



Environmental Permitting Regulations (England and Wales) Regulations 2016

Compilation of Environment Agency Requirements, Approvals and Specifications

made under

Permit Number EPR/ZB3335DP

Issued to

Cyclife UK Ltd

for the

**Receipt and Disposal of Radioactive Waste from
Metal Recycling Facility**

Issue V002 Dated 31/01/2017

TABLE 1 :CURRENT REQUIREMENTS

Permit condition	Requirement number	Effective Date
Condition 2.4.1	2.4.1/v002	31/01/2017
Condition 2.6.2	2.6.1/v002	31/01/2017
Condition 3.1.4(a)	3.1.4(a)/v002	31/01/2017
Condition 3.1.7	3.1.7/v002	31/01/2017
Condition 3.1.8	3.1.8/v002	31/01/2017
Condition 3.2.1(b)	3.2.1(b)/v002	31/01/2017
Condition 3.2.1(c)	3.2.1(c)/v002	31/01/2017
Condition 3.2.3	3.2.3/v002	31/01/2017
Condition 3.2.4	3.2.4/v002	31/01/2017
Condition 3.2.5(a)	2.5(a)/v002	31/01/2017
Condition 3.2.5(b)	3.2.5(b)/v002	31/01/2017
Condition 4.1.1(d)	4.1.1(d)/v002	31/01/2017
Condition 4.1.2	4.1.2/v002	31/01/2017
Condition 4.2.2	4.2.2/P1/v002*	31/01/2017
Condition 4.2.2	4.2.2/P2/v002**	31/01/2017

* part 1 (pollution inventory)

** part 2 (other specifications)

Authorised:



Steve Howard

Authorised to sign on behalf of the Environment Agency

Issue V002 dated 31/01/2017

Requirement number 2.4.1/v002**Permit condition**

The operator shall complete the requirements specified in schedule 1 Table S1.2 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

Environment Agency Agreement

None agreed.

Requirement number 2.6.2/v002

Permit condition

The operator shall ensure that any radioactive waste which does not comply with the specifications produced pursuant to condition 2.6.1 is returned to the consignor as soon as reasonably practicable, unless otherwise agreed in writing with the Environment Agency.

Environment Agency Agreement

The Environment Agency agrees that the operator shall ensure that any consignment or part of any consignment of radioactive waste, found following transfer not to be in accordance with the specifications produced pursuant to condition 2.6.1, is assessed to determine the Best Available Technique for further treatment or disposal, or returned to the customer if a suitable waste route is not available.

Requirement number 3.1.4(a)/v002

Permit condition

The operator may dispose of radioactive waste, not being radioactive waste otherwise authorised to be disposed of, which is collected as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme provided that the operator:

- (a) transfers the radioactive waste to a person whom the Environment Agency has agreed in writing may receive that radioactive waste.

Environment Agency Agreement

None agreed.

Requirement number 3.1.7/v002

Permit condition

If required by the Environment Agency, the operator shall ensure that any consignment or part of any consignment of radioactive waste found, following transfer, not to be in accordance with the conditions of this permit:

- (a) is packaged in accordance with the appropriate transport regulations;
- (b) is returned as soon as is reasonably practicable to the operator's site

Environment Agency Requirement

None agreed.

Requirement number 3.1.8/v002

Permit condition

The operator shall, not later than 14 days after the end of each month or within such longer period as the Environment Agency may approve in writing, record all disposals of radioactive waste made during that month.

Environment Agency Approval

None agreed.

Requirement number 3.2.1 (b) v002

Permit condition

3.2.1 The operator shall:

(b) unless otherwise agreed in writing by the Environment Agency:

- (i) define, document and carry out an environmental monitoring programme
- (ii) use the results of that programme to carry out an annual retrospective assessment of the dose to the representative person;
- (iii) inform the Environment Agency in writing in advance of any modifications affecting the extent of that programme or that have a potential to change the results obtained.

Environment Agency Agreement

None agreed.

