

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

AWE plc

Atomic Weapons Establishment

Aldermaston Reading Berkshire RG7 4PR

Permit number

EPR/QB3535DR/V002

# AWE Aldermaston Permit number EPR/QB3535DR/V002

## Introductory note

#### This introductory note does not form a part of this permit

The permit allows the Operator to receive and dispose of radioactive waste on or from the specified premises, which are a nuclear licensed site.

The permit is issued under the provisions of regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010. Those Regulations are concerned, amongst other things, with the control of radioactive material and radioactive waste.

The operator must also comply with other legislation to which the keeping or use of radioactive material and the transfer, accumulation and disposal of radioactive waste is subject. This includes legislation enforced by the Office for Nuclear Regulation.

The main features of the facility are as follows:

The wastes are produced during the production, servicing and disassembly of nuclear warheads, research and development of warhead technology and decommissioning of redundant nuclear plant. The radioactive wastes principally contain tritium, plutonium and uranium isotopes (including their daughters) and to a lesser extent fission and activation products.

Where limits are specified for "alpha emitters" these are principally from alpha emitting isotopes of plutonium and uranium (including associated and daughter isotopes). Where limits are specified for "particulate beta" these are principally pure beta emitting isotopes or beta emitting isotopes not accounted for under alpha emitters. Where limits are specified for "volatile beta" these are principally volatile isotopes from mixed fission products. Where limits are specified for "activation products" these are principally isotopes from neutron interactions with targets and the workplace. Limits for tritium and carbon-14 are self explanatory.

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

Status Log of the permit		
Detail	Date	Response Date
Permit BZ1994E came into effect	01/03/2007	109
Variation Application EPR_QB3535DR_V001 duly made	27/03/2012	, t <sub>a</sub> . 8
Request for further information	26/06/2012	29/06/2012
Letter requesting determination extension	19/07/2012	26/07/2012
Permit determined	10/10/12	
Permit effective	1/11/2012	
Agency initiated Variation and Minor changes	1/9/2014	т

End of Introductory Note

### **Permit**

Permit number EPR/QB3535DR/V002

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 (the "regulations"),

AWE plc ("the operator")

whose registered office (or principal office) is

Atomic Weapons Establishment Aldermaston Reading Berkshire RG7 4PR

company registration number 2763902

to carry on a radioactive substances activity/radioactive substance activities at

Atomic Weapons Establishment Aldermaston Reading Berkshire RG7 4PR

("the premises")

to the extent authorised by and subject to the conditions of this permit.

Name		Date	
David Griffiths	DA Confl. Ho	1 September 2014	

Authorised on behalf of the Environment Agency

The permit shall come into effect from 1 September 2014

### 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 permit; 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 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall manage and operate the activities in consultation with such suitable Radioactive Waste Advisers as are necessary for the purpose of advising the operator as to compliance with this permit.

## 2 Operations

#### 2.1 Permitted 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 at schedule 7 to this permit.

### 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 permit 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 permit;
- (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 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 systems, equipment and procedures for:
  - (a) carrying out any monitoring and measurements necessary to determine compliance with the conditions of this permit;
  - (b) measuring and assessing exposure of members of the public and radioactive contamination of the environment.
- 2.3.7 The operator shall post copies of this permit on the premises, in such characters and in such positions to be conveniently read by persons who have duties on the premises which are or could be affected by the matters set out in this 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 date 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 specified disposals and receipts of radioactive waste 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 permit; or
  - (ii.) where disposal of that type of radioactive waste is not currently permitted, 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 to 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 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 Subject to condition 3.1.1, the operator shall dispose of each form of solid and non-aqueous liquid radioactive waste by an optimised disposal route for that waste form.
- 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 permit:
  - (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 permit;
- (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 permit 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 permit 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 systems and equipment provided for:
    - (i.) carrying out any monitoring and measurements necessary to determine compliance with the conditions of this permit;
    - (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 systems and equipment are serviceable and correctly used.

### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit 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 permit, unless otherwise agreed in writing by the Environment Agency.
- 4.1.3 The operator shall
  - retain records made in accordance with any previous relevant permit issued to the operator and related to the premises covered by this permit;
  - (b) retain records transferred to the operator, which were made in accordance with any previous relevant permit related to the premises covered by this permit.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by this permit 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 permit, or disposal of waste other than by a relevant permitted 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 Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address;
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (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 permit is achieved:
  - (a) the operator shall notify the Environment Agency at least 28 days before making that change, or where that is not possible, without delay; and

- (b) shall include in the notification a description of the proposed changes.
- 4.3.6 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.
- 4.3.7 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 permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit 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 activition	es de la companya de		
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	Use of radioactive material for military purposes
A2	Sch 23 Part 2 para 11(4)(a)	Receipt of radioactive waste for the purpose of disposal	

Reference	Requirement	Date
1	AWE shall provide to the Environment Agency a Best Available Techniques document to justify the disposal of ILW using a specified route.	At least 2 months prior to using a new ILW route.
2 .	AWE shall undertake a comprehensive review of what represents the Best Available Techniques for disposing of its radioactive aqueous liquid wastes.	By 1st November 2014

Table S1.3A Pre-ope	rational measures	<b>《中国》,"阿里斯斯</b>	
Reference	Measures		
	None specified		

Table S1.3B Pre-o	operational measures for future development	THE REPORT OF THE PROPERTY OF
Reference	Disposal or receipt	Pre-operational measures
	None specified	

# Schedule 2 – Holdings of Open Sources

There are no requirements under this schedule

## Schedule 3 - Disposals of radioactive waste and monitoring

Specified radioactive waste type	Disposal outlet reference	Radionuclide or group of nuclides	Annual limits (site)	Weekly Advisory Level	Quarterly Notification Level
Such stacks or outlets associated with discharges from facilities engaged completely or principally in:  a) Decommissioning operations in buildings and facilities. b) Support of production and capability in buildings and facilities c) Research and Development in buildings and facilities d) Waste management operations n buildings and facilities as approved in writing beforehand by the	Total Tritium	39 TBq	Not specified	8 TBq	
	Alpha emitters <sup>1</sup>	165 kBq	Not specified	Not specified	
	Beta-emitting radionuclides associated with particulate matter .1 & 2	600 kBq	Not specified	Not specified	
	Activation Products	BAT	Not specified	Not specified	
	buildings and facilities as approved in writing beforehand by the	Beta emitting radionuclides (volatile) <sup>3</sup>	4.4 MBq	Not specified	Not specified
	Environment Agency.4	Carbon-14 <sup>3</sup>	6 MBq	Not specified	Not specified

- (1) Site limit including Non-Proliferation Treaty work.
- (2) Excluding Pu-241 and tritides
- (3) Specific to Non-Proliferation Treaty work
- (4) For National Security reasons the lists of the Groups and discharge points will not be named in this Permit but will be maintained by AWE, referenced in the AWE Management System but shall be approved by the Environment Agency.

Specified radioactive waste type	Disposal outlet reference	Disposal outlet	Radionuclide or group of nuclides	Annual limits	Activity Notification level <sup>2</sup>
Aqueous waste	W1 <sup>1</sup> (System 2)	System provided by the Operator for the discharge of aqueous radioactive waste from the North Ponds Water Management System situated on the Aldermaston site into the Aldermaston Stream at AWE Aldermaston. ("System 2")	Tritium	No Limit	30 Bq I <sup>-1</sup>

- or other such systems approved in advance with the Environment Agency and maintained and referenced in the AWE management system.
- 2) If the Activity Notification Level is exceeded the Environment Agency shall be notified not later than 14 days from making the record.

Table S 3.3 S	pecified disposa	ls to sewer			
Specified radioactive waste type	Disposal outlet reference	Disposal outlet	Radionuclide or group of nuclides	Annual limits	Quarterly Notification level
		AWE Aldermaston Site	Alpha emitters	. 10 MBq	2 MBq
Aqueous	System 1 <sup>1</sup>	Discharge to the Public	Tritium	25 GBq	5 GBq
wasic		Sewer	Other beta emitters	20 MBq	4 MBq

<sup>1) –</sup> or other such systems approved in advance with the Environment Agency and maintained and referenced in the AWE management system.

