

Approval with introductory note

Administrative arrangements to achieve controls similar to those under
The Environmental Permitting (England & Wales) Regulations 2016

Secretary of State for Defence

HM Naval Base
Devonport
Plymouth
PL2 2BG

Approval number
EPR/LB3730DK

HM Naval Base, Devonport

Approval number EPR/LB3730DK

Introductory note

This introductory note does not form a part of this approval

This document contains details of an approval by the Environment Agency of the arrangements for the receipt, accumulation and disposal of radioactive waste on and from the premises. This document is similar to an environmental permit issued under the Environmental Permitting Regulations.

Those Regulations do not apply to radioactive substances activities carried on at premises occupied on behalf of the Crown for naval, military or air force purposes, by the Ministry of Defence or by Visiting Forces. Nevertheless, it is the Ministry's policy that it will apply, so far as is reasonably practicable, standards of control at least as good as those required by legislation. In support of that policy, the Environment Agency maintains oversight of Ministry of Defence premises through the issue of notifications and approvals.

The main features of the facility are as follows

- *Disposal of gaseous waste to the environment*
- *Disposal of aqueous waste to sewer*
- *Disposal of aqueous waste to the Hamoaze*
- *Transfer of aqueous waste to DRDL for the purpose of subsequent disposal, including to the Hamoaze via the Effluent Treatment Plant*
- *Transfer of solid wastes to DRDL, or other operators, for the purpose of subsequent disposal*

This document is a varied and consolidated approval reflecting the changes made to the approval since issue.

The status log of the approval sets out the approval history, including any changes to the approval reference number .

Status Log of the approval		
Detail	Date	Response Date
Approval BY9922 Effective	01/06/2007	
Application EPR/LB3730DK/V001	06/03/2014	
Variation determined EPR/LB3730DK/V001	01/12/2014	
Application EPR/LB3730DK/V002	04/12/2017	
Variation determined EPR/LB3730DK/V002	16/02/2018	
Revised and consolidated approval EPR/LB3730DK effective	16/02/2018	
Environment Agency initiated variation EPR/LB3730DK/V003 commenced	28/10/2019	
Variation EPR/LB3730DK effective	08/07/2020	
Revised and consolidated Approval EPR/LB3730DK effective	08/07/2020	
Application EPR/LB3730DK/V004	23/06/2021	
Variation determined LB3730DK/V004	08/03/2022	
Varied and consolidated approval EPR/LB3730DK/V004 effective	08/03/2022	

End of Introductory Note

Approval

Approval number

EPR/LB3730DK

The Environment Agency hereby approves

Secretary of State for Defence (“the operator”)

whose principal office is

Director General Nuclear

Ministry of Defence

6_D Main Building

Whitehall

London

SW1A 2HB

to carry on a radioactive substances activities at

HM Naval Base

Devonport

Plymouth

PL2 2BG

(“the premises”)

subject to the limitations and conditions of this approval document.

Name	Date
Jane Longman Team Leader, Nuclear Regulation Group	08 March 2022

Authorised on behalf of the Environment Agency

The approval shall come into effect from 08 March 2022

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that is sufficient to achieve compliance with the conditions of this approval; and
- (b) using sufficient competent persons and resources.

1.1.2 The operator shall maintain records demonstrating compliance with condition 1.1.1.

1.1.3 After completion of requirement IC2 specified in Schedule 1 table S1.2, the operator shall maintain a waste management plan and a site-wide environmental safety case, which together demonstrate throughout the lifecycle of the regulated facility

- (a) how the production and disposal of radioactive waste is managed to protect the environment and to optimise the protection of people;
- (b) how the disposability of radioactive waste that will require disposal on or from the premises is assured;
- (c) how members of the public and the environment are protected from the non-radiological hazards of disposals of radioactive waste; and
- (d) how the premises will be brought to a condition at which it can be released from regulation under this approval.

