

## **10 EFFLUENT**

### **10.1 Introduction**

The following describes the effluent arising from the development and the measures taken to ensure that this effluent does not pose a risk to the surrounding environment.

Reference should be made to Section 9 of this Volume of the EIS, which deals with Hydrology and Drainage, as mitigation measures are proposed to ensure protection of surface water and groundwater as part of the development.

### **10.2 Study Methodology**

This Section has been prepared using the recommendations set out in the Environmental Protection Agency (EPA) document ‘Guidelines on Information to be contained in Environmental Impact Statements’ (EPA, 2002).

### **10.3 Receiving Environment**

The Srahmore Peat Deposition site has been used previously for the industrial harvesting of peat. However this activity involved a relatively low intensity of industrial activity. Peat harvesting was undertaken with plant and machinery developed by Bord na Móna to produce milled peat, which was then exported from the site.

With respect to wastewater effluent (i.e. human effluent), the peat harvesting would not have resulted in the generation of significant effluent. Operations within Srahmore would have been low intensity over a short summer period. Therefore, for the purpose of this report, the existing environment is considered void of potential effluent sources.

During the previous operations on site, during the deposition of approximately 448,000m<sup>3</sup> of peat from the Terminal site, a containment system was utilised for the management of effluent. All effluent and wastewater was drained to a holding tank and this tank was periodically emptied by a waste haulier and exported to an approved wastewater treatment plant. This system eliminated impacts on the receiving environment during periods of activity within the site.

#### **10.4 Characteristics of the Proposed Development**

This development proposal seeks to allow for deposition of up to 75,000m<sup>3</sup> of peat material sourced from the onshore pipeline development within Area 6 of the Srahmore Peat Deposition site. Deposition will initially be undertaken within Bay 2, Bay 1 and Bay 6 (with Bay 7 available as reserve, if required). These bays are within the activity area previously granted planning permission by An Bord Pleanála and a waste licence by the EPA.

It is proposed that activities within the Srahmore Peat Deposition site will be consistent with activities previously undertaken within the site.

During operations within the site, up to 35 people will utilise the site during the normal working day with facilities to cater for up to 50 people. Sanitary and canteen facilities are proposed for these employees, resulting in an induced effluent load of approximately 20 PE.

It is proposed that during the operations associated with the import and deposition of peat, all wastewater generated within the site will be collected in a holding tank. The effluent will be periodically emptied and exported from the site by a permitted haulier to an approved wastewater treatment plant. Therefore, during operation there will be no discharges of effluent to the receiving environment.

#### **10.5 Potential Impact of the Proposed Development**

The potential sources of effluent within the site are considered to result from human and/or mechanical activity onsite.

The principal source of potential effluent will be at the reception area, where office/canteen buildings are proposed for the on-site operatives. Toilet facilities and washwater are considered an effluent and should be dealt with accordingly to protect the surrounding water environment.

The reception area will be the interface between the import of peat from the pipeline development and the transport of peat to the deposition area. The vehicular activity in this area poses a risk with respect to uncontrolled emissions, through leakages or accidental spillage of potentially polluting material. The potential impact of such an event would adversely impact the aquatic environment.

## **10.6 Do Nothing Scenario**

In this scenario, the site would remain unchanged. No effluent would be generated, as no human activity would occur within the site.

## **10.7 Mitigation Measures**

In order to minimise the generation of effluent within the site a number of measures have been incorporated into the design of the facility. These measures are of proven technology and will ensure minimal impact on the surrounding environment. Due to the temporary nature of the development, the majority of plant and equipment can be removed easily and the site can be returned to its predevelopment state.

With respect to the toilet/canteen accommodation, it is proposed that all effluent and washwater be drained to a holding tank. All wastewater will be collected in a holding tank, which will be emptied periodically by an approved contractor and exported from the site to an approved waste water treatment plant. These measures will ensure that there is no discharge of waste water or domestic sewage to the receiving environment. This system was successfully employed during the previous operation on the Srahmore Peat Deposition site.

A permitted waste contractor will be employed for the export of general waste. This waste will be exported to an approved facility for disposal. Any recyclable materials will be separated and exported to an appropriate facility for recovery.

With respect to the control of potentially polluting material arising from the concrete hardstand, appropriate measures have been designed to significantly reduce the risk to the surrounding environment. The reception area is fully bunded and laid to grades such that any precipitation/surface water runoff is channelled toward a concrete open drain at the centre of the reception slab. The runoff from the slab is culverted through a deep settlement tank/grit trap to allow primary settlement of sediment. The runoff water is then diverted through a oil interceptor (secondary settlement) to ensure that any potentially polluting material is retained at source. All water outfall from the oil interceptor is diverted through the settlement pond to the south of Area 5. The outfall water following treatment within the reception area is not considered an effluent.

The grit trap and oil interceptor are periodically monitored and emptied by an approved licensed contractor when required.

The only possibility of effluent runoff is from leakage of fuels from machinery or accidental spillages. Oil spill kits are stored on site to be utilised in the case of spillage. The treatment arrangement proposed will ensure any such occurrence is dealt with effectively and the material is retained within the reception area. The water outfall to the settlement lagoons is

not considered an effluent and the treatment of surface water runoff is dealt within in Section 9 herein.

A temporary bunded oil/lubricant storage facility will be provided on-site.

### **10.8 Predicted Impact of the Proposed Development**

The development will not result in the generation of effluent during the peat deposition operation as all effluent will be exported from the site.

The treatment arrangement within the reception area are constructed to retain any fuel effluent arising from the reception area, through leakages or accidental spillage. The grit trap and oil interceptor are emptied periodically to ensure the surrounding environment is not impacted.

The overall predicted impact is considered to be low.

### **10.9 Monitoring**

The toilet and canteen facilities will be inspected on a daily basis to ensure the toilet and canteen facilities are of a good standard of hygiene. The waste will be exported from the site on a regular basis, however a regular visual assessment will be undertaken to ensure that the waste is managed in an appropriate manner.

The deep settlement tank/grit trap and the oil interceptor will be inspected on a weekly basis to ensure that they are operating efficiently. These will be periodically emptied to appropriate facilities based on the monitoring undertaken.

All vehicles used on site will be regularly visually assessed to ensure there are no leakages. All leakage of fluid will be immediately reported and the vehicle will be diverted for service.

### **10.10 Reinstatement and Residual Impacts**

Reinstatement is not considered possible within the Srahmore Peat Deposition site until the peat stabilisation process is complete and the site represents a low risk. Following the stabilisation process, the drainage infrastructure could be altered to close drains to impede drainage. This would create conditions favourable for wetland habitats. This is discussed in more detail in Section 6 of this Volume of the EIS.

Post peat deposition, residual impacts will result from the low level of activity associated with the stabilisation and monitoring programme.