

Caulmert Limited

Engineering, Environmental & Planning
Consultancy Services

Bryn Posteg Landfill Site

Sundorne Products (Llanidloes) Limited

Environmental Permit Variation Application

Supporting Document

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BRYN POSTEG LANDFILL SITE - ENVIRONMENTAL PERMIT VARIATION APPLICATION

SUPPORTING DOCUMENT

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1.0 INTRODUCTION

1.1 Application Context

1.1.1 Bryn Posteg Landfill Site (hereafter referred to as 'the Site') in Llanidloes, Powys is operated by Sundorne Products (Llanidloes) Limited, trading as Potters Waste Management ('the Operator') under Environmental Permit ref. EPR/BU77661C/V009.

1.1.2 Caulmert Limited have been appointed by the Operator to prepare an environmental permit variation application to vary the existing bespoke permit for the following:

- To provide further information on a proposed new surface water treatment process at the Site, including process description;
- To formalise an increase in the Chloride compliance limit for groundwater monitoring point G1/W1, from 69mg/l to 500mg/l (as agreed with Natural Resources Wales);
- To add waste code 20 03 01 to the list of waste codes in Table S2.4 of the Permit for physico-chemical treatment (Section 5.4 Part A (1)(a)(ii));
- To add two waste codes 19 08 05 and 19 08 12 to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A(1)(a)(i)) - specifically restricting the use of these wastes to reseedling of leachate in the existing leachate treatment plant on-site;
- To add waste code 19 05 99 to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A(1)(a)(i)) - specifically for composting liquor waste generated from the existing composting activity on-site, to be sent into the leachate treatment plant on-site; and,
- To add two waste codes 02 01 03 and 02 01 06 to Table S1.1 of the Permit for the incineration of straw wastes in the existing biomass plant on-site (Section 5.1 Part B (a)(v));

1.1.3 Further details on the above changes are provided in Sections 3.1 and 3.5 of this document.

1.2 Document Structure

1.2.1 This Supporting Document has been prepared to provide additional information to support the information provided in forms Part A, C2, C3 and F1 of the environmental permit application for varying a bespoke permit. To aid cross-referencing between this document and the application forms, the answers to questions are presented in the same order as in the application forms and the headings in this document include the specific question number to which the information relates.

2.0 PART A FORM – ABOUT YOU

2.1 Part A – Qu. 6a: Your main (registered office) address

- 2.1.1 The Site is operated by Sundorne Products (Llanidloes) Limited, which trades as Potters Waste Management and therefore the main registered address on record at Companies House is Potter House, Henfaes Lane, Welshpool, Powys, Wales, SY21 7BE.

3.0 PART C2 FORM – GENERAL - VARYING A BESPOKE PERMIT

About the Permit

3.1 Part C2 – Qu. 1a: Pre-application Discussions

- 3.1.1 Ongoing discussions have been taking place with Natural Resources Wales (specifically Lara Cubley, a Senior NRW Officer) regarding the treatment of surface water at the Site and they have advised that a normal variation application needs to be submitted to cover the treatment of surface water, as detailed in Improvement Condition 11 of the Site's Environmental Permit.
- 3.1.2 In response to Action 8 in the NRW Compliance Assessment Report (CAR) ref. NRW0037617 (attached), the Operator also wishes to formalise an agreed increase in the Chloride compliance limit for groundwater monitoring point G1/W1 in Table S3.5 of the Permit. NRW has agreed with the Operator that the Chloride compliance limit can be raised from its current limit of 69mg/l at G1/W1 to a new limit of 500mg/l, as part of a permit variation.
- 3.1.3 It has also been discussed and agreed between the Operator and NRW to add three new waste codes to the existing landfill permit as follows:
- Add waste code 20 03 01 (mixed municipal waste) to Table S2.4 of the Permit for physico-chemical treatment (Section 5.4 Part A (1)(a)(ii)); and,
 - Add waste codes 19 08 05 (Sludge from treating waste water) and 19 08 12 (Sludge from biologically treating industrial waste water not containing hazardous substances) to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A (1)(a)(i)) - specifically restricting the use of these wastes to reseedling of leachate in the existing leachate treatment plant on-site.
- 3.1.4 The Operator also proposes to add the following three new waste codes to the existing landfill permit as follows:
- Add waste code 19 05 99 (wastes from aerobic treatment of solid wastes – wastes not otherwise specified) to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A(1)(a)(i)) - specifically for composting liquor waste from the existing composting activity on-site, into the leachate treatment plant on-site;
 - Add two waste codes 02 01 03 (plant-tissue waste) and 02 01 06 (including spoiled straw) to Table S1.1 of the Permit for the incineration of straw wastes in the existing biomass plant on-site (Section 5.1 Part B (a)(v)).

