

SCOTTISH ENVIRONMENT PROTECTION AGENCY

RADIOACTIVE SUBSTANCES ACT 1993 (AS AMENDED) ("the Act")

NOTICE OF VARIATION UNDER SECTION 17 OF THE ACT

NOTICE NUMBER: RSA/A/0070022/VN03


NAME: EDF Energy Nuclear Generation Limited
(formerly known as British Energy Generation Limited)

REGISTERED OFFICE: Barnett Way
Barnwood
Gloucester
GL4 3RS

REGISTERED NO: 03076445
(the "Authorisation Holder")

Notice is hereby given to the Authorisation Holder that Authorisation with Certificate Number RSA/A/0070022 is varied as specified in Schedule 1 attached to and forming part of this Notice of Variation by the Scottish Environment Protection Agency ("SEPA"), in exercise of its powers under section 17(2) of the Act.

Effective date of Variation: 14 June 2016


.....
Authorised to sign on behalf of the
Scottish Environment Protection Agency

Date: 16/5/16

Under Section 26 of the Act you have a right of appeal to the Scottish Ministers against the terms of this notice, except where it relates to a Direction given to SEPA by the Scottish Ministers. The procedures to be followed in the event of an appeal are set out in the Radioactive Substances (Appeals) Regulations 1990. Any appeal must be made within 2 months of the date of this notice. Note that there is no right of appeal against the revocation of a condition or limitation subject to which the Authorisation has effect.

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RADIOACTIVE SUBSTANCES ACT 1993 (AS AMENDED)("the Act")

SCHEDULE 1 TO NOTICE OF VARIATION UNDER SECTION 17 OF THE ACT

This is Schedule 1 attached to and forming part of the Notice of Variation number RSA/A/0070022/VN03.

The Certificate of Authorisation Number RSA/A/0070022 is varied as follows:

1. The Contents page, Interpretation of Terms, Schedules 1-10 and Appendix 1 are deleted and are replaced with the following:

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INTERPRETATION OF TERMS

(1) In this Authorisation:

Except where otherwise specified, words and expressions defined in the Radioactive Substances Act 1993 shall have the same meanings when used in this Authorisation as they have in that Act;

"the Act" means The Radioactive Substances Act 1993 as amended;

"activity", expressed in becquerels, means the number of spontaneous nuclear transformations occurring in a period of one second;

"aqueous waste" means radioactive waste in the form of a continuous aqueous phase together with any entrained solids, gases and non-aqueous liquids;

"Authorisation" means an Authorisation issued under the Radioactive Substances Act 1993 or the Radioactive Substances Act 1960;

"Authorised Person" means a person who is authorised in writing by SEPA under Section 108 of the Environment Act 1995 to exercise the powers specified in that Section;

"the Authorised Premises" are the premises defined in Schedule 1;

"Bq", "kBq", "MBq", "GBq", "TBq" and "PBq" are used as abbreviations meaning becquerel, kilobecquerel, megabecquerel, gigabecquerel, terabecquerel and petabecquerel respectively;

"calendar year" means a period of 12 consecutive months beginning on 1 January;

"environment" means all, or any, of the media of air, water (to include sewers and drains) and land;

"Environmental Permit" has the meaning given in regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2010;

"Environmental Operating Rule" means a mandatory restriction on operation, established by the Authorisation Holder, which is necessary to ensure compliance with this Authorisation;

"gaseous waste" means radioactive waste in the form of gases and associated mists and particulate matter;

"Hythe Incinerator Operator" means the holder of the environmental permit authorising the disposal of radioactive waste on or from the incinerator at Charleston Road, Hardley, Hythe, Southampton, Hampshire SO45 3ZA;

"Intermediate Level Waste" or "ILW" with radioactivity levels exceeding the upper boundaries for low level wastes, but which does not require heating to be taken into account in the design of storage or disposal facilities;

"Low Level Waste" or "LLW" means radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma activity;

"maintenance instructions" means instructions, established by the Authorisation Holder, for carrying out any maintenance that may have an effect on compliance with this Authorisation;

"maintenance schedule" means a programme, established by the Authorisation Holder, for maintenance of all systems and equipment that contribute to achieving compliance with this Authorisation;

"management system" includes organisational structure and procedures established by the Authorisation Holder;

"month" means calendar month (i.e. 1-31 January, 1-28/29 February, 1-31 March, etc.);

"operating instructions" means instructions, established by the Authorisation Holder, for carrying out any operation that may have an effect on compliance with this Authorisation;

