

## **Sensient Flavors, Felinfach groundwater abstraction**

### **1. Purpose of this document**

This report:

- explains how the application for a transitional full licence (also known as ‘New Authorisation’ licence) has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the use of specific bespoke conditions within the licence.

In determining this application, NRW has exercised its duties and powers under The Water Abstraction (Transitional Provisions) Regulations 2017.

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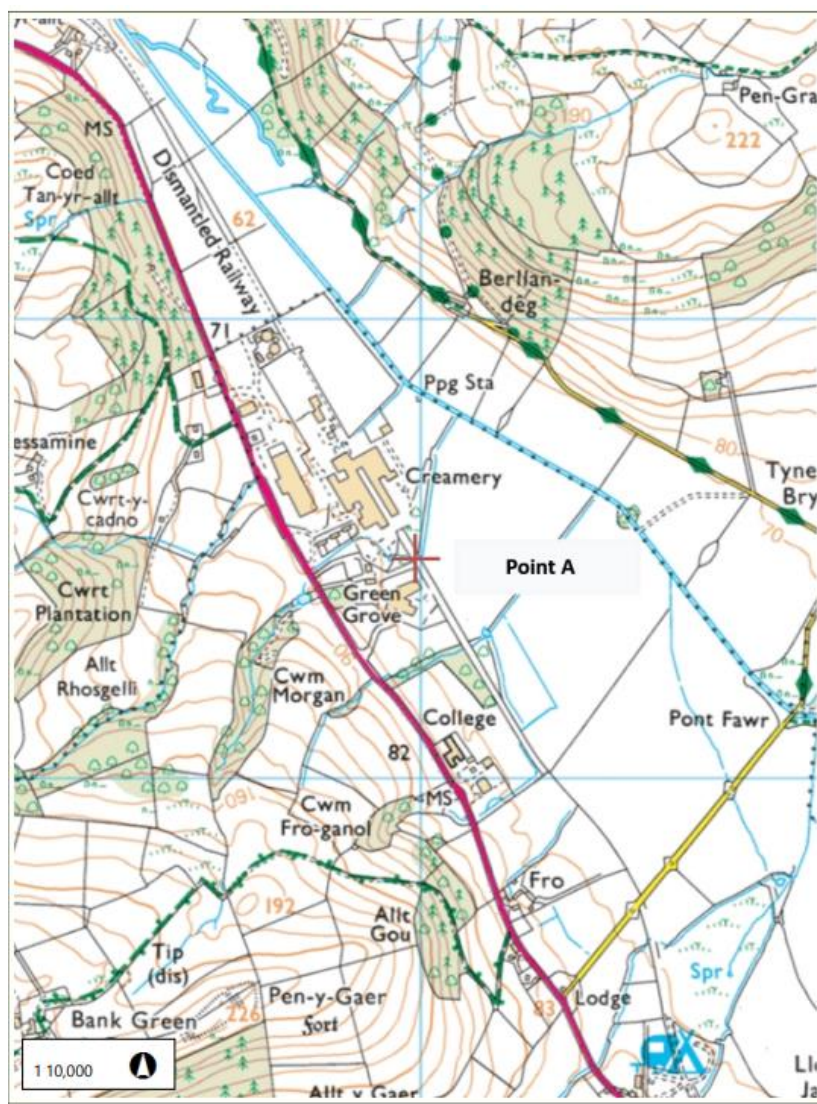
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### 3. Summary of the application

This is an application to licence an existing abstraction from one borehole at Sensient Flavors Ltd, Felinfach, Ceredigion. The water abstracted has been used for the manufacture of food flavourings.

The borehole was originally constructed by the previous owner of the site, Dairycrest, in about 1985, and is believed to have been used nearly constantly since then. There are known to be other boreholes at the same industrial site but not used by Sensient. Some of the water abstracted from this borehole and the others nearby is pooled before use by the applicant and a neighbouring business.

The borehole is 20.3 m deep and has a maximum diameter of 200 mm. The applicant abstracted their maximum volume in 2016. They are reading the meter (a 3" paddle meter) on a daily basis and manually recording the readings.



**We have decided to issue the licence on 23/04/2021**

#### 4. Application and licence determination details

Application details	
Applicant name and address	Sensient Flavors Limited Bilton Road Milton Keynes Bucks MK1 1HP
Application contact details	Mr Tim Pink 01570 472009 Tim.Pink@sensient.com
Application reference number	PAN-006204
New licence number	WA/063/0005/0002
WFD Waterbody number & name	GB41002G203300 Teifi and Coastal Ceredigion
Abstraction Licensing Strategy (ALS)	Teifi and North Ceredigion
Catchment and sub-catchment	Aeron C063002 Aeron 0005
NRW Area	Mid