Requirement number 3.2.1 (c)/v002

Permit condition

3.2.1 The operator shall:

- (c) use the best available techniques when taking such samples, conducting such measurements, tests, surveys, analyses and calculations, and carrying out such an environmental monitoring programme and retrospective dose assessment, unless particular techniques are specified in schedule 3 of this permit or in writing by the Environment Agency;

In conjunction with wording in the relevant table in Schedule 3 which permits changes to those techniques as agreed in writing by the Environment Agency.

Environment Agency Agreement and Specification

None agreed.

Requirement number 3.2.3/v002

Permit condition

Monitoring equipment, techniques, personnel and organisations employed for the monitoring of disposals and the environment required by condition 3.2.1 and/or 3.2.5 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

Environment Agency Agreement

The Environment Agency agrees that MCERTS certification or MCERTS accreditation (as appropriate) is not required for the following:

None agreed.

Requirement number 3.2.4/v002

Permit condition

Permanent means of access shall be provided to enable sampling and monitoring to be carried out in relation to the disposal outlets specified in schedule 3 unless otherwise agreed in writing by the Environment Agency.

Environment Agency Agreement

None agreed.

Requirement number 3.2.5 (a)/v002

Permit condition

If required by the Environment Agency, the operator shall:

- (a) take such samples and conduct such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, at such times and using such methods and equipment as the Environment Agency specifies.

Environment Agency Requirement

None agreed.

Requirement number 3.2.5(b)/v002

Permit condition

If required by the Environment Agency, the operator shall:

- (b) keep samples, provide samples, or dispatch samples for tests at a laboratory, as the Environment Agency specifies, and ensure that the samples or residues thereof are collected from the laboratory within three months of receiving written notification that testing and repackaging in accordance with the relevant legislation are complete.

Environment Agency Requirement

None agreed.

Requirement number 4.1.1(d)/v002

Permit condition

4.1.1 All records required to be made by this permit shall:

(d) be retained until notified in writing by the Environment Agency that records no longer need to be retained.

Environment Agency Notification

None agreed.

Requirement number 4.1.2/v002

Permit condition

The operator shall keep on site all records, plans and the management system required by this permit, unless otherwise agreed in writing by the Environment Agency.

Environment Agency agreement

The Environment Agency approves paper records stored in a fireproof safe at the MRF site and electronic records maintained on servers with daily backup.

Requirement number 4.2.2/P1/v002

Permit condition

4.2.2 The operator shall supply such information in relation to:

- (a) the disposals of radioactive waste; and
- (b) the samples, tests, surveys, analysis and calculations, environmental monitoring and assessments undertaken under conditions 3.2.1 and 3.2.5 in relation to disposals of radioactive waste;

in such format and within such timescales as the Environment Agency may specify in writing.

Environment Agency specification Part 1 : Pollution Inventory

The Environment Agency specifies that:

1. The operator shall supply information relating to disposals of radioactive waste as specified in the attached Schedule, taking account of the guidance provided in Reporting Form PI(RAS), and in accordance with the following:

(a) the information shall be provided not later than 28 February each year for disposals made during the preceding calendar year;

(b) the information shall be provided by:

- (i) using our web-based reporting system (accessible from <https://piedc.environment-agency.gov.uk/piedc/piedc>); or
- (ii) completing form PI(RAS) (available from <https://www.gov.uk/government/publications/pollution-inventory-reporting-form>) and e-mailing it to: nrg.north@environment-agency.gov.uk or posting a paper copy to:

Nuclear Regulation Group North
Environment Agency
Ghyll Mount
Gillian Way
Penrith 40 Business Park
Penrith
Cumbria
CA11 9BP

(c) the information provided on release quantities shall be the operator's best estimate achievable with the time and resources available. The operator is not required to perform additional monitoring, beyond any demanded by the permit, in order to complete the Reporting Form.

Schedule

Part 1 About the operator and site

The information we require you to provide in Part 1, includes:

- details about you and your operations – permit number, operator name and address, and contact details;
- any claim that information provided is confidential.