"Radioactive Waste Adviser" means a person having a current valid certificate recognising the capacity to act as a Radioactive Waste Adviser issued by an Assessing Body approved by SEPA or a Corporate Radioactive Waste Adviser working in accordance with Corporate Arrangements approved by SEPA;

"quarter" means any period of three consecutive months;

"samples" includes samples that have been prepared or treated to enable measurements of activity to be made;

"Schedule" means a Schedule forming part of this Authorisation;

"SEPA" means the Scottish Environment Protection Agency;

"the Undertaking" means the undertaking defined in Schedule 1;

"treatment" includes the recovery of reusable materials or to make the subsequent storage or disposal of the waste more manageable;

"Transfrontier Shipment of Radioactive Waste Regulations" means the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008, as amended, and any subsequent revisions;

"Waste permitted person" means a person who is suitably:

authorised under the Act to dispose of or accumulate waste; or

permitted under the Environmental Permitting (England and Wales) Regulations 2010 to dispose of or accumulate radioactive waste

"week" means a period of 7 consecutive days commencing at a day and time to be notified in writing to SEPA by the Authorisation Holder at least 14 days before any disposal of radioactive waste is made under the terms of this Authorisation, any subsequent change being notified in writing to SEPA at least 7 days in advance;

"year" means any period of 12 consecutive months;

(2)(a) In this Authorisation the Interpretation Act 1978 shall apply as it does to an Act of Parliament and in particular words in the singular include the plural and words in

the plural include the singular.

- (b) Any reference to a numbered Condition, Limitation, Schedule, Table, Appendix, Figure or Paragraph is a reference to a numbered Condition, Limitation, Schedule, Table, Appendix, Figure or Paragraph in this Authorisation.
- (c) Except where otherwise specified in this Authorisation, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of this Authorisation) and to any other enactment, which may, after the date of this Authorisation, directly or indirectly replace it, with or without amendment.
- (3)(a) In determining whether particular means are the "best practicable" for the purposes of this Authorisation, the Authorisation Holder shall not be required to incur expenditure whether in money, time or trouble which is, or is likely to be, grossly disproportionate to the benefits to be derived from, or likely to be derived from, or the efficacy of, or likely efficacy of, employing them, the benefits or results produced being, or likely to be, insignificant in relation to the expenditure.

- (b) Where reference is made to the use of "best practicable means" in this Authorisation, the terms "best", "practicable" and "means" have the following meaning:

"Best" – means the most effective techniques for achieving a particular objective, having due regard to technological advances (state of the art) and changes in scientific knowledge; and understanding.

"Practicable" – indicates that the "means" under consideration should only be selected following an optimisation process that includes consideration of the technical viability including comparable processes, facilities or methods of operation which have recently been successfully tried out and takes into account social and economic costs and benefits.

"Means" – includes: technology, disposal options, the design, build, maintenance, operation and decommissioning of facilities, and wider management arrangements.

- (c) The social and economic costs and benefits that should be taken into account in the optimisation process used to decide what is practicable includes (where relevant):

- economic costs
- social benefits
- radiological exposures to the public
- occupational radiological exposures
- radiological impact on the environment
- conventional safety
- consistency with the waste hierarchy
- impact of the non-radioactive properties of radioactive waste
- the generation and associated impact of non-radioactive wastes, including climate change emissions
- the proximity principle
- applicable government policy

- (4) Where reference is made to radiological effects on the environment in this Authorisation it includes the effects on any living organism supported by the environment.

1. LIMITATIONS AND CONDITIONS RELATING TO THE AUTHORISED PREMISES AND THE UNDERTAKING

1.1 Description of Undertaking

1.1.1 The Undertaking is the generation of electricity from two Advanced Gas-cooled Reactors.

1.2 The Authorised Premises

1.2.1 The Authorised Premises are as shown delineated in red on the Site Plan forming Appendix 1 of this Authorisation and at the date of this Authorisation having postal address Hunterston B Power Station, West Kilbride, Ayrshire KA23 9QJ.

2. GENERAL LIMITATIONS AND CONDITIONS

2.1 Disposal

- 2.1.1 The Authorisation Holder shall use the best practicable means to minimise the volume of and the total radioactivity in radioactive waste produced.
- 2.1.2 For each of the relevant waste types and disposal routes specified in Table 3.1, the Authorisation Holder shall use the best practicable means to:
 - 2.1.2.1 minimise the radioactivity of gaseous and aqueous radioactive waste disposed of by discharge to the environment; and
 - 2.1.2.2 dispose of radioactive waste at times, in a form, and in a manner so as to minimise the radiological effects on the environment and members of the public.
- 2.1.3 The Authorisation Holder shall maintain in good repair the systems and equipment provided:
 - 2.1.3.1 to meet the requirements of paragraphs 2.1.1 and 2.1.2; and
 - 2.1.3.2 for the disposal of radioactive waste under this Authorisation.
- 2.1.4 The Authorisation Holder shall check, at an appropriate frequency, the effectiveness of systems, equipment and procedures provided:
 - 2.1.4.1 to meet the requirements of paragraphs 2.1.1 and 2.1.2; and
 - 2.1.4.2 for the disposal of radioactive waste under this Authorisation.

