

**Landfill Guidance - Landfills regulated under PPC -**

November 2024

**The Closure and Aftercare Management Plan**

# The Closure and Aftercare Management Plan (CAMP)

## Background

An Operator’s Closure and Aftercare Management Plan (CAMP) must demonstrate how the Operator will manage the closure and aftercare of the landfill as it moves from operational status to definite closure and surrender of the permit authorising its operation. This guidance note sets out the different steps in the closure and aftercare process, including the actions required by the Operator to review the CAMP, submit relevant information to SEPA and apply to SEPA for variation of the site permit and definite closure. This guidance note should be read in conjunction with SEPA Guidance Note – Guidance on Closed Landfills Regulated under Pollution Prevention and Control (WST-G-056).

## General

**Capping**

The Operator must demonstrate the site is capped and that the capping is compliant with the standard specified in the Permit or Management Plan. A drawing must be provided showing:

* the capping status of all disposal phases/cells showing that all phases/cells have been permanently capped,
* the specification of each capped area, and
* the areas and date(s) capped with reference to the relevant Construction Quality Assurance (CQA) Reports.

The Operator must demonstrate measures are in place to ensure monitoring of cap integrity in the aftercare phase.

**Restoration**

The Operator must demonstrate the site is restored, that the restoration (placement of full depth restoration layer and required planting for approved final after use) has been undertaken and is compliant with the Restoration Management Plan. A drawing must be provided to show the restoration status of all areas within the boundary.

**Stability**

The Operator must demonstrate that measures have been put in place to monitor site stability, particularly where there is potential for differential settlement between cells where different wastes have been placed.

**Ha****bitats**

Where the site is within a specified distance of a designated European site for nature conservation or other designated habitat site, the Operator must complete a habitats risk assessment to demonstrate that the site will not impact the habitat site following definite closure.

**Drawings/plans**

The Operator must provide a drawing showing the area of the site that is intended to be moved to definite closure. The Operator must also provide a series of drawings, as described below in the following sections. All drawings the Operator submits must be clearly titled, provided with a drawing identification number, revision number, dated and provided with scale.

**Financial provision**

There will remain the requirement on the Operator to demonstrate financial provision through the requirements of the conditions in the permit until surrender.

## Provision of environmental protection infrastructure

The Operator must demonstrate that they have the required infrastructure to manage landfill gas, leachate and any discharges in place and that this will be maintained as the landfill moves into the aftercare phase.

### Landfill gas management

The Operator must detail and fully describe the landfill gas collection and treatment system in place, the engine capacity and type and flare capacity and type. All landfill gas infrastructure (e.g. flare, engines, pipework, manifolds etc.) required for environmental protection should be identified on a drawing.

### Leachate management

The Operator must fully describe the leachate management system in place and detail the treatment and/or discharge from the site. All leachate infrastructure relating to storage, treatment and/or discharge required for environmental protection must be identified on a drawing. Infrastructure must include, but shall not be limited to, lagoons, tanks, pipework, pumps, treatment plant, discharge points and extraction points, including any side wall risers.

Evidence must be provided to demonstrate that all leachate wells have been drilled to the base of the lining system. Where any leachate wells have been lost and replaced, evidence must be provided for the amended base of well. All leachate logs must be provided along with calculations to demonstrate the level of leachate on the base of the liner.

### Surface water / Trade effluent management

If the site has any requirement for capture and/or treatment of ‘dirty’ surface water run-off or trade effluent the operator must demonstrate their arrangements for its management. Trigger levels for base indicator parameters (that will identify if surface water is contaminated) must be identified and monitored.

## Maintenance of environmental protection infrastructure

The Operator must demonstrate that they will maintain the necessary infrastructure, such as landfill gas and leachate infrastructure, to protect the environment, as the landfill moves into the aftercare phase.

The Operator must provide a drawing showing the location of all environmental protection infrastructure, including but not limited to, extraction wells, boreholes, storage tanks, pipework, permanent plant and equipment, drains, ditches, soakaways relating to the management (collection, treatment and disposal) of leachate, landfill gas and trade effluent and/or surface water.