1.1.4 Any person having duties that are or may be affected by the matters set out in this approval shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.1.5 The operator shall manage and operate the activities in consultation with a suitable Radioactive Waste Adviser for the purpose of advising the operator as to compliance with this approval.

2 Operations

2.1 Approved activities

2.1.1 The operator is only authorised to carry on the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan that is held available for inspection on the premises.

2.3 Operating techniques

2.3.1 The operator shall use the best available techniques to minimise the activity of radioactive waste produced on the premises that will require to be disposed of on or from the premises.

2.3.2 The operator shall use the best available techniques in respect of the disposal of radioactive waste pursuant to this approval to:

- (a) minimise the activity of gaseous and aqueous radioactive waste disposed of by discharge to the environment;
- (b) minimise the volume of radioactive waste disposed of by transfer to other premises;
- (c) 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.

2.3.3 The operator shall use the best available techniques to:

- (a) exclude all entrained solids, gases and non-aqueous liquids from radioactive aqueous waste prior to discharge to the environment;
- (b) characterise, sort and segregate solid and non-aqueous liquid radioactive wastes, to facilitate their disposal by optimised disposal routes;

2.3.4 The operator shall maintain in good repair the systems and equipment provided:

- (a) to meet the requirements of conditions 2.3.1, 2.3.2 and 2.3.3;
 - (b) to carry out any monitoring and measurements necessary to determine compliance with the conditions of this approval;
 - (c) to measure and assess the exposure of members of the public and radioactive contamination of the environment.
- 2.3.5 The operator shall check, at an appropriate frequency, the effectiveness and maintenance of systems, equipment and procedures provided to meet the requirements of conditions 2.3.1, 2.3.2 and 2.3.3.
- 2.3.6 The operator shall have and comply with appropriate criteria for the acceptance into service of adequate systems, equipment and procedures for:
- (a) carrying out any monitoring and measurements necessary to determine compliance with the conditions of this approval;
 - (b) measuring and assessing exposure of members of the public and radioactive contamination of the environment.
- 2.3.7 Subject to condition 2.3.2, the operator shall carry on the activities in a manner so as to minimise the risk of pollution from any non-radioactive substances in, or any non-radiological properties of, the radioactive waste, except to the extent the risk is addressed in a separate environmental permit.

2.4 Improvement and information programme

- 2.4.1 The operator shall complete the requirements specified in schedule 1 table S1.2 by the dates specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of a requirement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each requirement.

2.5 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.3A have been completed.
- 2.5.2 The specific disposals and receipts of radioactive waste identified in schedule 1 table S1.3B shall not commence until the relevant measures specified in that table have been completed.

2.6 Receipt of radioactive waste

- 2.6.1 The operator shall:
- (a) for each type of radioactive waste that the operator is prepared to receive, produce a written specification of the information required to:
 - (i) enable the disposal of that type of radioactive waste in compliance with this approval; or
 - (ii) where disposal of that type of radioactive waste is not currently approved, sufficiently characterise that waste to, as far as reasonably practicable, enable its future disposal;
 - (b) provide that written specification to any person from whom the operator is prepared to receive radioactive waste of that type;
 - (c) only accept a consignment of radioactive waste that is accompanied by a legible note providing the information specified in 2.6.1(a);
 - (d) keep a copy of any such note received;
 - (e) provide a receipt to the consignor in respect of each consignment of radioactive waste that the operator accepts.
- 2.6.2 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
- 2.6.3 Condition not in use.