2.2 Management

- 2.2.1 The Authorisation Holder shall have a management system and resources which are sufficient to achieve compliance with the limitations and conditions of this Authorisation and which include, without restricting the generality of the requirement under this paragraph:
 - 2.2.1.1 written arrangements specifying how the Authorisation Holder will achieve compliance with each limitation and condition of this Authorisation, to include arrangements for control of the design and operation of systems and equipment provided for such compliance with this authorisation, and any modifications made to these systems and equipment;
 - 2.2.1.2 written Environmental Operating Rules and operating instructions;
 - 2.2.1.3 a written maintenance schedule and instructions;
 - 2.2.1.4 written arrangements describing how the Authorisation Holder optimises their approach to waste management in an integrated way, which includes the waste streams and disposals expected from current and future operations;
 - 2.2.1.5 adequate supervision of the disposal of radioactive waste by suitably qualified and experienced persons, whose names shall be clearly displayed with each copy of this Authorisation that is posted on the Authorised Premises as required by Section 19 of the Act;

- 2.2.1.6 adequate supervision by suitably qualified and experienced persons of the operation and maintenance of the systems and equipment provided to meet the requirements of paragraphs 2.1.1 and 2.1.2 and for the disposal of radioactive waste;
- 2.2.1.7 internal audit and review of the Authorisation Holder's management system and its efficacy.
- 2.2.2 The Authorisation Holder shall inform SEPA, at least 28 days in advance or, where this is not possible, without delay, of any change in the management system, or resources which might have, or might reasonably be seen to have, a significant impact on how compliance with the limitations and conditions of this Authorisation is achieved.
- 2.2.3 The Authorisation Holder shall appoint, retain and consult with such suitable Radioactive Waste Advisers as are necessary for the purpose of advising the Authorisation Holder as to compliance with the relevant limitations and conditions of this Authorisation; including but not limited to:
 - 2.2.3.1 achieving and maintaining an optimal level of protection of the environment and the population;
 - 2.2.3.2 checking the effectiveness of technical devices for protecting the environment and the population;
 - 2.2.3.3 acceptance into service, from the point of view of surveillance of radiation protection, of equipment and procedures for measuring and assessing, as appropriate, exposure and radioactive contamination of the environment and the population; and
 - 2.2.3.4 regular calibration of measuring instruments and regular checking that they are serviceable and correctly used.
- 2.2.4 The Authorisation Holder shall appoint each Radioactive Waste Adviser in writing and include in the appointment the scope of advice which the Radioactive Waste Adviser is required to give.

2.3 Sampling, measurements, tests, surveys and calculations

- 2.3.1 The Authorisation Holder shall take samples and conduct measurements, tests, surveys, analyses and calculations to determine its compliance with the limitations and conditions of this Authorisation.
- 2.3.2 The Authorisation Holder shall undertake a programme to monitor the levels of radioactivity and ionising radiation in the environment and food caused by the disposal of radioactive waste on or from the Authorised Premises by taking such samples, conducting such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, as are necessary to continuously assess the effectiveness of the measures taken by the Authorisation Holder to comply with paragraphs 2.1.1, 2.1.2, 2.1.3 and 2.1.4.
- 2.3.3 The Authorisation Holder shall inform SEPA, at least 28 days in advance or, where this is not possible, without delay, of any change in the programme being undertaken to satisfy paragraph 2.3.2.