Purpose of Parts 2, 3, 4 and 5 of this Schedule

We require you to provide information on your releases of radioactive wastes to air, water and sewers. Parts 2, 3, and 4 of this Schedule list the individual reportable radionuclides for each environmental medium/disposal route (air, sewers, controlled water) and the reporting thresholds that apply to those radionuclides.

Part 2 Releases to air

Annual reporting threshold	Radionuclide
1 10 ¹¹ Bq (100 GBq)	Tritium
1 10 ⁹ Bq (1 GBq)	Carbon-14
1 10 ¹¹ Bq (100 GBq)	Fluorine-18
1 10 ⁸ Bq (100 MBq)	Sulphur-35
1 10 ¹² Bq (1 TBq)	Argon-41
1 10 ¹² Bq (1 TBq)	Krypton-85
1 10 ¹² Bq (1 TBq)	Technetium-99m
1 10 ⁹ Bq (1 GBq)	Ruthenium-106
1 10 ⁷ Bq (10 MBq)	Iodine-125
1 10 ⁶ Bq (1 MBq)	Iodine-129
1 10 ⁷ Bq (10 MBq)	Iodine-131
1 10 ¹² Bq (1 TBq)	Xenon-133
1 10 ⁸ Bq (100 MBq)	Caesium-137
1 10 ⁹ Bq (1 GBq)	Radon-222
1 10 ⁷ Bq (10 MBq)	Uranium alpha
1 10 ⁶ Bq (1 MBq)	Plutonium alpha
1 10 ⁶ Bq (1 MBq)	Americium-241
1 10 ⁶ Bq (1 MBq)	Other alpha particulate
1 10 ⁶ Bq (1 MBq)	Other beta/gamma particulate

Part 3 Releases to sewers

Annual reporting threshold	Radionuclide
1 10 ⁶ Bq (1 MBq)	Total alpha
1 10 ⁶ Bq (1 MBq)	Total beta/gamma (but not tritium)
1 10 ¹¹ Bq (100 GBq)	Tritium
1 10 ⁸ Bq (100 MBq)	Carbon-14
1 10 ¹⁰ Bq (10 GBq)	Fluorine-18
1 10 ⁸ Bq (100 MBq)	Sodium-22
1 10 ⁶ Bq (1 MBq)	Phosphorus-32
1 10 ⁷ Bq (10 MBq)	Phosphorus-33
1 10 ⁷ Bq (10 MBq)	Sulphur-35
1 10 ⁷ Bq (10 MBq)	Chromium-51
1 10 ⁷ Bq (10 MBq)	Cobalt-57
1 10 ⁶ Bq (1 MBq)	Cobalt-58
1 10 ⁶ Bq (1 MBq)	Cobalt-60
1 10 ⁸ Bq (100 MBq)	Gallium-67
1 10 ⁶ Bq (1 MBq)	Selenium-75
1 10 ⁹ Bq (1 GBq)	Strontium-89
1 10 ⁷ Bq (10 MBq)	Strontium-90
1 10 ⁹ Bq (1 GBq)	Yttrium-90
1 10 ⁶ Bq (1 MBq)	Zirconium-95
1 10 ⁶ Bq (1 MBq)	Niobium-95
1 10 ⁶ Bq (1 MBq)	Technetium-99
1 10 ¹⁰ Bq (10 GBq)	Technetium-99m
1 10 ⁸ Bq (100 MBq)	Ruthenium-106
1 10 ⁸ Bq (100 MBq)	Indium-111
1 10 ⁸ Bq (100 MBq)	Antimony-125
1 10 ⁹ Bq (1 GBq)	Iodine-123
1 10 ⁸ Bq (100 MBq)	Iodine-125
1 10 ⁷ Bq (10 MBq)	Iodine-129
1 10 ⁸ Bq (100 MBq)	Iodine-131
1 10 ⁷ Bq (10 MBq)	Caesium-134
1 10 ⁷ Bq (10 MBq)	Caesium-137
1 10 ⁸ Bq (100 MBq)	Cerium-144
1 10 ⁸ Bq (100 MBq)	Samarium-153
1 10 ¹¹ Bq (100 GBq)	Erbium-169
1 10 ⁹ Bq (1 GBq)	Thallium-201
1 10 ⁷ Bq (10 MBq)	Thorium-230
1 10 ⁷ Bq (10 MBq)	Thorium-232
1 10 ⁸ Bq (100 MBq)	Uranium alpha
1 10 ⁷ Bq (10 MBq)	Neptunium-237
1 10 ⁷ Bq (10 MBq)	Plutonium alpha