- 2.6.4 Condition not in use.
- 2.6.5 The provisions of conditions 2.6.1 to 2.6.2 do not apply to any radioactive waste collected as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme

3 Disposals of radioactive waste and monitoring

3.1 Disposals of radioactive waste

- 3.1.1 Subject to condition 3.1.4, there shall be no disposals of radioactive waste except of the types of radioactive waste and by the disposal routes specified in schedule 3.
- 3.1.2 The limits on disposals given in schedule 3 shall not be exceeded.
- 3.1.3 The operator shall ensure the use of an optimised disposal route when disposing of any radioactive waste in accordance with Table S3.4.
- 3.1.4 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;
 - (b) as soon as reasonably practicable provides available details in writing to the Environment Agency of the nature of the radioactive waste, the radionuclides present, their activities and the manner and date of disposal.
- 3.1.5 The operator shall ensure that the transfer of radioactive waste is in accordance with the directions of the person to whom the radioactive waste is transferred that are necessary to enable that person to comply with all relevant regulatory requirements.
- 3.1.6 The operator shall:
- (a) ensure that the person to whom radioactive waste is transferred receives at the time of transfer of each consignment a clear and legible note signed on the operator's behalf stating:
 - (i) the total activity in the consignment of each relevant radionuclide or group of radionuclides listed in the relevant table in schedule 3; or
 - (ii) when no relevant radionuclide or group of radionuclides is specified in schedule 3, the total activity in the consignment of each radionuclide or group of radionuclides as listed in the written specification of the person to whom the radioactive waste is transferred.
 - (b) obtain a note signed on behalf of the person to whom radioactive waste is transferred, at the time of transfer, stating that the transfer has taken place;
 - (c) keep a copy of any note issued under condition 3.1.6(a) and any note received under condition 3.1.6(b).
- 3.1.7 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 approval:
- (a) is packaged in accordance with the relevant legislation;
 - (b) is returned as soon as is reasonably practicable to the operator's premises.
- 3.1.8 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.

3.2 Monitoring

- 3.2.1 The operator shall:
- (a) take samples and conduct measurements, tests, surveys, analyses and calculations to determine compliance with the conditions of this approval;
 - (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.
 - (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 approval or in writing by the Environment Agency;
 - (d) define and document the techniques being employed to determine the activity of radioactive waste disposals and inform the Environment Agency in writing in advance of any modifications to those techniques that have a potential to change the results obtained.
- 3.2.2 The operator shall maintain records of all monitoring required by this approval including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.2.3 Monitoring equipment, techniques, personnel and organisations employed for the monitoring of disposals and the environment required by condition 3.2.1 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.
- 3.2.4 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.
- 3.2.5 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;
 - (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.
- 3.2.6 The operator shall carry out:
- (a) regular calibration, at an appropriate frequency, of measuring instruments and other systems and equipment provided for:
 - (i) carrying out any monitoring and measurements necessary to determine compliance with the conditions of this approval;
 - (ii) measuring and assessing exposure of members of the public and radioactive contamination of the environment.
 - (b) regular checking, at an appropriate frequency, that such measuring instruments and other systems and equipment are serviceable and correctly used.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this approval shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained until notified in writing by the Environment Agency that records no longer need to be retained.

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

4.1.3 The operator shall:

- (a) retain records made in accordance with any previous relevant approval issued to the operator and related to the premises covered by this approval;
- (b) retain records transferred to the operator, which were made in accordance with any previous relevant approval related to the premises covered by this approval.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by this approval to the Environment Agency using the contact details supplied in writing by the Environment Agency.

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.

4.3 Notifications

4.3.1 The operator shall notify the Environment Agency without delay following the detection of:

- (a) any malfunction, breakdown or failure of equipment or techniques or any accident that has caused, is causing or may cause significant pollution or may generate significant amounts of radioactive waste;
- (b) the breach of a limit specified in this approval, or disposal of radioactive waste other than by a relevant approved route;
- (c) any significant adverse environmental effects that could reasonably be seen to result from the operation of the facility.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The operator shall notify the Environment Agency within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

- (a) any change in the operator's name or address;
- (b) any steps taken with a view to the dissolution of the operator.

4.3.5 Where the operator proposes to make a 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 conditions of this approval is achieved, the operator shall:

- (a) notify the Environment Agency at least 28 days before making that change, or where that is not possible, without delay; and
- (b) include in the notification a description of the proposed changes.