Determination process details	
Date application received	31/07/2019
Date technical checks undertaken	15/08/2019
Date any final further information received and application validated	<a href="#">Updated application form</a> – 20/08/2019 <a href="#">Email</a> clarifying number and ownership of boreholes in vicinity of the Felinfach estate – 20/08/2021
Reason abstraction was previously exempt	Abstraction is located within the previously exempt groundwater licensing geographical area.
Non- statutory determination date	31/03/2021
Application publication	This advertising decision was agreed by the <a href="#">NA Panel on 14<sup>th</sup> January 2021</a> and recorded in the <a href="#">NA Screening spreadsheet</a> .  It is NRW's opinion that there is no appreciable adverse effect upon the environment caused by the abstraction, therefore the need for advertisement can be dispensed with in accordance with the regulations.
National Park notification	Not relevant as abstraction not located within a National Park.
External Consultation	None undertaken in accordance with current policies and guidance.
Environmental Impact Assessment Regulations (EIA) requirements	The proposal is not relevant under these regulations; therefore no environmental statement is required.
Application score	Low. This score was agreed by the <a href="#">NA Panel on 14<sup>th</sup> January 2021</a> and recorded in the <a href="#">NA Screening spreadsheet</a> .

Abstraction details	Licence details
Location of abstraction	Sensient Flavors, Felinfach, Lampeter.
Source of supply	Underground strata comprising of Mynydd Bach Formation.
Point of abstraction (NGR)	SN 51990 57478
Purpose of abstraction	Industrial process water
Period of abstraction	All year
Quantities and rates:	
cubic metres per day	901
cubic metres per year	221,655
Means of abstraction	A borehole not exceeding 20.2 metres in depth and 200 millimetres in diameter with a pump.
Measurement of abstraction	3" paddle meter
Frequency of measurement	Monthly
Frequency of recording/reporting	Monthly
Annual returns requirement	Yes
Licence end date	31/03/2028 in accordance with Teifi and North Ceredigion ALS
Minimum value condition (Y/N)	No
Issue date	23/04/2021
Effective date	23/04/2021

## 5. Advertisement of application

Not applicable to this application – see section 4 ‘application publication’ above.

## 6. Location of abstraction and discharge

See section 4 above.

## 7. Rights of Access

The map provided includes an outline of the landownership of the applicant and demonstrates that the abstraction point lies within their landownership.

## 8. Historical Evidence of abstraction and volumes

The applicant has supplied copies of dated daily meter readings taken over a year through 2016 and 2017. In addition, copies of dated calibration certificate of the meter used together with copies of dated water analysis report which have taken place during the Transitional Regulations qualifying period have been supplied.

NRW considers the volumes applied for acceptable. The evidence submitted supports the application and demonstrates that the abstraction has occurred during the qualifying period.

## 9. Internal Consultation

The applicant has an environmental permit ([EPR/BL5644IK](#)) covering the processes used to make their food flavourings and the subsequent emissions. As part of the determination process, the Industry and Waste Regulation team were consulted on the application. After initially querying the abstraction volumes in the licence versus 2020's reported potable water usage, the team confirmed, by [email](#), that they had no concerns about the details in the licence.

## 10. Technical assessment of the proposal

The application has been screened according to the New Authorisations (NA) screening process [and the results are recorded within the NA screening spreadsheet](#). Following this the application has been assigned a low risk and complexity score.

### 10.1 Water Framework Directive Regulations 2017

The abstraction is located within the groundwater waterbody Teifi and Coastal Ceredigion GB41002G203300.

In line with the approach set out in [Annex D of OGN 72](#) for green activities, the application has been screened out from further assessment under the WFD Regulations 2017 for the following reasons:

- The status of this waterbody is at Good quantitative status.
- The abstraction is not in connectivity with surface water bodies at high overall status or high status for morphology / hydromorphology.
- The abstraction is from groundwater and it is considered unlikely that there is direct connectivity with surface water flows.
- Surface water flows do not support Good Ecological Status (GES) but screening consultation has confirmed abstraction unlikely to be contributing to flow failure.
- The abstraction has been ongoing for many years with no reported impacts to the WFD status of the waterbody, therefore we are satisfied that there are no anticipated cumulative / in-combination impacts.
- No WFD-related concerns have been raised through the screening consultation, therefore there is no need for "local expert override".
- The abstraction will be licensed based on historic operation so there will be no change in groundwater levels or ecological status of the waterbody as a result of this abstraction.

The 75% of Qn99 HoF recommended in the response to protect lowest (drought) flows is not considered appropriate for the reasons outlined in section 9.2.

Licensing this abstraction is considered a first step to move towards sustainable abstraction and it will continue to be reviewed through future sustainability review processes.

## 10.2 Hydrogeology/Hydrology and low flows protection

The abstraction is located in the Mynydd Bach Formation underground strata and lies approximately 365 m south west of the Afon Aeron.

