

**Non-Technical Summary**  
**FCC Waste Services (UK) Limited . Greengairs Landfill – PPC/W/20041**  
**Variation application**

FCC Waste Services (UK) limited proposes to install a reverse osmosis (RO) treatment process that will be used to remove the potentially polluting contaminants from surface water run-off produced as a result of incinerator bottom ash (IBA) activities at Greengairs Landfill Site. The treatment process is based on a reverse osmosis system that removes organic and inorganic contaminants from the IBA surface water run-off. The RO Plant will be designed to produce a treated effluent allowing for discharge to an unnamed tributary of the Cameron Burn.

The proposed RO plant will be located on part of the landfill site and sits within the boundary of the existing leachate treatment lagoons. The wider landfill site is set within countryside predominantly affected by historic industrial mining activities. East Loch, a large water body located to the northeast of the site, is formed within a void space from opencast mining, with several underground mine entrances filled with water present at the bottom.

Currently, IBA run-off is being collected, stored and tankered away for appropriate treatment and disposal. The RO plant will be able to treat the run-off from the current and proposed IBA activities.

The application will result in a variation application of Greengairs Landfill Site which operates under PPC/W0020041. The variation will result in an addition of a listed activity to the PPC permit, treatment for the physico-chemical treatment of non-hazardous waste for disposal over 50 tonnes/day and so is a listed activity within the Pollution Prevention and Control (Scotland) Amendment Regulations 2014. Directly associated activities as a result of the permit variation include for the storage of IBA surface-water run-off and discharge of effluent to the surrounding watercourse.

The new RO process will facilitate the treatment of the run-off from the IBA treatment activities to reduce organic and inorganic contaminants. The end-products of the RO process will be an aqueous filtrate that is capable of being discharged to surface water and a small volume of aqueous concentrate that will be removed by tanker for off-site treatment/disposal. Discharge will be at the WP0002 emissions and monitoring point as shown in drawing ref.4875-CAU-XX-XX-DR-V-1801. The annual maximum throughput of the Caulmert Ltd4875-CAU-XX-XX-RP-V-03003April2027 FCC Waste Services (UK) Limited Supporting Document Greengairs Landfill Site RO facility will be 73,000 tonnes per annum. The layout of the proposed RO plant and pipeline is shown on Drawing ref. 470A328 'RO Plant Plan', contained within the application.

In preparing this PPC application an evaluation of the potential environmental and health impacts from the RO process were undertaken and it was concluded that there was no detrimental impact on the environment or human health in relation to overall site operations as a result of RO plant.

The assessment indicates that the RO process:

- Significantly reduces the volume of IBA run-off requiring final disposal at offsite treatment facilities;
- Significantly reduces the number of tanker movements associated with the removal of IBA surface water run-off for off-site treatment/disposal and in doing reduces the environmental and social impact associated with the vehicle use;

- Has no overall detrimental impact in relation to the environmental or health impact offsite operations.