Annual reporting threshold	Radionuclide
1 10 ⁸ Bq (100 MBq)	Plutonium-241
1 10 ⁷ Bq (10 MBq)	Americium-241
1 10 ⁸ Bq (100 MBq)	Curium-242
1 10 ⁶ (1 MBq)	Other alpha
1 10 ⁶ (1 MBq)	Other beta/gamma

Part 4 Releases to controlled water

Annual reporting threshold	Radionuclide
1 10 ⁶ Bq (1 MBq)	Total alpha
1 10 ⁶ Bq (1 MBq)	Total beta/gamma (but not tritium)
1 10 ¹² Bq (1 TBq)	Tritium
1 10 ⁸ Bq (100 MBq)	Carbon-14
1 10 ¹⁰ Bq (10 GBq)	Sulphur-35
1 10 ⁷ Bq (10 MBq)	Cobalt-60
1 10 ⁸ Bq (100 MBq)	Strontium-90
1 10 ⁹ Bq (1 GBq)	Yttrium-90
1 10 ⁹ Bq (1 GBq)	Zirconium-95
1 10 ⁸ Bq (100 MBq)	Niobium-95
1 10 ⁹ Bq (1 GBq)	Technetium-99
1 10 ⁹ Bq (1 GBq)	Ruthenium-106
1 10 ¹⁰ Bq (10 GBq)	Antimony-125
1 10 ⁸ Bq (100 MBq)	Iodine-129
1 10 ⁷ Bq (10 MBq)	Caesium-134
1 10 ⁸ Bq (100 MBq)	Caesium-137
1 10 ⁹ Bq (1 GBq)	Cerium-144
1 10 ⁷ Bq (10 MBq)	Thorium-230
1 10 ⁷ Bq (10 MBq)	Thorium-232
1 10 ⁸ Bq (100 MBq)	Uranium alpha
1 10 ⁸ Bq (10 MBq)	Neptunium-237
1 10 ⁸ Bq (10 MBq)	Plutonium alpha
1 10 ¹⁰ Bq (100 MBq)	Plutonium-241
1 10 ⁸ Bq (10 MBq)	Americium-241
1 10 ¹⁰ Bq (100 MBq)	Curium-242
1 10 ⁶ Bq (1 MBq)	Other alpha
1 10 ⁶ Bq (1 MBq)	Other beta/gamma

Requirement number 4.2.2 P2/v002

Permit condition

4.2.2 The operator shall supply such information in relation to:

- (a) the disposals of radioactive waste; and
- (b) the samples, tests, surveys, analysis and calculations, environmental monitoring and assessments undertaken under conditions 3.2.1 and 3.2.5 in relation to disposals of radioactive waste;

in such format and within such timescales as the Environment Agency may specify in writing.

Environment Agency Specification Part 2 : other specifications

1. The operator shall report information relating to waste disposals as specified in Table 1 below, at the frequencies and within the timescales specified in that table, and in accordance with the following:
 - (a) The guidance on assessing radioactive discharges in part 5 of 'Radiological Monitoring Technical Guidance Note 1: Standardised Reporting of Radioactive Discharges from Nuclear Sites'
(http://www.sepa.org.uk/media/101584/radiological_monitoring_technical_guidance_note_1_standardised_reporting_of_radioactive_discharges_from_nuclear_sites.pdf)
 - (b) For each reportable quantity, the operator shall highlight any reported value which exceeds the mean plus 3 standard deviations of the previous 12 reported values and, as far as reasonably practicable, provide an explanation for any such elevated value.