- 2.3.4 The Authorisation Holder shall carry out regular review of the adequacy of the programme undertaken to satisfy paragraph 2.3.2.
- 2.3.5 The Authorisation Holder shall use the best practicable means when taking samples and conducting measurements, tests, surveys, analyses and calculations to determine its compliance with the limitations and conditions of this Authorisation, unless particular means are specified in this Authorisation.
- 2.3.6 The Authorisation Holder shall keep any non-gaseous sample or a sub sample taken as a requirement of paragraph 2.3.2 and for the purpose of demonstrating compliance with Authorised Limits for a minimum period of six months from the date of sampling and in sufficient quantity that the analysis carried out by the Authorisation Holder can be repeated, and shall provide any of the samples or sub samples, on request, to an Authorised Person or to such other person as an Authorised Person specifies; and if required by SEPA dispatch samples for tests at a laboratory 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 appropriate transport regulations are complete.
- 2.3.7 The Authorisation Holder may dispatch samples of radioactive waste for testing to a Waste Permitted Person or to a person outside the United Kingdom who is legally entitled to accept the samples, but only where the quantity dispatched is the minimum practicable quantity that is necessary to carry out the planned tests. On completion of testing the samples or residues thereof may be returned to the Authorised Premises.
- 2.3.8 The Authorisation Holder shall provide and at all times maintain in good repair systems and equipment for:
- 2.3.8.1 carrying out any sampling, monitoring and measurements necessary to determine compliance with the limitations and conditions of this Authorisation; and
- 2.3.8.2 measuring and assessing exposure of members of the public and radioactive contamination of the environment.
- 2.3.9 The Authorisation Holder shall have and comply with appropriate criteria for the acceptance into service of systems, equipment and procedures for:
- 2.3.9.1 carrying out any sampling, monitoring and measurements necessary to determine compliance with the limitations and conditions of this Authorisation; and
- 2.3.9.2 measuring and assessing exposure of members of the public and radioactive contamination of the environment.
- 2.3.10 The Authorisation Holder shall carry out:
- 2.3.10.1 regular calibration, at an appropriate frequency, of systems and equipment provided for:
- 2.3.10.1.1 carrying out any sampling, monitoring and measurements necessary to determine compliance with the limitations and conditions of this Authorisation; and

2.3.10.1.2 measuring and assessing exposure of members of the public and radioactive contamination of the environment;

2.3.10.2 regular checking, at an appropriate frequency that such systems and equipment are serviceable, accurate and effective and correctly used at all times.

2.4 Records

2.4.1 The Authorisation Holder shall make, as soon as is reasonably practicable, and retain true, accurate and legible records sufficient to demonstrate whether the limitations and conditions of this Authorisation are and have been complied with.

2.4.2 If the Authorisation Holder amends any record made in accordance with this Authorisation the Authorisation Holder shall ensure that the original entry remains clear and legible.

2.4.3 The Authorisation Holder shall:

2.4.3.1 retain all records made in accordance with all previous Authorisations issued to the Authorisation Holder and related to the Authorised Premises covered by this Authorisation; and

2.4.3.2 retain all records transferred to the Authorisation Holder by all predecessor Authorisation Holder(s) which were made in accordance with any previous Authorisation related to the Authorised Premises covered by this Authorisation.

2.4.4 The Authorisation Holder shall at all times keep the records referred to in paragraphs 2.4.1 and 2.4.3 on the Authorised Premises unless otherwise agreed in writing with SEPA.

2.4.5 The Authorisation Holder shall retain the records referred to in paragraphs 2.4.1 and 2.4.3 until notified in writing by SEPA that the records no longer need to be retained.

2.5 Provision of information

2.5.1 The Authorisation Holder shall supply on request and without delay, to any Authorised Person any record made as a requirement of this Authorisation.

2.5.2 The Authorisation Holder shall supply to SEPA any such information in such format and within such time as specified in Schedule 9 of this Authorisation and other such information to determine the efficacy of and compliance with this Authorisation as SEPA may periodically specify in writing.

2.5.3 The Authorisation Holder shall inform SEPA without delay if the Authorisation Holder has reason to believe that disposal of radioactive waste is occurring, has occurred or might occur which does not comply with the limitations and conditions of this Authorisation, and shall report the circumstances in writing to SEPA as soon as practicable thereafter.

2.6 Remediation of contamination

2.6.1 The Authorisation Holder shall use best practicable means to remediate any radioactive contamination that has resulted from any unauthorised release of radioactive substances on or from the Authorised Premises.

2.6.2 The Authorisation Holder shall undertake any remediation required by 2.6.1 as soon as is reasonably practicable following identification of any such contamination.

2.7 Improvements

2.7.1 The Authorisation Holder shall carry out the improvements specified in Schedule 10 of this Authorisation and within such times as specified in Schedule 10.

3. RADIOACTIVE WASTE TYPES AUTHORISED FOR DISPOSAL AND AUTHORISED DISPOSAL ROUTES

3.1 Disposal of radioactive waste

3.1.1 Subject to paragraph 3.2, the Authorisation Holder is authorised to dispose only of the radioactive waste arising from the Undertaking at the Authorised Premises and that transferred by the Authorisation Holder from its premises at Torness Power Station, only of the types of radioactive waste identified in Table 3.1, and in accordance with any further limitations and conditions contained within Schedules 4 to 10.