The abstraction has been occurring lawfully for many years, and in recognition of this the [2017 Government response](#) allows NRW as the regulator to have some discretion about the application HoFs to transitional licences. It is recognised that the HoF condition may not be in line with the recommended HoFs detailed in the Abstraction Licensing Strategy (ALS) for Teifi and North Ceredigion, but considers licensing the abstraction will allow the catchment to move towards sustainable management in the future, through future sustainability review processes.

For abstractions that are located within WFD waterbodies where flows are 'supporting good ecological status', the [2017 Government response](#) suggests the application of a 75% of Qn99 HoF condition. However, in line with our regulatory discretion, NRW consider this HoF is not required for the following reasons:

- The abstraction is from groundwater. The status of this waterbody is at Good quantitative status and the abstraction is not considered to be impacting surface water flows.
- There is insufficient evidence in Wales that a prescribed flow of 75% of Qn99 would provide any environmental benefit / be likely to result in any improvement to WFD status.
- Finally, flow gauges are not generally considered to operate reliably at such low flows, and therefore any condition applying this HoF would not be considered legally enforceable.

## 10.3 Impact on fisheries

Not applicable to this application as a groundwater abstraction and considered unlikely to have any impacts to local surface waters.

## 10.4 Impact on water quality

There are no known local discharges in the area where the abstraction has been occurring; therefore, no impacts upon water quality are expected.

## 10.5 Protected rights and lawful users

Following MyMap screening, no licensed abstractions or deregulated abstractions were identified in the vicinity of the abstraction. The applicant did hold an abstraction licence to abstract surface water, however this was revoked in 2005. No protected rights have been identified as being at risk of derogation as a result of this proposal. No lawful users have been identified as part of the consultation screening process. The abstraction has been occurring lawfully for many years, and in accordance with Government Policy a light touch approach to licensing needs to be applied. NRW are satisfied that the risk to protected rights and lawful users is low risk and the abstraction should be licensed.



## 10.6 Habitats Directive, CROW Act, Conservation, heritage and landscape impacts

The following sites have been identified as a result of screening the application using MyMap. See MyMap screening result for full details.

Designation Type	Name of Site	Potential Impact	Distance & Direction from abstraction
SAC	None identified	N/A	
SPA	None identified	N/A	
RAMSAR	None identified	N/A	
SSSI	None identified	N/A	
AONB	None identified	N/A	
Protected habitat	None identified	N/A	
Source Protection zone	None identified	N/A	
National Park	None identified	N/A	

An Appendix 4 and HRA are not required because there is no conceivable impact pathway to any Natura 2000/Ramsar site/SSSI. The abstraction has been occurring lawfully with no reported impacts.

## 10.7 Serious Damage

Not applicable to this application.

## 10.8 Cumulative Impacts

During the screening process possible in-combination or cumulative effects due to the proximity of the abstraction to other boreholes on the same industrial site were raised. NRW has no information on the nearby boreholes as they are not licensed abstractions; and neither has the owner of these boreholes applied for a transitional abstraction licence. NRW's compliance teams have been informed that it is possible that other abstractions exist within the vicinity which may require licensing. The abstraction has been assessed with reference to all known information. As no information is available regarding other potential abstractions NRW are not able to consider in-combination and cumulative effects. The abstraction has been occurring lawfully for many years, and in accordance with Government Policy a light touch approach to licensing needs to be applied.

## 10.9 Subsidence and Desiccation

Not applicable to this application.

## 10.10 Existing legislation and permissions

Not applicable to this application.

## 11. Means of measurement of abstraction

The abstraction will be measured using the existing 3" paddle meter. The applicant is already measuring the abstraction daily, although NRW policy requires the meter to be read monthly for a daily quantity of between 100-2500 m<sup>3</sup>/day. The requirement to read the meter monthly and provide monthly totals or meter readings will be included in the licence.

## 12 Considerations of SMNR – Compliance with our General Purpose

We are satisfied that this decision is compatible with our general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources.

## 13 Criticality, PALS purposes and abstraction annual charges

### Criticality Class

Less Critical

### PALS Purposes

Primary Code	Secondary Code	Use/Loss Level code
I: Industrial, Commercial, Public Services	FAD: Food and Drink	350: Process Water - Medium

(The secondary code of FAD was chosen, rather than CHEM, as the installation permit [EPR/BL5644IK](#), clarifies that the flavours are made from the processing of vegetable matter.)

### Abstraction annual charges

The licence will be charged by multiplying together the following factors:

STANDARD CHARGE:						
Volume (ML)	Source	Season	Loss Purpose:	Special Charges Agreements	SUC	Charge
221.655	1	1	0.6	N/A	15.54	£2,066.71

PLUS

COMPENSATION CHARGE:						
Volume (ML)	EIUC Source	Season	Loss Purpose:	Special Charges	EIUC	Charge



221.655	1	1	0.6	N/A	0	£0

<b>Total Charge for 2020/2021</b>	£2,066.71
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