

Straid Farms Ltd

Straid Landfill Lendalfoot Girvan

PPC/A/1000116

Application for Variation

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1 NON-TECHNICAL SUMMARY OF DETERMINATION

Will the draft determination be subject to public consultation? Yes

Straid Landfill site near Girvan, Ayrshire, is operated by Straid Farms Limited under an existing PPC permit (PPC/A/1000116). The permit was granted in October 2006 and has been varied once. The site is authorised to accept a range of non-hazardous and stabilised non-reactive hazardous wastes for disposal. The site has a number of cells (or phases) namely cells 1, 2, 3, 4, 5a and 5b. Capping and restoration of Phases 1 to 4 has been completed, as has the capping of Phase 5a. Restoration of phase 5a is underway. Waste disposal operations in the final cell, Cell 5b, are ongoing.

The permitted activity is prescribed in Schedule 1 of the Pollution Prevention and Control (Scotland) Regulations 2012 as landfilling non-hazardous waste in a facility receiving more than 10 tonnes per day or with a total capacity exceeding 25,000 tonnes.

This application is to increase the PPC Permitted Installation boundary to include the full extent of landfill cells to the north of the site as it had been noted that some of operational areas of landfill cells 2, 4, 5a and 5b did not correspond with the permitted boundary.

There is no change to the amount or the type of waste to be landfilled, and no new cells are being developed as part of this application.

The proposed variation will not have an impact on current emissions from the site and no new emissions will be generated.

As the application formally extends the extent of the installation, the Operator has included details of specific financial provision methods to comply with updated SEPA guidance.

As part of the determination process, SEPA has reviewed environmental monitoring data supplied by the operator and, with agreement, has included changes to the monitoring requirements. These changes are detailed in the draft variation schedule and also include the requirement to install new gas monitoring boreholes.

After considering the application SEPA is satisfied that the change to the installation boundary will not have an adverse impact, and that the existing and proposed permit conditions will adequately control and minimise risks to the environment and sensitive receptors.

Glossary of terms

"stable, non-reactive hazardous waste" means hazardous waste, the leaching behaviour of which will not change adversely in the long-term, under landfill design conditions or foreseeable accidents-

- (a) in the waste alone (for example, by biodegradation);*
- (b) under the impact of long-term ambient conditions (for example, water, air, temperature, mechanical constraints); or*
- (c) by the impact of other wastes (including waste products such as leachate and gas).*

2 EXTERNAL CONSULTATION AND SEPA'S RESPONSE

Is Public Consultation Required - Yes

Advertisements Check:	Date	Compliance with advertising requirements
Edinburgh Gazette	15/04/20	Yes
Carrick Herald (also Ayr Advertiser and Troon Times)	28/04/20	Yes
Officer checking advert: CS		
No. of responses received:	None	
Is PPC Statutory Consultation Required – Yes		
Food Standards Scotland	Issued 18/03/20, no response	
Ayrshire & Arran Health Board	Issued 18/03/20, no response	
South Ayrshire Council	Issued 18/03/20, no response	
Scottish Water	N/A	
Health and Safety Executive	No response, understood HSE were consulted 18/03/20 but no record following cyberattack	
Scottish Natural Heritage (PPC Regs consultation)	Issued 22/05/20; response received	
Discretionary Consultation - N/A		
Enhanced SEPA public consultation - No		
'Off-site' Consultation - No		
Transboundary Consultation - No		
Public Participation Consultation - Yes		
<p>STATEMENT ON THE PUBLIC PARTICIPATION PROCESS <i>The Pollution Prevention and Control (Scotland) Regulations 2012 (schedule 4, para 22) requires that SEPA's draft determination of this application be placed on SEPA's website and public register and be subject to 28 days' public consultation. The dates between which this consultation took place, the number of representations received and SEPA's response to these are outlined below</i></p>		
Date SEPA notified applicant of draft determination		
Date draft determination placed on SEPA's Website	17 June 2022	
Details of any other 'appropriate means' used to advertise the draft	n/a	
Date public consultation on draft permit opened	17 June 2022	
Date public consultation on draft permit consultation closed		
Number of representations received to the consultation		
Date final determination placed on the SEPA's Website		
Summary of responses and how they were taken into account during the determination:		
Summary of responses withheld from the public register on request and how they were taken into account during the determination:		

Officer:

3 ADMINISTRATIVE DETERMINATIONS

Determination of the Schedule 1 activity

The Schedule 1 activity will not change from the current permitted activity:

Landfilling non-hazardous waste in a facility receiving more than 10 tonnes per day or with a total capacity exceeding 25,000 tonnes, as described in Part A of Section 5.2 of Schedule 1 of the Pollution Prevention and Control (Scotland) Regulations 2012.