4.3.6 Where the operator proposes to make a change to the waste management plan, to the site-wide environmental safety case or, where applicable, to the facility-specific environmental safety case, including a change to the waste acceptance criteria, which might have, or might reasonably be seen to have, a significant impact on the quantity or nature of radioactive wastes disposed or planned to be disposed of on the site, or result in a significant change to the nature, place or environmental impact of such disposals, the operator shall:

- (a) notify the Environment Agency at least 28 days before making that change, including in the notification a description of the proposed changes; and

(b) where the Environment Agency so notifies the operator, not implement the proposed changes until the Environment Agency has given its agreement in writing.

4.3.7 If, in any week, the activity in any radioactive waste disposed of from any outlet or group of outlets specified in schedule 3 of any radionuclide or group of radionuclides exceeds, or is likely to exceed, the relevant Weekly Advisory Level (where specified), the operator shall:

(a) without delay, inform the Environment Agency and the Food Standards Agency;

(b) as soon as reasonably practicable, advise the Environment Agency and the Food Standards Agency of the circumstances at the premises leading to the release and the possible impact of any deposition of radioactivity on pasture or crops in the vicinity of the premises, including any measurements made.

4.3.8 If, in any quarter, the activity in any waste discharged from any outlet or group of outlets specified in schedule 3 of any radionuclide or group of radionuclides exceeds the relevant Quarterly Notification Level (where specified), the operator shall provide the Environment Agency with a written submission which includes:

(a) details of the occurrence;

(b) a description of the means used to minimise the activity of radioactive waste discharged;

(c) a review of those means having regard to conditions 2.3.1, 2.3.2 and 2.3.3;

not later than 14 days from making the record which demonstrates such excess.

4.4 Interpretation

4.4.1 In this approval the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this approval references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 23 of the regulations	Description of specified activity	Limit of specified activity
A1	Sch 23 Part 2 para 11(2)(b)	Disposal of radioactive waste on or from the premises	Disposal of radioactive waste in connection with the operation of HM Naval Base, Devonport.
A2	Sch 23 Part 2 para 11(4)(a)	Receipt of radioactive waste for the purpose of disposal	

Table S1.2 Improvement and information requirements		
Reference	Requirement	Date
IC1	<p>For each calendar year the Operator shall provide the Agency with a report of its efforts to:</p> <ul style="list-style-type: none"> • Use the best available techniques to; <ul style="list-style-type: none"> • minimise the activity of radioactive waste produced, in accordance with condition 2.3.1. • minimise the activity of gaseous and aqueous radioactive waste disposed of by discharge to the environment, in accordance with condition 2.3.2. • minimise the volume of radioactive waste disposed of by transfer to other premises, in accordance with condition 2.3.2. • 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 in accordance with condition 2.3.2. • Dispose of each solid and non-aqueous waste form by an optimised disposal route, in accordance with approval condition 3.1.3. <p>The form of this report to be agreed in writing by the Environment Agency.</p>	Not later than 31 March of the following calendar year.
IC2	Prepare a suitable waste management plan and a site-wide environmental safety case to meet the requirements of condition 1.1.3 of this approval, and have these available for inspection by the Environment Agency.	31 December 2023

Table S1.3A Pre-operational measures	
Reference	Measure
	None specified

Table S1.3B Pre-operational measures for future development		
Reference	Disposal or receipt	Measure
PM1	First disposals of water direct to river, from each sump below the Tidal X-Berth effluent receipt tanks.	<p>The operator shall provide written confirmation that each sump surface has been:</p> <ul style="list-style-type: none"> (a) re-sealed and (b) tested to verify that the surface is impervious

