l	0.284	0.284	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.284	<0.02	<0.02	<0.02	<0.02	<0.02
Phosphate mg/l	28.4	3.857	0.954	0.297	1.92	0.332	2.59	1.45	0.44	5.29	3.87	0.317	0.423	28.4
Ammonia mg/l	1.39	0.597	<0.2	0.426	<0.2	1.27	0.408	0.277	0.339	0.431	1.39	0.276	0.361	0.79
Total Nitrogen mg/l	38.8	6.587	2.69	5.77	2.22	4.31	5.35	2.94	2.26	3.46	38.8	2.69	3.01	5.54

Following our inspection, the Consortium submitted the full set of data in the required format to NRW on 9 June 2016. The monitoring and analytical methods used to gather this data have been specified in the operator's submission. NRW therefore considers that the requirements of IC2 have been complied with.

ELVs may subsequently be set in table S3.1 for the parameters listed in the above table following our review of the monitoring results. The monitoring results may also be used to inform the Best Available Techniques Reference Document (BREF) permit review process. NRW is conducting an internal consultation to decide if any new ELVs are appropriate going forward and we will contact the Consortium with our conclusions.

Waste emissions and quarterly waste returns

Waste returns have been submitted to NRW for all four quarters in 2015 using the specified reporting forms.

Felinfach ETP is permitted as a waste treatment installation which accepts effluent (waste) from Sensient and Volac and transfers ETP sludge off-site for recovery. We have reviewed Condition 4.2.5 and concluded that it is appropriate for the operator to submit a quarterly waste return to NRW's Waste Returns Team in the same way as other permitted waste treatment installations and operations. This involves submitting waste returns to NRW's central system so the figures can be processed and included in periodic waste recovery and disposal figures for Wales.

Previously the form 'Quarterly Waste Returns' has been used to report quarterly waste data. NRW has introduced a new standard form for waste activities and installations which needs to be used from this point forwards (Q2 2016). The operator has been provided with a copy of this new form and some guidance on how to complete it correctly.

A conversion from cubic metres into tonnes will be necessary for effluent transfers into the ETP. We may be able to assist with this conversion if required.

Completed waste returns should be emailed within 30 days of the end of each quarter to: waste.returns@naturalresourceswales.gov.uk

The inspecting officer recommends that he is copied in to any emailed returns.

Annual Performance

The operator submitted 2015's annual performance reports to us on 20 January 2016 using the appropriate forms.

For future performance returns, the operator is asked to provide an equivalent figure in tonnes for ETP sludge collected for off-site recovery. This could be noted in the comments box on the form. Alternatively, confirmation of the weight conversion factor used to derive a tonnage figure for the sludge would be sufficient.

The operator has not included an interpretative review of the results of the monitoring and assessment carried out in accordance with the permit. This is not compliant with Condition 4.2.2(a) of the permit. We have recorded one CCS Category 4 score in response to this permit non-compliance. Although we consider this to be a technical breach with no environmental impact, the operator is reminded that an interpretative review of monitoring must be reported annually to avoid future non-compliance scores.

As noted in CAR_NRW0026799, the overall power use at the installation has dropped in 2015. This is the type of information that should be included and discussed in the aforementioned report required under Condition 4.2.2. Monitoring data at W1 could be analysed and graphed to help identify any data trends or patterns. The annual report does not need to be onerous and may consist of 1-2 sides of A4 summarising and discussing the key results, events and patterns observed.

Compliance summary: One CCS4 score has been applied for non-compliance with Condition 4.2.2(a) (lack of an interpretative review of the monitoring and assessment required by the permit).

E-PRTR reporting

The annual reporting requirements for 2015 E-PRTR data were discussed. The Consortium needs to report any relevant releases to water and also waste transfer data for sludge movements from the ETP. In the UK, Defra has provided an online portal for this purpose: <http://prtr.defra.gov.uk/data-entry-system/>

Defra's online reporting system is normally available from early February onwards and the deadline for submitting data is normally 31 March. Guidance on the use of the reporting website can be found on the reporting system login page.

Sensient and Volac should report wastewater transfers when submitting their own E-PRTR

returns to reflect transfer of effluents from both factories to Felinfach ETP.

NRW issues a notice on an annual basis to all operators in Wales who are required to report pollutant releases under the E-PRTR. This notice contains a list of all the individual reportable substances for air, water and wastewater. Substances such as metals, nitrogen and phosphorus would be relevant when reporting releases to water. Operators are encouraged to submit values for releases below the E-PRTR reporting threshold if they have the data.

The next round of E-PRTR notices (for 2016 pollutant data) is due to be circulated in January 2017. It is appreciated that the operator's data set for substances previously monitored for under IC2 may be incomplete as ELVs and monitoring requirements are yet to be agreed. The operator should contact the inspecting officer in the event of any queries with next year's reporting requirements.

Conclusions

The operator has mostly complied with the permit monitoring and reporting requirements in 2015. Two CCS Category 4 scores have been issued for incomplete monitoring data and the lack of an interpretative review of the monitoring and assessment required by the permit.

The operator is asked to clarify what type of monitoring is currently in place for effluent flow and pH. Are there continuous monitors for either parameter?

The operator has complied with the requirements of IC2 and has submitted monitoring data for the required parameters at emission point W1. NRW is conducting an internal consultation to decide if any new ELVs are appropriate going forward and we will contact the Consortium with our conclusions.

New reporting forms have been issued for quarterly waste returns and the operator should use these from 2016 Q2 onwards.

Guidance has been provided regarding reporting of annual E-PRTR data and the use of Defra's online PRTR portal.

[ENDS]

EPR Compliance Assessment Report

**Report ID:
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Site	Felinfach Effluent Treatment Plant	Permit Ref	BP3135EB
Operator/Permit holder	Sensient Flavors Ltd & Volac International 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.

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.

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			
G1	C4	Operator needs to make sure an interpretative review of permit monitoring data is included with the annual submission. Guidance on the format and contents of this review has been provided in this CAR.	28/02/2017
G1	X	Operator needs to clarify what type of monitoring is in place for effluent flow and pH at emission point W1. Are these parameters continuously monitored?	28/02/2017
G1	C4	Operator needs to report annual emissions to water more accurately using form Water1. For 2016/17 results ensure that sample time and date and sampling uncertainty are clearly expressed on the reporting form.	28/07/2017

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 report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen 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.