Determination of the stationary technical unit to be permitted:

n/a

Determination of directly associated activities:

There will be no change to any directly associated activities, these will remain as:

- waste receipt and handling;
- leachate collection and treatment; and
- landfill gas collection and flaring / utilisation

Determination of 'site boundary'

The purpose of the variation is to extend the site boundary to cover the full extent of the landfill cell areas. A new site plan will be included in the permit to amend the installation boundary.

Officer: CS

4 INTRODUCTION AND BACKGROUND

4.1 Historical Background to the activity and variation

Straid Landfill has operated under PPC permit for the landfilling of non-hazardous wastes since 2006. The permit authorises associated activities such as waste receipt and handling, leachate collection and treatment, and the collection, flaring and utilisation of landfill gas. The site deposits wastes into cells which have an engineered liner and containment system.

Waste types allowed to be accepted at the site include municipal waste, non-hazardous waste, asbestos waste and stable non-reactive hazardous waste which fulfils certain waste acceptance criteria. The permit stipulates that a maximum of 1,600,000 tonnes of waste may be deposited in total, and the maximum quantity of waste deposited at the site annually shall not exceed 110,000 tonnes.

This variation is to amend the site boundary to include the full extent of phases 2, 4 and 5; no changes to waste types, quantities or landfill activities are proposed. Some of the land to be added to the permit will include areas where waste has been landfilled, and this is deemed to increase the financial liability of the Operator. The operator has submitted details of ring-fenced funds to ensure compliance with SEPA guidance "*Estimate of Amount of Financial Provision for Landfill Sites (SEPA Guidance WST-G-032 version 2 issued 16/06/2016)*". As a result, a bespoke

condition has been drafted to require that these ring-fenced funds will be maintained for as long as necessary.

In addition to the main variation applied for, SEPA is proposing to include the following variations to the permit:

- an updated NGR for the leachate sampling point
- changes to groundwater monitoring requirements to reflect a review of the environmental data submitted to date, and revision of groundwater trigger levels
- the requirement to install two new perimeter boreholes for gas monitoring purposes

4.2 Description of activity

Straid Landfill accepts non-hazardous waste for disposal. The current permit places conditions on cell design, waste acceptance and handling, capping and environmental monitoring to ensure that impacts are minimised.

4.3 Outline details of the Variation applied for

This variation is to amend the site boundary to include the full extent of landfill phases 2, 4, 5(a) and (b). No changes to waste types or quantities are proposed.