3.2 Part C2 – Qu. 1b: Permit Number

- 3.2.1 The Environmental Permit to which the application relates is ref. EPR/BU7766IC/V009.

About your Proposed Changes

3.3 Part C2 – Qu. 2a: Type of Variation

- 3.3.1 This application has been prepared on the basis of a normal variation and the appropriate fee has been submitted by BACs payment to NRW.

3.4 Part C2 – Qu. 2b: Provide a Non-Technical Summary of your application

- 3.4.1 A non-technical summary has been provided as part of this application, attached as document referenced 4299-CAU-XX-XX-RP-V-0301 (Appendix 1).

3.5 Part C2 – Qu. 2b: Details of Proposed Changes

- 3.5.1 Question 2b of application form Part C2 requests that information should be given about changes to existing activities. The permit currently relates to the installation which is Bryn Posteg Landfill along with its related activities. The permit controls the landfill as a 'stationary technical unit' and 'directly associated activities' serving the landfill.
- 3.5.2 In response to Improvement Condition 11 of the Environmental Permit, Natural Resources Wales (NRW) have requested that the Operator submit a normal permit variation to cover the treatment aspects of the surface water at the site and its ultimate discharge off-site, including details on infrastructure and specifics on the treatment process. The Process Description & Operating Techniques document ref. 4299-CAU-XX-XX-RP-V-0303 is attached as Appendix 2.
- 3.5.3 The surface water management system at Bryn Posteg Landfill Site is currently divided into two different sub-catchment areas, the eastern and western catchments, a consequence of its geography and engineered landform. Surface water in the eastern catchment is currently directed to and discharged at surface water point P1 (into the Nant y Bradnant stream) on the eastern boundary. Surface water from the western catchment is collected and discharged at surface water point P2 (into the Afon Dulas stream) on the western boundary.
- 3.5.4 It is proposed to amend this activity to upgrade the surface water treatment process to chemically treat surface water captured in Lagoon 3, by using additives to encourage settlement of suspended solids, in order to bring suspended solids levels in the surface water to within the compliance limits of the permit, prior to being discharged from P1.
- 3.5.5 As part of this variation application, a Surface Water Pollution Risk Assessment and associated modelling for the site has been undertaken and is attached in Appendix 3 as report ref. 3400-CAU-XX-XX-RP-O-0302.
- 3.5.6 In addition to the above, this permit variation is to also include an amendment to Table S3.5 of the permit to increase the compliance limit of Chloride from 69 mg/l to 500 mg/l for groundwater monitoring point G1/W1 only. This is as a result of investigations conducted by the Operator (see Potter's report ref. 'Bryn Posteg Chloride Report 2020' in Appendix 6 and Caulmert report ref. 3428-CAU-XX-XX-CO-V-9101 in Appendix 7) and subsequently agreed by Natural Resources Wales (NRW) in CAR report ref. NRW0037617 (in Appendix 8). This has been

accepted in principle by NRW, as stated in the CAR form, and now needs formalising and the permit amending as part of this permit variation.

3.5.7 Furthermore, the Operator wishes to add six new waste codes to two tables within the existing landfill permit (EPR/BU7766IC) as follows:

- Waste code 20 03 01 (mixed municipal waste) to be added to Table S2.4 of the Permit for physico-chemical treatment (Section 5.4 Part A (1)(a)(ii)) – this waste is already accepted onto Site under the Environmental Permit ref. WML 47120 for the Material Recycling Facility (MRF) on Site and therefore a risk assessment is not considered necessary; and,
- Waste codes 19 08 05 (Sludge from treating waste water) and 19 08 12 (Sludge from biologically treating industrial waste water not containing hazardous substances) to be added to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A (1)(a)(i)) - specifically restricting the use of these wastes to reseedling of leachate in the existing leachate treatment plant on Site only.
- Waste code 19 05 99 (wastes from aerobic treatment of solid wastes – wastes not otherwise specified) to be added to Table S2.3 of the Permit for leachate storage and treatment (Section 5.4 Part A(1)(a)(i)) - specifically for composting liquor waste generated from the existing composting activity on-site, to be sent into the leachate treatment plant on-site;
- Waste codes 02 01 03 (plant-tissue waste) and 02 01 06 (including spoiled straw) to Table S1.1 of the Permit for the incineration of straw wastes in the existing biomass plant on-site (Section 5.1 Part B (a)(v)).