Schedule 2 – Holdings of Open Sources

There are no requirements under this schedule

Schedule 3 – Disposals of radioactive waste and monitoring

Table S 3.1 Disposals to air						
Radioactive waste type	Disposal outlet reference	Disposal outlet	Radionuclide or group of nuclides	Annual limits	Weekly Advisory Level	Quarterly Notification level
Gaseous waste	A1	Static and Mobile radioactive effluent tanks used on the premises or in carrying on Approved Activities	Carbon -14	1.5 GBq	Not specified	Not specified
Gaseous waste	A2	Temporary containment structures	Beta/gamma-emitting radionuclides associated with particulate matter ⁽¹⁾	0.3 MBq	Not specified	Not specified
Gaseous waste	Approved outlets (air)	All outlets to air, not otherwise described in this table, that are approved by the Environment Agency	Carbon-14	5% of the relevant annual limit for A1	Not specified	Not specified

(1) as measured using the techniques defined in Schedule 3, table S3.6

Table S 3.2 Disposals to water					
Radioactive waste type	Disposal outlet reference	Disposal outlet	Radionuclide or group of nuclides	Annual limits	Quarterly Notification level
Aqueous waste	W1	System provided by the Operator for discharge into surface water drains to the outfall to the Hamoaze.	Tritium	100 MBq	Not specified
			Cobalt-60	1 MBq	Not specified
			Total beta-emitting radionuclides ⁽¹⁾	10 MBq	Not specified

(1) as measured using the techniques defined in Schedule 3, table S3.6.

Table S 3.3 Disposals to sewer					
Radioactive waste type	Disposal outlet reference	Disposal outlet	Radionuclide or group of nuclides	Annual limits	Quarterly Notification level
Aqueous waste	S1	Sewer from change rooms	Total Activity Limit	2 MBq/m ³	Not specified
			Cobalt-60	10 MBq	Not specified
			All "other radionuclides" ⁽¹⁾	15 MBq	Not specified
Aqueous waste	Approved outlets (sewer)	All outlets to sewer, not otherwise described in this table, that are approved by the Environment Agency.	Cobalt 60 and "other radionuclides"	5% of the relevant annual limit for S1	Not specified

(1) as measured using the techniques defined in Schedule 3, table S3.6

Table S3.4 Disposals by transfer to other premises					
Radioactive waste type	Disposal route: person to whom radioactive waste may be transferred ¹	Purpose of transfer	Radionuclide or group of radionuclides	Calendar year limit	Annual volume limit – m³
LLW	The holder of an environmental permit for the receipt and disposal of LLW	For any one or more of: - treatment - onward transfer for treatment or disposal - incineration - metals recovery - final disposal	Any	No limit	No limit
Liquid waste	Any nuclear operator holding an environmental permit for the receipt of radioactive waste	For any one or more of: - treatment - onward transfer for treatment or disposal - incineration - final disposal	Any	No limit	No limit
ILW	Any nuclear operator holding an environmental permit for the receipt of radioactive waste	For any one or more of: - treatment - onward transfer for treatment or storage - storage before future disposal	Any	No limit	No limit
Radioactive Waste as defined in the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008	Transfer in accordance with the conditions of an authorisation granted under the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008		Any	No Limit	No Limit

¹ For the purposes of this table, "environmental permit" includes any authorisation or permit issued by the environmental regulator for Wales, Scotland or Northern Ireland.

Table S 3.5 Disposal by on-site incineration

Radioactive waste type	Incinerator unit	Radionuclide or group of nuclides	Monthly incineration limit (as input)¹
Combustible solid waste	None specified		

1 limits apply to the inputs to all units in total

2 "Other radionuclides" means the sum of all radionuclides except those otherwise specified in this Table.