4.4 Guidance/directions issued to SEPA by the Scottish Ministers under Reg.23 or 24.

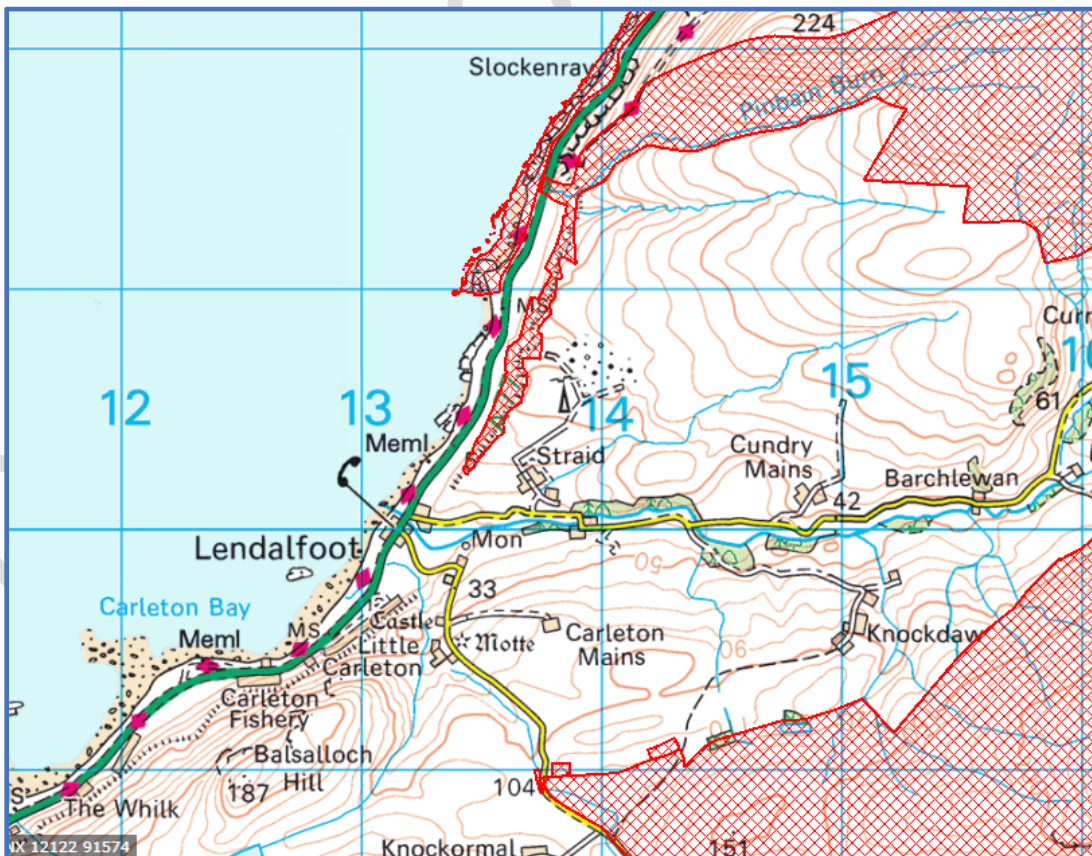
N/A

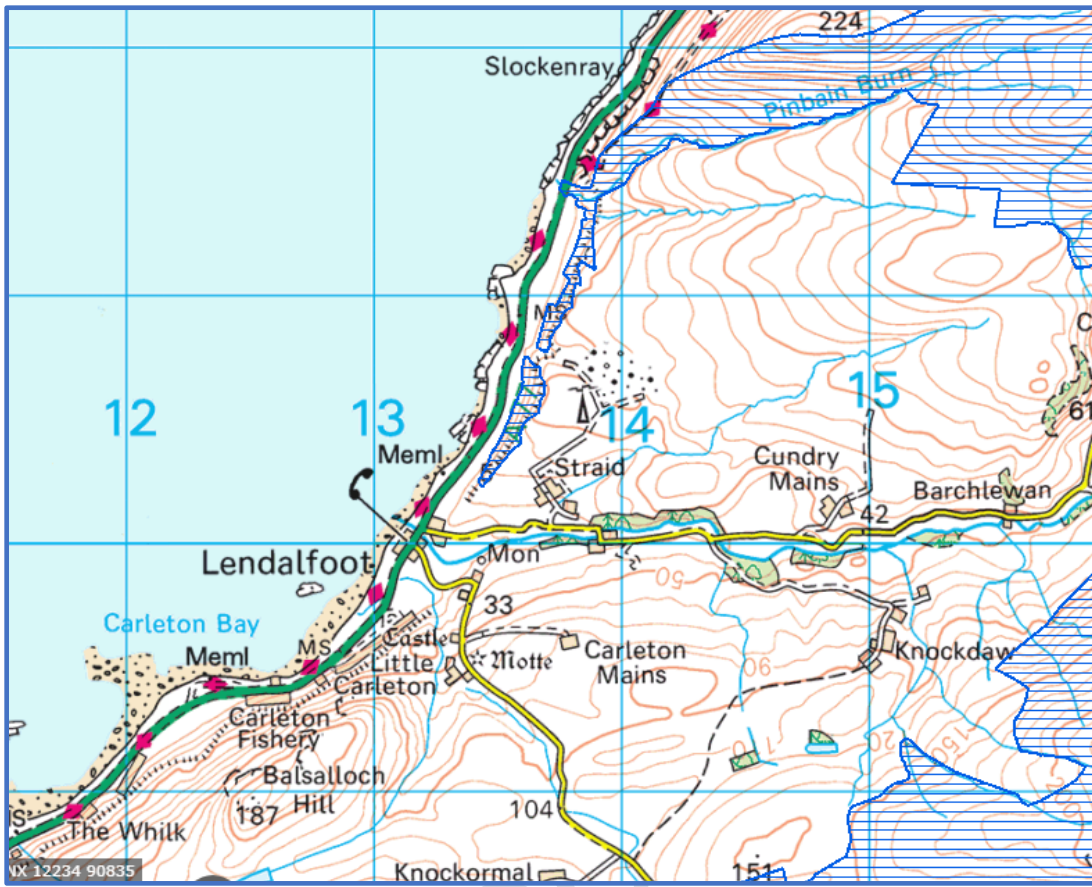
4.5 Identification of important and sensitive receptors