3.2 National Arrangements for Incidents involving Radioactivity (NAIR)

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

3.2.1.1 transfers the waste to a person whom SEPA has agreed in writing may receive that waste; and

3.2.1.2 as soon as practicable provides to SEPA all available details in writing of the nature of the radioactive waste, the radionuclides present, their activities and the manner and date of disposal.

Table 3.1

Radioactive Waste Type	Disposal Route
Gaseous Waste	Discharge to the environment
Aqueous Waste	Discharge to the environment
Low Level Waste	Transfer to a Waste Permitted Person within the United Kingdom
	Transfer to a Person outwith the United Kingdom
	Transfer to EDF Energy at Torness Power Station
	Incineration on the Authorised Premises
Intermediate Level Waste	Transfer to a specified person within the United Kingdom
	Transfer to a Person outwith the United Kingdom

4. FURTHER LIMITATIONS AND CONDITIONS RELATING TO DISPOSAL OF RADIOACTIVE GASEOUS WASTE BY DISCHARGE TO THE ENVIRONMENT

4.1 Discharge of radioactive gaseous waste

4.1.1 The Authorisation Holder shall discharge radioactive gaseous waste to the environment only by means of the outlets identified in Table 4.1.

4.1.2 The Authorisation Holder shall not in any year discharge gaseous waste in which the activity of any radionuclide or group of radionuclides specified in column 1 of Table 4.2 exceeds the relevant Annual Limit in column 2 of that table.

4.1.3 The Authorisation Holder shall use the best practicable means to exclude entrained particulate matter and mists from radioactive gaseous waste prior to discharge to the environment.

4.2 Discharges exceeding or likely to exceed a Weekly Advisory Level

4.2.1 If, in any week, the activity in gaseous waste of any radionuclide or groups of radionuclides specified in column 1 of Table 4.2 exceeds, or is likely to exceed the relevant Weekly Advisory Level (where specified) in column 3 of that table, the Authorisation Holder shall:

4.2.1.1 without delay, inform SEPA and the Food Standards Scotland; and

4.2.1.2 as soon as reasonably practicable, advise SEPA and the Food Standards Scotland of the circumstances leading to the release and the possible impact of any deposition of radioactivity on pasture or crops in the vicinity of the Authorised Premises, including any measurements made.

4.3 Discharges exceeding a Quarterly Notification Level

4.3.1 If, in any quarter, the activity in gaseous waste of any radionuclide or groups of radionuclides specified in column 1 of Table 4.2 exceeds the relevant Quarterly Notification Level (where specified) in column 4 of that table, the Authorisation Holder shall not later than 14 days from making the record which demonstrates such an excess provide SEPA with a written submission which includes:

4.3.1.1 details of the occurrence; and

4.3.1.2 a description of the means used to minimise the activity of gaseous waste discharged; and

4.3.1.3 a review of those means having regard to paragraphs 2.1.1 and 2.1.2.

Table 4.1

Authorised Gaseous Discharge Outlets	Height of Outlet Above Ground (m)
Reactor Main Blowdown System	67
Auxiliary CO2 Blowdown System	46
Charge Machine Emergency Cooling Contaminated Ventilation	67
Central Contaminated Ventilation - East	67
Central Contaminated Ventilation - West	67
Pond Contaminated Ventilation System - East	67
Pond Contaminated Ventilation System - West	67
Reactor 3 Pile-cap interspace Contamination Ventilation	67
Reactor 4 Pile-cap interspace Contamination Ventilation	67
IFD Cell 2 Contamination Ventilation	67
Low Level Waste Facility Contaminated Ventilation	13
Active Laundry Contaminated Ventilation System	10
Radiochemistry Laboratory Fume Cupboard System	67
Instrument Calibration Facility Source Store Roof Fan Ventilation System	7
Gas Circulator Workshop Contamination Ventilation System	6, 3, and 12
Heavy Decontamination Centre Contamination Ventilation System	5
Metallurgy Laboratory Fume Cupboard System	3
Reactor 3 Pressure Vessel relief Valves	67
Reactor 4 Pressure Vessel relief Valves	67

Table 4.2

Column 1	Column 2	Column 3	Column 4
Radionuclide or Group of Radionuclides	Annual Limit (GBq)	Weekly Advisory Level (GBq)	Quarterly Notification Level (GBq)
Tritium	15000	1500	3750
Carbon-14	4500	450	1125
Sulphur-35	500	50	125
Argon-41	150000	Not specified	37500
Iodine-131	2	Not specified	0.5
Beta emitting radionuclides associated with particulate matter	0.5	Not specified	0.125

5. FURTHER LIMITATIONS AND CONDITIONS RELATING TO DISPOSAL OF RADIOACTIVE AQUEOUS WASTE BY DISCHARGE TO THE ENVIRONMENT

5.1 Discharge of Radioactive Aqueous Waste

5.1.1 The Authorisation Holder shall only discharge radioactive aqueous waste to the environment only at the location specified in Table 5.1 and through the systems specified in that Table.