Your Ability as an Operator

3.6 Part C2 – Qu. 3a: Relevant Offences

3.6.1 The application form specifies that details of any relevant offences only need to be provided when applying to add waste installations or waste operations to a permit that has not previously had them. No waste installations or waste operations are being added as part of the variation application.

3.7 Part C2 – Qu. 3b: Technical Ability

3.7.1 The Operator already provides technically competent managers with relevant qualifications under the CIWM/WAMITAB scheme for technical competence to manage the landfill operations on site. Their requirement is not affected by this application.

3.8 Part C2 – Qu. 3b: Finances

3.8.1 This question is not relevant to this application as no waste installations or waste operations are being added as part of the permit variation.

3.9 Part C2 – Qu. 3d: Management System

3.9.1 Bryn Posteg Landfill Site and the associated activities on Site are managed by the Operator in accordance with their own management system. A summary of the Environmental Management System is provided below.

3.9.2 The Operator will implement a number of site-specific procedures and documents to control the operations at the Site, as follows:

Identifying and minimising risks of pollution

3.9.3 Environmental risk assessments have been carried out for the purpose of this application which assesses the environmental risks from all the relevant activities affected by this application.

3.9.4 The risk assessment was also used as a tool for identifying the risk management measures that are important in minimising the risks of pollution. The identified risk management measures are considered to be the minimum technical standards which the Site should operate to.

Operations and maintenance

3.9.5 With regards to the proposed activities, the control measures identified within the 'Amenity and Accident Risk Assessment' and 'Surface Water Pollution Risk Assessment' will form part of the technical standards for the Site.

3.9.6 Maintenance is managed through maintenance schedules for all equipment on Site.

Incidents and non-conformances

3.9.7 Any incidents or non-conformances will be recorded in the daily site records. A daily site inspection is carried out by a technically competent manager. Staff are also encouraged to report any issues immediately to the technically competent manager.

Complaints

3.9.8 The company has a Complaints Procedure, which forms part of the management system for the Site.

Staff training and competence

3.9.9 Training is provided so that all workers have a satisfactory understanding of their duties in relation to environmental and health & safety issues on Site.

3.9.10 For machine and equipment operators, the company ensures that training and certification and continued competence in relation to that particular machine or equipment is undertaken by all machine operators prior to their use of that machine.

Odour, noise and emissions management

- 3.9.11 The management system includes measures that will be taken to manage odour, noise and other emissions.
- 3.9.12 In addition, the technical standards proposed for the management of odour, noise and other emissions, which were identified through the Amenity and Accident Risk Assessment for this application, will form part of the management system for the Site.
- 3.9.13 The management measures are supported by the daily checks which are carried out by the technically competent managers who will consider the most appropriate action to take.

Documentation of legislative and other requirements

- 3.9.14 Copies of planning permissions, environmental permits and other relevant permissions are kept either as paper records or electronically in the Site Office.
- 3.9.15 The technically competent manager will keep up to date with other legal requirements and changes to relevant environmental legislation through trade magazines and the Natural Resources Wales and Environment Agency websites.

Management reviews

- 3.9.16 Management will periodically review the environmental performance of the company through their review of environmental audit reports and the daily site records.
- 3.9.17 The environmental policy statement is also reviewed periodically to ensure it reflects the company's operations and its environmental objectives.

Application Supporting Information

3.10 Part C2 – Qu. 5a: Provide a Plan for the Site

- 3.10.1 This question requires that where an operator is seeking to add land as part of the variation application, a revised site plan that identifies all of the land on which the activities will take place must be submitted. There is no additional land to be added as part of this permit variation.

3.11 Part C2 – Qu. 5b & 5c: Extra Land and Site Report

- 3.11.1 There will be no additional land or installations added as part of this permit variation and therefore it is not necessary to submit a site report or a baseline report.

Environmental Risk Assessment

3.12 Part C2 – Qu. 6: Provide an Environmental Risk Assessment

- 3.12.1 This question requires an environmental risk assessment of the risks of the proposed activities as part of the application.
- 3.12.2 A Surface Water Pollution Risk Assessment has been conducted and the report is attached in Appendix 3 as document ref. 3400-CAU-XX-XX-RP-O-0302.
- 3.12.3 An Amenity and Accidents Risk Assessment has been completed and is attached in Appendix 4 as report ref. ref. 4299-CAU-XX-XX-RP-V-0302.