Designated Sites

The Lendalfoot Hills Complex Special Area of Conservation (SAC), a series of upland habitats, and the Girvan to Ballantrae Coast Section geological SSSI are within 1km of Straid Landfill, as shown on the map extracts below.

SSSI



SPA

It is considered that there will be minimal or no impact on these designated sites as a result of this variation. The variation is not extending the waste disposal operations at the site, creating additional waste capacity, or changing any emissions. The landfill cells being fully included in the new installation boundary have already been constructed and will be subject to the current permit controls such as cell design and monitoring.

Other Receptors

There are no dwelling houses present within 250m of the landfill, although there is a farmhouse along the site access. The nearest settlement is Lendalfoot Bridge, approximately 900 metres to the south west of the site.

There is a caravan park shown approximately 350 metres from the existing southern site boundary. The proposed variation does not affect this section of the installation boundary.

5 KEY ENVIRONMENTAL ISSUES

5.1 Summary of significant environmental impacts

As with all landfills accepting non-hazardous biodegradable waste there is the potential for nuisance impacts from odour, dust, litter and gas emissions. There is also the potential for emissions to the water and air environment from leachate and gas emissions.

The existing permit conditions controlling the engineering and nuisance aspects remain unchanged and should adequately control environmental impacts from landfill. The variation will not alter the requirement for the Operator to continue environmental monitoring at the site.

5.2 Implications of the Variation on Point Source Emissions to Air

This will not change - the variation does not include point source emissions to air.

5.3 Implications of the Variation on Fugitive Emissions to Air

There is the potential for dust emissions from site operations such as plant and vehicle movements and capping activities. There are already conditions in the current permit to require the Operator to control and minimise dust emissions.

5.4 Implications of the Variation on Point Source Emissions to Surface Water and Sewer

The variation does not change or add any emissions to surface water or sewer.

Leachate from the cells within the new area will be collected and transported to the leachate treatment lagoons as per the existing arrangements and discharged to the water environment under the respective permit conditions and controls.

5.5 Implications of the Variation on Point Source Emissions to Groundwater

The risk to groundwater is considered to be moderate. The landfill cells have been designed and constructed to satisfy the permit and CQA requirements.

Two bespoke permit conditions relate directly to groundwater levels beneath the engineered phase and to the area proposed to be added. These conditions specify that-

- a minimum 1.5 m thick layer of unsaturated in-situ glacial till should be present between the engineered mineral layer and groundwater; and
- no work for phases 4 or 5 should be undertaken until site investigation works have been undertaken to confirm groundwater levels underlying these phases

During the determination of this application, SEPA requested updated groundwater level data and contours. The data confirms that whilst the design of phase 4, the largest area, does fully satisfy the permit condition requiring 1.5 metre unsaturated zone, some areas of phases 5a and 5b do not.

The overall risks to groundwater from leachate migration have been assessed and are still considered to be acceptable.

This is because no portion of the landfill phases appears to be in contact with ground water and a large area of phases 4, 5a & 5b has an unsaturated thickness in excess of 1.5m. The hydrogeological risk assessment probability modelling that has been used to assess the risk also accounts for some areas having a low unsaturated thickness.