5.1.2 The Authorisation Holder shall discharge radioactive aqueous waste to the environment only:

5.1.2.1 When the nominal flow of cooling water is no less than 7m³/s;

5.1.2.2 When the cooling water is discharging to the Firth of Clyde at National Grid Reference NS 1773 5176; and

5.1.2.3 During the interval commencing one hour after high-tide and ending one hour before low tide.

5.1.3 The Authorisation Holder shall use the best practicable means to exclude entrained particulate matter, gases and non-aqueous liquids from radioactive aqueous waste prior to discharge to the environment.

5.1.4 The Authorisation Holder shall not in any year discharge radioactive aqueous waste in which the activity of any radionuclide or group of radionuclides specified in column 1 of Table 5.2 exceeds the relevant Annual Limit in column 2 of that table.

5.2 Discharges exceeding a Quarterly Notification Level

5.2.1 If, in any quarter, the activity in radioactive aqueous waste discharged of any radionuclide or group of radionuclides specified in column 1 of Table 5.2 exceeds the relevant Quarterly Notification Level (where specified) in column 3 of that table, the Authorisation Holder shall not later than 14 days from making the record which demonstrates such an excess, provide SEPA with a written submission which includes:

5.2.1.1 details of the occurrence;

5.2.1.2 a description of the means used to minimise the activity of radioactive aqueous waste discharged;

5.2.1.3 a review of those means having regard to paragraphs 2.1.1 and 2.1.2.

Table 5.1

Authorised Aqueous Discharge System
System provided by the Authorisation Holder for the collection, conveyance and discharge of radioactive aqueous waste to the siphon seal pit at National Grid Reference NS 1845 5158.

Table 5.2

Column 1	Column 2	Column 3
Radionuclide or Group of Radionuclides	Annual Limit (GBq)	Quarterly Notification Level (GBq)
Tritium	700000	175000
Sulphur-35	6000	1500
Cobalt-60	10	2.5
Alpha emitting radionuclides	1	0.25
Any non-alpha emitting radionuclides taken together excluding those listed individually in this schedule	150	37.5

6. FURTHER LIMITATIONS AND CONDITIONS RELATING TO DISPOSAL OF RADIOACTIVE WASTE BY INCINERATION ON THE AUTHORISED PREMISES

6.1 Incineration of radioactive waste

- 6.1.1 The Authorisation Holder shall only incinerate radioactive waste of the type specified in Table 6.1.
- 6.1.2 The Authorisation Holder shall only incinerate radioactive waste in the unit specified in Table 6.2.
- 6.1.3 The Authorisation Holder shall use best practicable means to remove suspended solids from the radioactive waste oil prior to incineration.
- 6.1.4 The Authorisation Holder shall not in any year incinerate waste in which the activity of any radionuclide or group of radionuclides, specified in Table 6.3, exceed the relevant Annual Limit.

Table 6.1

Authorised Waste Types
Waste oil

Table 6.2

Authorised Incineration Unit
Waste oil burner, located at National Grid Reference NS 1864 5153, with stack discharging 14 metres above ground level

Table 6.3

Radionuclide or group radionuclides	Annual Limit (GBq)
Tritium	3
Carbon-14 and Sulphur-35	1
Any non-alpha emitting radionuclides taken together excluding those listed individually in this schedule	0.8
Alpha emitting radionuclides	0.02

7. FURTHER LIMITATIONS AND CONDITIONS RELATING TO THE DISPOSAL OF RADIOACTIVE WASTE BY TRANSFER

7.1 Further Limitations on the Disposal of Radioactive Waste within the United Kingdom

7.1.1 Subject to 7.1.2 and 7.1.3, the Authorisation Holder is authorised to dispose of LLW:

7.1.1.1 only to a waste permitted person; and

7.1.1.2 only where this is the best practicable means for the disposal of that type of waste.

7.1.2 In relation to LLW disposed of to the Authorisation Holder's premises at Torness Power Station, the LLW so disposed must be disposed of from Torness Power Station no later than 6 months after it leaves the Authorised Premises.