The maintenance schedule for all infrastructure must be provided and must address assessments undertaken, frequency, responsibilities, and procedures for repair/replacement. The steps proposed should any environmental protection infrastructure reveal significant environmental effects must be detailed. The Operator should confirm that the landfill gas compound, leachate treatment plant and other key monitoring infrastructure will be secured to prevent unauthorised access and confirm if the landfill gas compound and/or the leachate treatment system is accessible by key personnel.

## Provision of monitoring network

The Operator must demonstrate that the required monitoring infrastructure is in place for environmental protection as the landfill moves into the aftercare phase.

The Operator must provide a drawing showing the location of each monitoring point that is specified within the permit and/or Management Plan. This should include all leachate extraction and monitoring wells, groundwater perimeter boreholes (identifying upgradient and down gradient), landfill gas perimeter wells, surface water discharge points and monitoring points and leachate discharge points.

The Operator must provide evidence to demonstrate that each monitoring point in the monitoring network has been labelled and secured to prevent unauthorised access. The Operator must confirm that each monitoring point that is in the permit and/or Management Plan has been surveyed and is in the correct location, serviceable and capable of providing a sample.

The construction details for each well/borehole/discharge point must be provided.

## Maintenance of monitoring network

The Operator must demonstrate that the required infrastructure is adequately maintained as the landfill moves into the aftercare phase. A maintenance schedule for each monitoring point must be detailed including, but not limited to, inspection frequency, assessments undertaken, procedures for repair/replacement and responsibilities for assessment and remediation, if required. Should a significant environmental event be identified during any monitoring and/or maintenance inspection, the Operator must notify SEPA of the event.

## Provision of compliant monitoring boreholes

The Operator must demonstrate that leachate, gas and groundwater boreholes are compliant with all relevant emission limits or trigger/control levels through provision of monitoring data.

The Operator must provide an interpretive report of monitoring data, including identification of data gaps, limit exceedances and remedial actions identified for issues raised. The report should make reference to Annual Monitoring Report submissions.

The Operator must include a copy of the site Hydrogeological Risk Assessment (HRA). If the HRA is more than 6 years old, and/or activities on site have changed since the assessment was completed, a new HRA should be undertaken and submitted.

## Other activities

### Directly Associated Activities (DAA’s)

Any DAA(‘s) which is/are proposed to be continued after the site moves into definite closure must be identified by the Operator. Any DAA(’s) which will no longer remain technically connected to the landfill operation must be identified.

## When reviewing the Closure and Aftercare Management Plan

The Operator must ensure the following:

* All documents submitted with the reviewed CAMP and the follow up application for Variation to the Permit, are clearly labelled. An appropriate reference to each document or drawing must be entered in each relevant part of your application form, and/or CAMP
* Any continuation sheets are clearly labelled and that an appropriate reference to these is entered in each relevant part of your application form, and/or CAMP and
* All documents created by you or on your behalf and submitted include a date and version number.

**Summary of steps to complete definite closure**

1. The Operator requests initiation of the closure process.
2. SEPA provides approval for the closure process to commence.
3. The Operator reviews the Closure and Aftercare Management Plan, reviews the monitoring data to identify existing compliance status, exceedances and gaps in monitoring and provides a copy of this review. The Operator reviews the existing HRA and confirms if it remains representative and provides a copy of this review.
4. SEPA review the submitted information and invites the Operator to a pre-application for variation meeting, if required.
5. Depending on the SEPA review of the submitted information, gaps in monitoring data and infrastructure, the Operator may require several months/years to complete the action(s).
6. The Operator submits further monitoring information, evidence of compliance and/or other outstanding information.
7. SEPA review the submitted information and invites the Operator to a second pre-application for variation meeting, if required.
8. The Operator is invited to submit an application for Variation and Definite Closure.
9. SEPA undertake a Final Inspection before Definite Closure.
10. SEPA issue a Variation to the Permit and issue a Definite Closure Notice.
11. The site moves into the Aftercare phase and the subsistence fee is reduced.

For any queries please contact SEPA’s Landfill Team (landfill@sepa.org.uk).

#### If you would like this document in an accessible format, such as large print, audio recording or braille, please contact SEPA by emailing equalities@sepa.org.uk.