Table 1 –Waste Disposal Information

Information to be supplied	Frequency required	Date by which information is to be supplied
As specified in Proforma 1 - monthly liquid effluent discharge return	Quarterly	30 days after end of month when discharges made
As specified in Proforma 2 - monthly gaseous effluent discharge return	Quarterly	30 days after end of month when discharges made
As specified in Proforma 3 – monthly disposals of waste by transfer to other sites	Annual	30 days after end of year when disposals made
The operator shall provide the Agency with a report on the waste management performance of the facility, including a breakdown of the radioactive waste disposals avoided as a result of the facility operations and materials made available for recycling as a result of the facility operations.	Annual	30 days after end of year when disposals made

NOTE:- Returns may be submitted using a format substantially similar to that shown in the relevant proforma.

2. The operator shall, within 4 months of the end of the calendar quarter in which the samples were taken, report analytical results for each sample specified in the table in paragraph 2 of requirement 3.2.5(b) from which an aliquot was dispatched to the Agency's contract laboratory.

3. The operator shall report the results of the environmental monitoring programme (see condition 3.2.1) on an annual basis; the reports to be provided within 2 months of the end of the year to which they refer and in accordance with the following:
- (a) all positive results (ie those exceeding the detection limit) shall be reported with an uncertainty which is at the 95% confidence level (ie 1.96 standard deviations) and includes all analytical uncertainties in accordance with ISO 17025. Where results are less than, or equal to, the detection limit, the detection limit value shall be reported. (See paragraph 1 above for definition of detection limit.);
 - (b) reasons shall be identified for why any:
 - results are late;
 - sample has not been obtained;
 - analysis has not been undertaken;
 - relevant detection limit has not been achieved;
 - radiological assessment has used alternatives to the values and relationships given in Annexes II and III to the Council Directive 96/29/Euratom of 13 May 1996. The alternative data used shall be provided.
 - (c) the type(s) of instrument used for contamination monitoring shall be specified;
 - (d) where gamma-spectrometry has been carried out on sediment samples, any positive results for potassium-40 shall be reported;
 - (e) any result which exceeds the mean plus 3 standard deviations of the previous 12 results shall be highlighted and, as far as reasonably practicable, an explanation shall be provided for any such elevated value;
 - (f) any result which exceeds the mean plus 4 standard deviations of the previous 12 results shall be notified to the Environment Agency, without delay.
 - (g) The report for the last quarter of each calendar year shall include annual means and annual ranges for each type of measurement at each location.
4. The information required by paragraph 2 of this specification shall be sent to:
- Radiological Monitoring and Assessment Team
 - Environment Agency
 - Lutra House
 - Dodd Way
 - Walton Summit
 - Bamber Bridge
 - Preston
 - PR5 8BX

All other information required by this specification shall be sent to:

- Nuclear Regulation Group North
- Environment Agency
- Ghyll Mount
- Gillian Way
- Penrith 40 Business Park
- Penrith
- Cumbria
- CA11 9BP

PROFORMA 1

QUARTERLY GASEOUS EFFLUENT DISCHARGE RETURN

	MONTH YEAR	MONTH YEAR	MONTH YEAR	TOTAL FOR QUARTER YEAR	QUARTERLY TOTAL as % of ANNUAL LIMIT
α (Bqm ⁻³)					
Total α (kBq)					
β (Bqm ⁻³)					
Total β (kBq)					
TOTAL VOLUME DISCHARGED (m ³)					N/A

SIGNED.....

PRINT NAME..... **DATE**:.....

PROFORMA 2

QUARTERLY LIQUID EFFLUENT DISCHARGE RETURN

	MONTH YEAR	MONTH YEAR	MONTH YEAR	TOTAL FOR QUARTER YEAR	QUARTERLY TOTAL as % of ANNUAL LIMIT
α (Bqm ⁻³)					
Total α (kBq)					
Other radionuclides (Bqm ⁻³)					
Total Other radionuclides (kBq)					
TOTAL VOLUME DISCHARGED (m ³)					N/A

SIGNED.....

PRINT NAME.....

DATE.....