7.1.3 The Authorisation Holder must dispose of from the Authorised Premises; any LLW disposed of from Torness Power Station to the Authorised Premises no later than 6 months after it leaves Torness Power Station.

7.1.4 The Authorisation Holder is authorised to dispose of the radioactive waste types identified in Table 7.1 for the purpose of treatment to the relevant person or persons specified in Table 7.1 and to the relevant destination specified in Table 7.1.

7.2 Disposal of Radioactive Waste by Transfer

7.2.1 Before each consignment of radioactive waste is disposed of, the Authorisation Holder shall:

7.2.1.1 determine the radionuclides contained in the radioactive waste and their radioactivity;

7.2.1.2 provide to the person to whom the radioactive waste is to be disposed with a written description of the radioactive waste and the radioactivity of the radionuclides contained therein;

7.2.1.3 obtain confirmation that the person to whom the radioactive waste is to be disposed agrees to accept the radioactive waste.

7.2.2 All disposals of radioactive waste shall be accompanied at all times by a true and accurate record signed by or on behalf of the Authorisation Holder. This record shall detail the physical description of the radioactive waste, the radionuclides contained in the radioactive waste, the volume of the radioactive waste and the activity of each of the radionuclides in the radioactive waste. A copy of this record shall be provided to the person to whom the waste is transferred at the time of disposal and a copy shall be retained by the Authorisation Holder.

7.2.3 The Authorisation Holder shall not make any disposal of radioactive waste from the Authorised Premises unless a receipt is obtained from the person (or his agent) who removes such waste from the Authorised Premises.

7.2.4 The Authorisation Holder shall obtain written confirmation as soon as is reasonably practicable from the person to whom such waste is transferred that they have received such waste.

7.2.5 The Authorisation Holder shall notify SEPA in writing at least 28 days in advance of the first disposal of the radioactive waste to any person. The notification shall include:

7.2.5.1 the name and address of the person; and

7.2.5.2 the address and type of the radioactive waste treatment and/or disposal and/or accumulation facility to be used; and

7.2.5.3 evidence that the Authorisation Holder has established that the person is suitably authorised to receive or dispose of the radioactive waste.

7.3 Radioactive Waste Found Following the Transfer not to be in accordance with the Limitations and Conditions of this Authorisation

7.3.1 If required by SEPA, the Authorisation Holder shall ensure that any consignment, or part of any consignment of radioactive waste, found following transfer not to be in accordance with the limitations or conditions of this Authorisation:

7.3.1.1 is packaged in accordance with the appropriate transport regulations; and

7.3.1.2 is returned as soon as reasonably practicable to the Authorised Premises.

7.4 Radioactive Waste which cannot be Disposed of Due to Non-delivery

7.4.1 If any disposal of radioactive waste cannot be completed by reason of non-delivery for any reason, the Authorisation Holder shall ensure that the radioactive waste is returned to the Authorised Premises forthwith.

Table 7.1

Description of ILW	Persons to Whom Waste is to be sent	Destination
Oily waste arising on the Authorised Premises	Hythe Incinerator Operator	Charleston Road, Hardley, Hythe, Southampton, Hampshire SO45 3ZA

8. FURTHER CONDITIONS AND LIMITATIONS RELATING TO THE DISPOSAL OF RADIOACTIVE WASTE BY TRANSFER TO A PERSON OUTWITH THE UNITED KINGDOM

8.1 Further Limitations on the Disposal of Radioactive Waste to a Person outwith the United Kingdom

8.1.1 The Authorisation Holder is authorised to dispose of radioactive waste to a person outwith the UK:

8.1.1.1 only where this is the best practicable means for the disposal of that type of waste; and

8.1.1.2 only for the purpose of treatment followed by return of any radioactive waste arisings; and

8.1.1.3 only in accordance with an authorisation granted under the Transfrontier Shipment of Radioactive Waste Regulations.

8.2 Disposal of Radioactive Waste by Transfer

8.2.1 Before each consignment of radioactive waste is disposed of to any person outwith the United Kingdom the Authorisation Holder shall:

8.2.1.1 determine the radionuclides contained in the radioactive waste and their radioactivity;

8.2.1.2 provide to the person to whom the radioactive waste is to be disposed with a written description of the radioactive waste and the radioactivity of the radionuclides contained therein;

8.2.1.3 obtain confirmation that the person to whom the radioactive waste is to be disposed agrees to accept the radioactive waste.