5.6 Implications of the Variation on Fugitive Emissions to Water

No change, there are no fugitive emissions to water expected.

5.7 Implications of the Variation on Odour

No change anticipated. The existing permit controls on odour will apply.

5.8 Implications of the Variation on Management

The proposed variation does not require any change to management requirements or procedures at the site. Technically competent management is still required and the Operator's existing management plan is still relevant.

5.9 Implications of the Variation on Raw Materials

The variation will have negligible impact on raw materials. All construction and capping works will have been detailed as part of the permit requirements, the only additional works and materials required will be the drilling and installation for the new monitoring boreholes.

5.10 Implications of the Variation on Raw Materials Selection

No change - the raw materials for the construction and capping of the cells will be as per current permit requirements.

5.11 Implications of the Variation on Waste Minimisation Requirements

No change as a result of the variation.

5.12 Implications of the Variation on Water Use

Water use will not change as result of this variation; existing permit requirements and conditions will apply in relation to the use of dust suppression equipment.

5.13 Implications of the Variation on Waste Handling

The variation will not change the current permit requirements on the waste handling and disposal.

5.14 Implications of the Variation on Waste Recovery or Disposal

No implications as the site is an existing waste disposal facility.

5.15 Implications of the Variation on Energy

There will be no change to the existing requirements for power and fuel for site offices, plant and machinery.

5.16 Implications of the Variation on Accidents and their Consequences

No change as a result of this variation.

5.17 Implications of the Variation on Noise

The proposed variation will not result in any changes to the potential for noise generation from the site activities, the main noise sources will remain as vehicle and machinery movements and site equipment. There is as standard condition in the permit and the operator has a Noise Management Plan.

As noted in section 4 of this document, there are no nearby sensitive receptors.

5.18 Implications of the Variation for Monitoring

The current permit requires the Operator to monitor leachate, landfill gas and groundwater, and the site currently has a Monitoring Plan. This will continue, subject to the following proposals:

Infrastructure

This variation extends the site boundary, and a condition in the proposed variation will require the operator to submit proposals to install new landfill gas monitoring boreholes to the north of the new installation boundary near phases 4 and 5. Regular monitoring at these locations will enable early intervention should landfill gas migration occur.

Groundwater

The current groundwater monitoring requirements have been reviewed. To ensure the groundwater monitoring regime is appropriate for the Straid landfill site, changes are being proposed to the parameters monitored and some of the monitoring frequencies. There are sufficient groundwater monitoring wells to monitor the site.

Trigger levels have been reviewed for four parameters. These substances are not elevated in background groundwater and there is no off-site source of contamination. The trigger level for mercury has been increased from 0.01 µg/l to 0.1 µg/l, this value is adequate in relation to risks to the groundwater environment and will resolve the occasional limit of detection issues for mercury.

Surface Water

There are no changes proposed to the surface water monitoring schedule.

5.19 Implications of the Variation for Closure

No change. The operator will have to undertake the required post closure monitoring and aftercare until the permit is surrendered

5.20 Implications of the Variation for Site Condition Report

No change. As above, the operator will have to undertake the required post closure monitoring and aftercare until the permit is surrendered.

5.21 Consideration of BAT

Not applicable to landfill activities.

6 OTHER LEGISLATION CONSIDERED
<i>Nature Conservation (Scotland) Act 2004 & Conservation (Natural Habitats &c.) Regs 1994</i>
<p>Is there any possibility that the proposal will have any impact on site designated under the above legislation?</p> <p>The landfill cells are already in operation, so the variation to formally reflect the installation boundary is unlikely to impact any designated site. However, as there are designated sites within 1 km of the installation boundary, SNH were consulted.</p>
<p>Screening distance(s) used – 1km</p>
<p>Are there any SSSIs within the area screened? yes – see section 4.5 for site plan Has SNH been consulted under section 15(5) of the 2004 Act? yes Date consultation letter sent - 22/05/20 Summary of response received including date – <i>“Thank you for your email of 22 May 2020 consulting us on the application to SEPA to vary the conditions of the PPC Permit by Straid Farms at Lendalfoot.</i> <i>From the information provided, it is unclear if any material changes are proposed which would affect the Lendalfoot Hills Complex SAC (or Pinbain Burn to Cairn Hill SSSI, which is also within the boundary of the landfill site). We therefore advise that there is currently insufficient information to determine whether the proposal is likely to have any significant impacts on the features of the designated sites.</i> <i>As stated in your email, should subsequent assessment indicate a likely significant effect on the SAC or likely cause damage to the natural features of any SSSI, SNH should be consulted as required.”</i> Actions taken including justification – No action taken. The proposed variation does not involve a change to the waste types, tonnages and operations already permitted, so it is considered unlikely to have any impact on the designated sites. Has SEPA reached agreement with SNH on protection of the SSSI? – n/a </p>
<p>Are there any SPA or SAC designated areas within the area screened? Yes - see section 4.5 Have you carried out an appropriate assessment? See above</p>
Officer: CS