Table S 3.6 monitoring techniques

Table and radionuclide	Monitoring technique
Table S3.1 – Disposals to air	<p>The Operator shall use the following method for the purposes of demonstrating compliance with limitations and conditions in this approval relating to gaseous discharges:</p> <p>In accordance with the document required by condition 3.2.1(d) (titled: “Assessment Techniques Employed by HMNB(D) to Determine Activity of Radioactive Waste Disposals related to Disposal Approval EPR/LB3730DK”), the quantity of gaseous carbon-14 discharged to atmosphere is derived from the specific activity of carbon-14 in primary coolant transferred from submarines to the Naval Base effluent tank system. The quantity of Beta/gamma-emitting radionuclides associated with particulate matter discharged to the atmosphere will be calculated in accordance with the document required by condition 3.2.1(d) using air sampling data obtained at the time cutting operations are conducted.</p>
Table S3.2 – Disposals to river	<p>The Operator shall use the following method for the purposes of demonstrating compliance with limitations and conditions in this approval relating to aqueous waste discharged to river:</p> <p>In accordance with the document required by 3.2.1(d) (titled: “Assessment Techniques HMNB(D) to Determine Activity of Radioactive Waste Disposals related to Disposal Approval EPR/LB3730DK”), the radioactive content of aqueous waste is determined by representative sampling and radiochemical analysis.</p>
Table S3.3 – Disposals to sewer	<p>The Operator shall use the following method for the purposes of demonstrating compliance with limitations and conditions in this approval relating to “other radionuclides” in aqueous waste discharged to sewer:</p> <p>In accordance with the document required by 3.2.1(d) (titled: “Assessment Techniques HMNB(D) to Determine Activity of Radioactive Waste Disposals related to Disposal Approval EPR/LB3730DK”), the quantity of “other radionuclides” disposed to sewer is derived from solid waste fingerprints and assessment of potential surface contamination.</p>
Table S3.4 – Specified disposals to other premises	<p>The Operator shall use the following method for the purposes of demonstrating compliance with limitations and conditions in this approval relating to aqueous transfers:</p> <p>In accordance with the document required by 3.2.1(d) (titled: “Assessment Techniques HMNB(D) to Determine Activity of Radioactive Waste Disposals related to Disposal Approval EPR/LB3730DK”), the radioactive content of aqueous transfers is determined by representative sampling and radiochemical analysis.</p>

Schedule 4 - Reporting

There are no requirements under this schedule.

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the disposal. Where appropriate, a comparison should be made of actual disposals and approved disposal limits.

Part A – to be provided within 24 hours

Approval Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or disposal which has caused, is causing or may cause significant pollution or may generate significant amounts of radioactive waste	
Date and time of the event	
Reference or description of the location of the event	
Description of where any disposal into the environment took place	
Radionuclides potentially released	
Best estimate of the quantity or rate of release of radionuclides or amount of radioactive waste generated	
Measures taken, or intended to be taken, to stop any disposal	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit or disposal of radioactive waste other than by a relevant approved route	
Disposal outlet reference/ source	
Radionuclides	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the disposal	

(c) Notification requirements for the detection of any significant adverse environmental effect	
Description of where the effect on the environment was detected	
Radionuclides detected	
Activity of radionuclides detected	
Date of monitoring/sampling	

Part B - to be provided as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any contamination of the environment which has been or may be caused by the disposal	
The dates of any unauthorised disposals from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of HM Naval Base, Devonport

Schedule 6 - Interpretation

In this approval, except where otherwise specified, words and expressions defined in the regulations in relation to radioactive substances regulation shall have the same meanings when used in this approval as they have in those regulations.

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

"*annual limit*" means the limit over a period of any consecutive 12 months.

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

"*best available techniques*" means the latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. In determining whether a set of processes, facilities and methods of operation constitute the best available techniques in general or individual cases, special consideration shall be given to:

- a. comparable processes, facilities or methods of operation which have recently been successfully tried out;
- b. technological advances and changes in scientific knowledge and understanding;
- c. the economic feasibility of such techniques;
- d. time limits for installation in both new and existing plants;
- e. the nature and volume of the discharges and emissions concerned

"*techniques*" include both the technology used and the way in which the installation is designed, built, maintained, operated and dismantled.