4.0 PART C3 FORM – VARIATION TO A BESPOKE INSTALLATION PERMIT

4.1 Part C3 - Relevant Questions to the Application

- 4.1.1 The answers to the questions relevant to this variation application in the Part C3 form are presented within the Process Description & Operating Techniques report ref. 4299-CAU-XX-XX-RP-V-0303 (attached as Appendix 2).

5.0 PART F1 FORM – OPRA, CHARGES AND DECLARATIONS

Working out charges

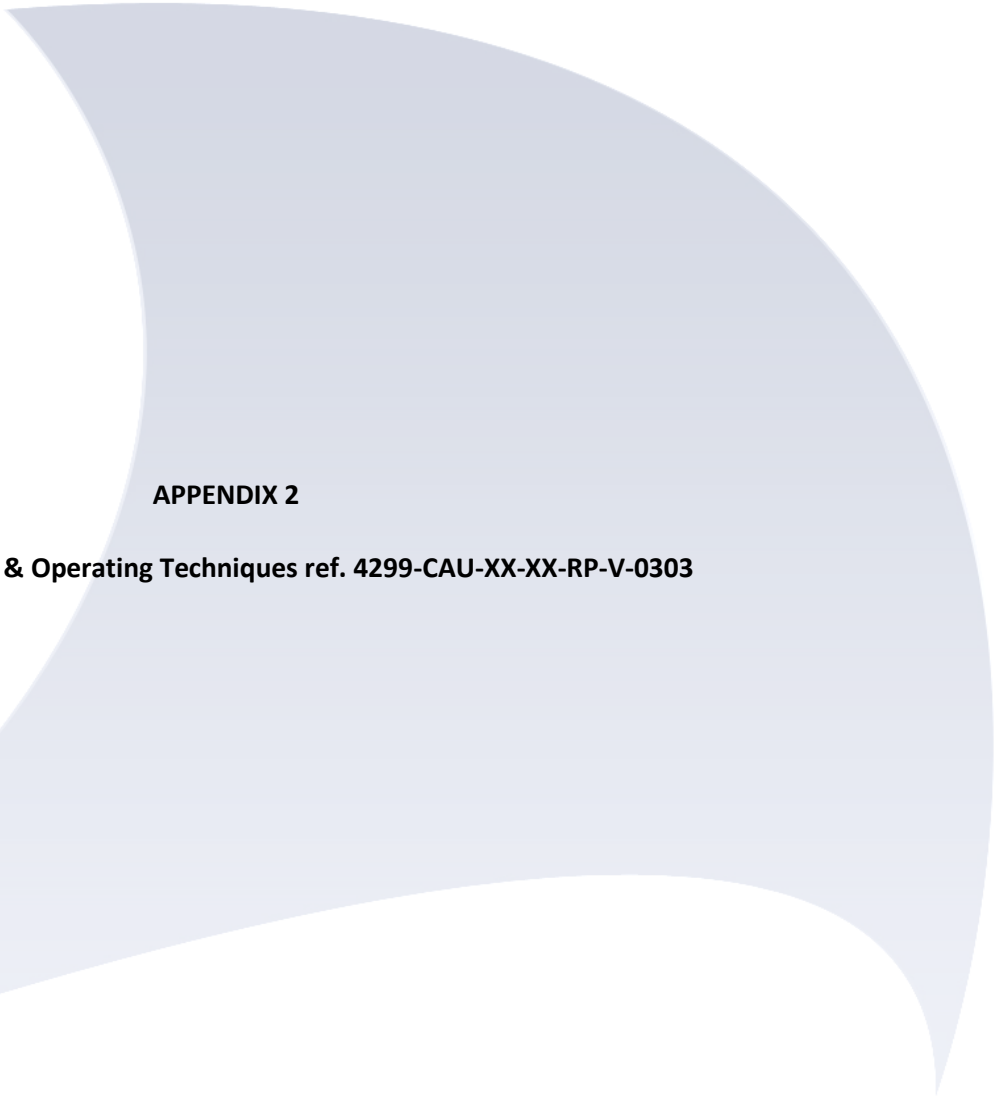
5.1 Part F1 – Qu.1 Table 1 & Table 2: Working out charges

- 5.1.1 The current OPRA profile spreadsheet for the site shows the OPRA charging score is 177, resulting in a fee, according to Table 1, of £10,089.00 for a normal variation.
- 5.1.2 The fee of £10,089.00 has been paid to Natural Resources Wales via credit card.
- 5.1.3 A copy of the current OPRA profile spreadsheet for the Site is attached as Appendix 5.