7 ENVIRONMENTAL IMPACT ASSESSMENT AND COMAH
<p>How has any relevant information obtained, or conclusion arrived at pursuant to Articles 5, 6 and 7 of Council Directive 85/337/EEC on the assessment of the effects certain public and private projects on the environment been taken into account?</p> <p>Not applicable.</p>
<p>How has any information contained within a safety report within the meaning of Regulation 7 (safety report) of the Control of Major Accident Hazards Regulations 1999 been taken into account?</p> <p>Not applicable</p>
Officer: CS

8 DETAILS OF PERMIT
Do you propose placing any non-standard conditions in the Permit? Yes
Do you propose making changes to existing text, tables or diagrams within the permit? Yes
<p>Outline of change(s) and details including justification:</p> <ol style="list-style-type: none"> 1. Section 2.6 – In order to secure compliance with the requirement to maintain ring-fenced funds, a non-standard condition is proposed, making reference to maintaining the ring-fenced funds or subsequent alternative method. 2. Table 9.2.1 - The grid reference for the leachate sampling point has been updated 3. Table 11.1.7 - Following a review of groundwater monitoring data, changes are proposed to the parameters monitored and the frequency of some monitoring. For gas monitoring, reference is now made to schedule 8 of the permit in order to avoid duplication of the requirements. 4. Condition 11.1.10 - The installation boundary has been extended to the north of the site. The existing monitoring network for gas is not considered adequate to detect gas migration for phases 4 and 5, so a condition requiring the installation of two additional gas monitoring boreholes is proposed. 5. Table 11.3.1 - Revised groundwater trigger levels have been set for certain key parameters. 6. The site plan in schedule 12 has been deleted and replaced with the new site plan.

9 EMISSION LIMIT VALUES OR EQUIVALENT TECHNICAL PARAMETERS/ MEASURES
Are you are dealing with either a permit application, or a permit variation which would involve a review of existing ELVs or equivalent technical parameters? No
Emission limit values Air: Not applicable

Emission limit values Water: Not applicable
Emission limit values Land: Not applicable
Emission limit values Noise and Vibration: Not applicable
Details of any equivalent technical parameters adopted to supplement or replace ELVs: N/A

10 PEER REVIEW
Has the determination and draft permit been Peer Reviewed? Yes.
Name of Peer Reviewers and comments made: WRU, Legal & LRT – changes to point source emissions to groundwater section, reference to trigger levels instead of compliance limits, wording of variation, comments on monitoring table.

11 FINAL DETERMINATION
Issue a Permit variation – Based on the information available at the time of the determination SEPA is satisfied that <ul style="list-style-type: none"> • The applicant will be the person who will have control over the operation of the installation; • The applicant will ensure that the installation is operated so as to comply with the conditions of the Permit, • The applicant is a fit and proper person; • Planning permission for the activity is in force; • That the operator is in a position to use all appropriate preventative measures against pollution; • That no significant pollution should be caused.
Officer: CS

12 REFERENCES AND GUIDANCE
Guidance Notes – Identify key references, guidance (BREF, UK Technical Guidance, etc) used in determination
The Pollution Prevention and Control (Scotland) Regulations 2012 The Conservation (Natural Habitats, &c.) Regulations 1994 SEPA Nature Conservation Procedure for Environmental Licensing NCP-P-01 SEPA Guidance WST-G-032 “Estimate of Amount of Financial Provision for Landfill Sites” v2 16/06/16