8.3 Radioactive Waste Found Following the Transfer not to be in accordance with the Limitations and Conditions of this Authorisation

8.3.1 If required by SEPA, the Authorisation Holder shall ensure that any consignment, or part of any consignment of radioactive waste, found following transfer not to be in accordance with the limitations or conditions of this Authorisation:

8.3.1.1 is packaged in accordance with the appropriate transport regulations; and

8.3.1.2 is returned as soon as reasonably practicable to the Authorised Premises.

8.4 Radioactive Waste which cannot be Disposed of Due to Non-delivery

8.4.1 If any disposal of radioactive waste cannot be completed by reason of non-delivery for any reason the Authorisation Holder shall ensure that the radioactive waste is returned to the Authorised Premises forthwith.

8.5 Return of Radioactive Waste after Treatment

8.5.1 The Authorisation Holder shall ensure that the radionuclides contained in the radioactive waste to be returned to the Authorised Premises and their

radioactivity is determined before the radioactive waste is returned to the Authorised Premises.

- 8.5.2 Radioactive waste arising from the treatment shall be accepted for return to the Authorised Premises only if:
 - 8.5.2.1 the waste does not contain any other radionuclides that were not present in the radioactive waste at the time of its transfer except for those present as a result of radioactive decay; and
 - 8.5.2.2 the radioactivity in the radioactive waste is no greater than at the time of its transfer to that person as determined as a requirement of paragraph 8.2.1.1.

9. INFORMATION REQUIREMENTS

9.1 Information Requirements

9.1.1 The Authorisation Holder shall provide the information specified in Table 9.1 by the relevant completion date.

Table 9.1

Specified information	Completion Date
<p>1. The Authorisation Holder shall in respect of the programme being undertaken to satisfy paragraph 2.3.2 provide to SEPA in writing the results of the said programme and a report assessing the results in respect of the radiation exposure of humans and trends in radioactivity concentration in the environment. The Authorisation holder 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.</p>	<p>Not later than 90 days after the end of each 3 month period or within such longer period as SEPA may approve in writing.</p>
<p>2. The Authorisation Holder shall provide SEPA with a report of a dose assessment to non-human species residing within environmentally sensitive areas within 20Km of the Authorised Premises from:</p> <ul style="list-style-type: none"> a. discharges made over the past 3 years; and b. predicted discharges to be made over the next 3 years. 	<p>Three years from the effective date of this Variation Notice and at the same intervals thereafter unless SEPA otherwise specifies in writing.</p>
<p>3. The Authorisation Holder shall provide SEPA with a monthly report summarising:</p> <ul style="list-style-type: none"> 1. gaseous waste: <ul style="list-style-type: none"> a. the radioactivity discharged during the month and b. the total radioactivity of the radionuclides or group of radionuclides disposed of during the rolling year and compared to the relevant annual limit; 2. aqueous liquid waste; <ul style="list-style-type: none"> a. the total volume discharged and b. its radioactivity and c. the total radioactivity of the radionuclides or group of radionuclides disposed of during the rolling year and compared to the relevant annual limit; and 3. for the disposal of waste by transfer, for each consignment disposed during the month: <ul style="list-style-type: none"> a. a description of the waste, b. the purpose of the transfer, c. its volume and 	<p>Not later than 28 days after the end of each month and at the same interval thereafter unless SEPA otherwise specifies in writing.</p>

<p>d. total radioactivity and e. the name of the person and address of the premises that received the waste.</p> <p>The reporting shall be in accordance with SEPA's Radiological Monitoring Technical Guidance Note 1 – Standardised Reporting of Radioactive Discharges from Nuclear Sites.</p>	
<p>4. For each calendar year the Authorisation Holder shall provide SEPA with a full report of its efforts to reduce gaseous, aqueous, waste oil, LLW and ILW disposals from the Station, having regard to Conditions 2.1.1 and 2.1.2 of Schedule 2.</p>	<p>Not later than 31 March of the next calendar year.</p>

10. IMPROVEMENT REQUIREMENTS

10.1 Improvement Requirements

10.1.1 The Authorisation Holder shall complete the specified improvements in Table 10.1 by the relevant completion date and, shall notify SEPA, in writing, within 14 days of the completion of each of those specifications.

Table 10.1

Specified improvements	Completion Date
Not specified	

11 APPENDIX 1 – SITE PLAN

KEY
LICENCED SITE
BOUNDARY
GREEN AREAS –
BUILDINGS
DARK BROWN
AREAS –
CONCRETED
AREAS/ROADWAYS
OTHER AREAS –
GRASS

B Station showing licensed site boundary

(Taken from Drawing C24/60500/BEG/328880)