APPENDIX 1

Non-Technical Summary ref. 4922-CAU-XX-XX-RP-V-0301



APPENDIX 2

Process Description & Operating Techniques ref. 4299-CAU-XX-XX-RP-V-0303




APPENDIX 3

Surface Water Risk Assessment document ref. 3400-CAU-XX-XX-RP-O-0302



APPENDIX 4

Amenity & Accidents Risk Assessment document ref. 4299-CAU-XX-XX-RP-V-0302



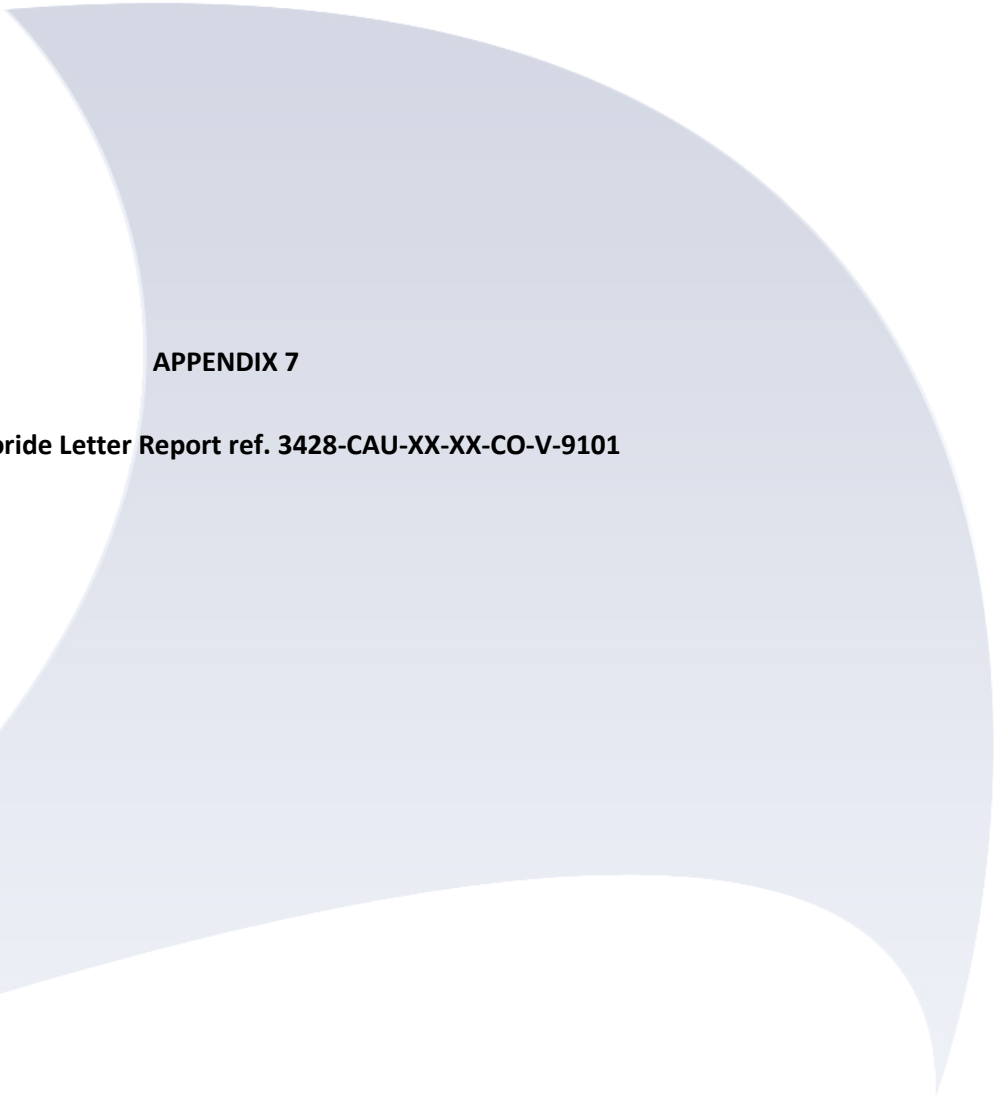
APPENDIX 5

Current OPRA Profile Spreadsheet



APPENDIX 6

Potter's 'Bryn Posteg Chloride Report 2020'



APPENDIX 7

Caulmert Chloride Letter Report ref. 3428-CAU-XX-XX-CO-V-9101



APPENDIX 8

Natural Resources Wales (NRW) CAR report ref. NRW0037617



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