"*Bq, kBq, MBq, GBq, TBq and PBq*" are used as abbreviations meaning becquerels, kilobecquerels, megabecquerels, gigabecquerels, terabecquerels and petabecquerels respectively.

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

"*disposability*" means capable of being conditioned, packaged and disposed of in a way that meets the standards and specifications for final disposal using the identified disposal route, and where the conditioned waste will maintain its integrity such that safe and efficient storage, handling, transport and disposal is achieved.

"*disposal facility*" means an on-site engineered facility where solid radioactive waste is permanently emplaced solely for the purpose of disposing of that waste.

"*disposal for a purpose*" means on-site disposal of solid radioactive waste by permanent deposit where, if suitable radioactive waste were not available, other materials would have to be found to fulfil the purpose.

"*disposal in-situ*" means on-site disposal of solid radioactive waste by leaving it permanently in its original position, together with any necessary preparatory works.

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

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

"*LLW*" means solid radioactive waste with an activity concentration greater than the maximum for LLW, but which does not require heating to be taken into account in the design of storage or disposal facilities.

"*LLW*" means solid radioactive waste, including any immediate packaging, with an activity concentration greater than the maximum for VLLW but not exceeding 4 gigabecquerels per tonne of alpha emitting radionuclides nor 12 gigabecquerels per tonne of all other radionuclides.

"*MCERTS*" means the Environment Agency's Monitoring Certification Scheme.

"*month*" means calendar month.

"*National Arrangements for Incidents Involving Radioactivity*" means the arrangements co-ordinated by Public Health England to protect the public from hazards arising from the use and transport of radioactive materials and in situations where no formal contingency plans exist.

"*nuclear operator*" means a person who carries on a radioactive substances activity on a nuclear site

"*optimise*" and "*optimised*" means the outcome of the process of optimisation, in which all exposures to ionising radiation of any member of the public and of the population as a whole resulting from the disposal of radioactive waste are kept as low as reasonably achievable, taking into account economic and social factors.

"*other than in a disposal facility*" means one or both of "*disposal for a purpose*" and "*disposal in-situ*"

"*packaging*" includes any sack, drum, container or wrapping.

"*quarter*" means any period of three consecutive months.

"*Radioactive Waste Adviser*" means an individual, or group of individuals, with the knowledge, training and experience needed to give radioactive waste management and environmental radiation protection advice in relation to radioactive waste to ensure the effective protection of members of the public whose competence is recognised by the Environment Agency.

"*Radsafe*" means the consortium of organisations which offer mutual assistance in the event of a transport accident involving radioactive materials belonging to a RADS SAFE member.

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

"*site-wide environmental safety case*" means a documented set of claims made by the operator, and substantiated by a structured collection of arguments and evidence, to demonstrate achievement by the site as a whole of the required standard of environmental safety. Where relevant it includes the facility-specific environmental safety case for any on-site disposal facility.

"*spot sampling*" means the taking of samples on a non-continuous basis of radioactive substances for subsequent analysis.

"*VLLW*" means solid radioactive waste with a maximum concentration of 40 megabecquerels per tonne of tritium and carbon-14 (in total) and 4 megabecquerels per tonne of all other radionuclides.

"*waste acceptance criteria*" means qualitative and/or quantitative criteria, specified by the operator, for solid radioactive waste to be accepted for disposal.

"*waste management plan*" means a documented plan, prepared by the operator, which provides a comprehensive description of the current intent for dealing with all radioactive waste on or adjacent to the site and demonstrates how waste management has been optimised.

"*week*" means a period of 7 consecutive days commencing at a day and time to be notified in writing to the Environment Agency by the Operator at least 14 days before any disposal of radioactive waste is made under the terms of this approval, any subsequent change being notified in writing to the Environment Agency at least 7 days in advance.

"*year*" means any period of 12 consecutive months.

Schedule 7 - Site plan

Available for inspection on the premises

END of APPROVAL