

PROPOSED RECYCLING FACILITY

Location of mobile plant and associated waste acceptance

As detailed in the documentation submitted with the permit application, the mobile recycling plant will initially be located on the current quarry floor at the southern end of the quarry void during phase 1 of the site restoration scheme before being relocated to the north of the quarry when infilling has reached 282 AOD. Site surfacing will consist of the quarry floor for phase 1 and then on top of the compacted infill. A pavement of crushed hardcore may be provided if required to assist the operations associated with the recycling activities

ASH will ensure information for basic characterisation of the waste will be received before any waste is accepted into the quarry either for processing or deposit as part of the restoration scheme.

WAC testing (WAC Acceptance Criteria) BSEN12457

WAC testing was introduced to supplement the revised changes to the Hazardous and Landfill Regulations in 2005. WAC is primarily a compliance test (PASS/FAIL) against regulatory limit values. The test involves applying an acceptance leaching test, which requires the taking of representative samples of waste and subjecting it to leaching in water under specific test conditions. Additional tests may also be carried out eg Acid Neutralisation Capacity (ANC), this requires the waste to be chemically treated by pH variation to assess stability.

ASH will only accept waste into Cambrian Quarry which meets the standards of the chemical tests specified for inert WAC or material which would be exempt from testing eg single type from a single source from a greenfield site. This material represents a minimal risk of contamination.

The waste accepted at Cambrian Quarry should meet the standards of the chemical tests as detailed below:

Solid Analysis

	Inert	SNRHW in NHL	Hazardous
TOC	3 %	5 %	6 %
Loss on ignition			10 %
Sum of BTEX	6 mg/kg		
Sum of 7PCBs	1 mg/kg		
Mineral Oil	500 mg/kg		
PAH Sum of 17	100 mg/kg		
pH		>6	
ANC to 6		(include for indicative purposes only)	
ANC to 4			

Eluate Analysis: Cations

	Inert	SNRHW in NHL	Hazardous
Arsenic	0.5 mg/kg	2.0 mg/kg	25.0 mg/kg
Barium	20 mg/kg	100 mg/kg	300 mg/kg
Cadmium	0.04 mg/kg	1.0 mg/kg	5.0 mg/kg
Chromium	0.5 mg/kg	10 mg/kg	70 mg/kg
Copper	2 mg/kg	50 mg/kg	100 mg/kg
Mercury	0.01 mg/kg	0.2 mg/kg	2.0 mg/kg
Molybdenum	0.5 mg/kg	10 mg/kg	30 mg/kg
Nickel	0.4 mg/kg	10 mg/kg	40 mg/kg
Lead	0.5 mg/kg	10 mg/kg	50 mg/kg
Antimony	0.06 mg/kg	0.7 mg/kg	5 mg/kg
Selenium	0.1 mg/kg	0.5 mg/kg	7 mg/kg
Zinc	4 mg/kg	50 mg/kg	200 mg/kg

Eluate Analysis: Anions, organic etc

	Inert	SNRHW in NHL	Hazardous
Chloride	800 mg/kg	15,000 mg/kg	25,000 mg/kg
Fluoride	10 mg/kg	150 mg/kg	500 mg/kg
Sulphate	1,000 mg/kg	20,000 mg/kg	50,000 mg/kg
Total Dissolved Solids	4,000 mg/kg	60,000 mg/kg	100,000 mg/kg
Phenol Index	1 mg/kg		
Dissolved Organic Carbon	500 mg/kg	800 mg/kg	1,000 mg/kg