

PPC/A/5009290 Application for Variation to Permit

Non-Technical summary

GAP Alba Ltd. plans to use a former Solid Recovered Fuel (SRF) building to install equipment that will process end-of-life Waste Temperature Electrical Equipment (WTEE) and Insulation Panels.

The process will safely remove and capture oils, refrigerants, and blowing agents from these materials.

Process Overview:

1. **Input Materials:** Refrigerators, freezers, fridge-freezer combos, and air conditioners.
2. **Preparation:** Manual removal of loose parts (e.g., cables, containers), food residues, and harmful substances like mercury.
3. **Stage 1 - Cooling Circuit Extraction:**
 - A vacuum system extracts refrigerants and oils from the cooling circuits.
 - The refrigerant/oil mixture is separated and treated to remove harmful substances, which are then disposed of properly.
 - After refrigerant and oil are removed, compressors are separated and disposed of. The devices are then sent for shredding.
4. **Stage 2 - Shredding & Pollutant Extraction:**
 - The equipment is shredded, separating materials like iron, aluminium, copper, and plastics. These are sent for recycling.
 - Insulation foam (PUR) is shredded to release the blowing agents (CFCs), which are removed from the air using specialized systems (e.g., low-temperature condensation and activated carbon).
5. **Output:** The separated recyclables (metal, plastic) are collected and sent to authorized recycling facilities.
6. **Emissions:** Clean exhaust air is continuously monitored for Volatile Organic Compounds (VOCs) during the process.

This process ensures the safe recovery of valuable materials while minimizing environmental impact.