



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence Review

W0024-02

**Ballynacarrick Landfill Site,
Ballintra County Donegal**

ATTACHMENTS TO SECTION J

Accident Prevention & Emergency Response

ATTACHMENTSTO SECTION I CONTINGENCY ARRANGEMENTS

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ATTACHMENTS TO SECTION J

Attachment J.1

The following measures and procedures will be implemented on site.

Out of Hours Alarm

Procedures for abnormal shutdown operations have been developed as part of the Environmental Management System for leachate and landfill extraction and treatment systems at the facility. A Supervisory Control And Data Acquisition (SCADA) system has been installed on site for the operation of the enclosed landfill gas flare system and leachate management system which will include emergency call alarms to nominated personnel.

An alarm will be raised via the SCADA system (a specific text message for each alarm to mobile phone/phones).

Call out received from the SCADA system (will be dealt with in accordance with manufactures operational instruction ASAP. (Messages received overnight will be dealt with first thing in the morning or in any event within a 24 hour period). Undertake field balancing if required.

If problem cannot be resolved then contact manufacture for advice and arrange service if required.

Fire Fighting Procedures

Fires in site buildings or plant will be assessed by site staff and will be tackled with site fire fighting equipment if appropriate. The Fire Brigade will be called to ensure any danger has passed. For major fires or fires within the landfill the Fire Brigade will be contacted to deal with the situation.

All fires will be reported immediately to the Senior Executive Engineer. Procedures will be reviewed following any fire.

Breakdown Situations

Breakdown situations will be resolved by staff on site who undertake the day to day operation of the site. Should breakdowns result in a lack of machinery the contractor will supply an alternative piece of machinery until the situation is resolved.

Emergency Situations

Emergency situations will be handled initially by staff on site who will inform the necessary emergency services or departments within Donegal County Council. The following measures have been undertaken:

- Site safety procedures will be adopted on site.
- Trained First Aider available in site.

- First Aid Kit available on site.
- Emergency procedures developed as part of the Environmental Management System and emergency numbers displayed in site building.

All emergency situations will be reported immediately to the Senior Executive Engineer, Environment Section. Procedures will be reviewed following any accident.

Should staffing levels at the site fall below two and an operative is required to work alone, an hourly "call in" system will be employed in which the employee will be required to contact the manager each hour and confirm the operatives attendance on site.

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Management of Accidental Emissions or Spillages

1. Leachate

Leachate and groundwater

Groundwater will be monitored in accordance with the licence requirement. Trigger levels have been set for groundwater monitoring taking into consideration that Ballynacarrick Landfill Site was initially developed as an unlined site on the traditional 'dilute and disperse' principle. It is recognised that leachate will continue to enter the groundwater below the site from these areas. Baseline data from upstream of the site also indicates pollution.

However the capping and the removal of leachate from unlined area through the current leachate extraction system will improve the environmental performance of the unengineered areas to ensure that there will be no significant impact on the groundwater in the future. The extension to the landfill site was engineered and therefore the possibility of contamination of groundwater will be minimal. However should monitoring of groundwater indicate contamination then a review of baseline monitoring results will be undertaken to establish that contamination is arising from the site. This will be reported to the EPA as an incident. Leachate levels within the unlined and lined cells will be reviewed. The leachate head will be reduced by pumping excess leachate to holding tank.

An investigation will be undertaken to establish the cause and location of the contamination and measures taken to ensure that this does not occur again. All measures taken will be reported to the EPA for their agreement.

Leachate Transfer

Leachate will only be transferred from holding tank to tanker at the purpose built concrete slab. All surface water and spillages in this area are collected into a gully which passes through a silt trap prior to being pumped back into the leachate treatment tank. Procedures have been developed on site for leachate transfer.

Leachate and Surface Water

Surface water will be monitored in accordance with the licence requirement. Should monitoring of surface water indicate contamination then a review of baseline monitoring results will be undertaken to establish that contamination is arising from the site. This will be reported to the EPA as an incident. Surface water will be retained in surface water lagoon. This will be pumped to the leachate-holding tank if required or lined area.

2. Landfill Gas

A permanent gas alarm is provided in the site office. When landfill gas concentrations are found within buildings (on or off site) in excess of 1.0% v/v of methane (10% LEL) or 1.5% v/v carbon dioxide, they will be evacuated by the following procedures:

- Warn occupants of the danger and possible risk to life and property; advise necessity of evacuation.
- Ventilate all parts of the building. Affected rooms should be ventilated by opening doors and windows.
- Isolate all ignition sources. All fires and naked flames should be extinguished. Gas should be turned off at the isolation cock. Electricity should be isolated at the meter (check flammable concentrations prior to this).
- Adjoining buildings (occupied/unoccupied) should also be checked.
- Interested parties should be informed. They include the licensee, site operator and the EPA.
- No one will be allowed to re-enter building till all clear is given. Measures will be undertaken to prevent further ingress of gas if required. All interested parties will be informed of control measures and their effectiveness.

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