Specified radioactive waste type	Person to whom radioactive waste may be transferred	Purpose of transfer	Radionuclide or group of radionuclides	Calendar year limit	Annual volume limit
VLLW	The holder of an environmental permit for the receipt and disposal of VLLW	For any one or more of subsequent - treatment - onward transfer for treatment or disposal - incineration - metals recovery - final disposal	Any	No limit	No limit
ПТМ	The holder of an environmental permit for the receipt and disposal of LLW	For any one or more of subsequent - treatment - onward transfer for treatment or disposal - incineration - metals recovery - final disposal	Any	No limit	No limit
ILW <sup>2</sup>	The holder of an environmental permit for the receipt and disposal of ILW.	For treatment and / or storage before future disposal.	Any	No limit	No limit
Aqueous waste	The holder of an environmental permit for the receipt and disposal of aqueous liquid waste	For any one or more of:  - treatment  - onward transfer for treatment or disposal  - incineration  - final disposal	Any	No limit	No limit
Non-aqueous liquid waste (including waste oils)	The holder of an environmental permit for the receipt and disposal of Non-aqueous liquid waste	For any one or more of:  - treatment - onward transfer for treatment or disposal - incineration - final disposal	Any	No limit	No limit
Radioactive Waste as defined in the Transfrontier Shipment of Radioactive Waste Regulations 1993 or 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 Regulations 1993 or the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008.	For treatment and / or storage before future disposal	Any	No limit	No limit

For the purposes of this table, "environmental permit" includes an authorisation issued under the Radioactive Substances Act 1993 by the environmental regulator for Scotland or Northern Ireland.

2 See Table S1.2 Reference 1 - Improvement and information requirements.

# 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 permitted disposal limits.

Part A – to be provided w	ithin 24 hours.
Permit Number	
Name of operator	
Location of Facility	· · · · · · · · · · · · · · · · · · ·
Time and date of the detection	
Time and date of the detection	
accident, or disposal when may generate significant Date and time of the event	any malfunction, breakdown or failure of equipment or techniques, nich has caused, is causing or may cause significant pollution or at amounts of radioactive waste
Reference or description of the location of the event	* * * * * * * * * * * * * * * * * * * *
Description of where any disposal into the environment took place Radionuclides potentially	2
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 t	the breach of a limit or disposal of radioactive waste other than by
a relevant permitted route	
Disposal outlet reference/ source	9
Radionuclides	
Limit	
William Street, and the street of the street	
Measured value and uncertainty	*
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the disposal	
	he detection of any significant adverse environmental effect
Description of where the effect on the environment was detected Radionuclides detected	
Activity of radionuclides detected	II.
Date of monitoring/sampling	
	, # "

Part B - to be submitted 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.	19	d'ana

Name*	
Post	
Signature	
Date	

<sup>\*</sup> authorised to sign on behalf of AWE plc

### Schedule 6 - Interpretation

In this permit, 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 permit 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;
- 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.

"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.

"ILW" 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 the Health Protection Agency 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 the holder of a licence issued under the Nuclear Installations Act 1965

"quarter" means any period of three consecutive months.

"open radioactive source" means radioactive material not in the form of a sealed radioactive source.

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

"Radioactive Waste Adviser" means, subject to the transitional arrangements in the Environment Agencies' Scheme for Radioactive Waste Advisers ("the Scheme"), either an individual certified under the Scheme and appointed in writing by the operator, or those individuals advising the operator under the operator's arrangements, approved under the Scheme, for "corporate radioactive waste

adviser". The Scheme is set out in the Environment Agencies' Statement on Radioactive Waste Advisers of 24 May 2011, together with the associated guidance and other documents published by the Environment Agencies from time to time. (Current documents are available at: http://www.sepa.org.uk/radioactive\_substances/radioactive\_waste\_advisers.aspx.)

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

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

"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.

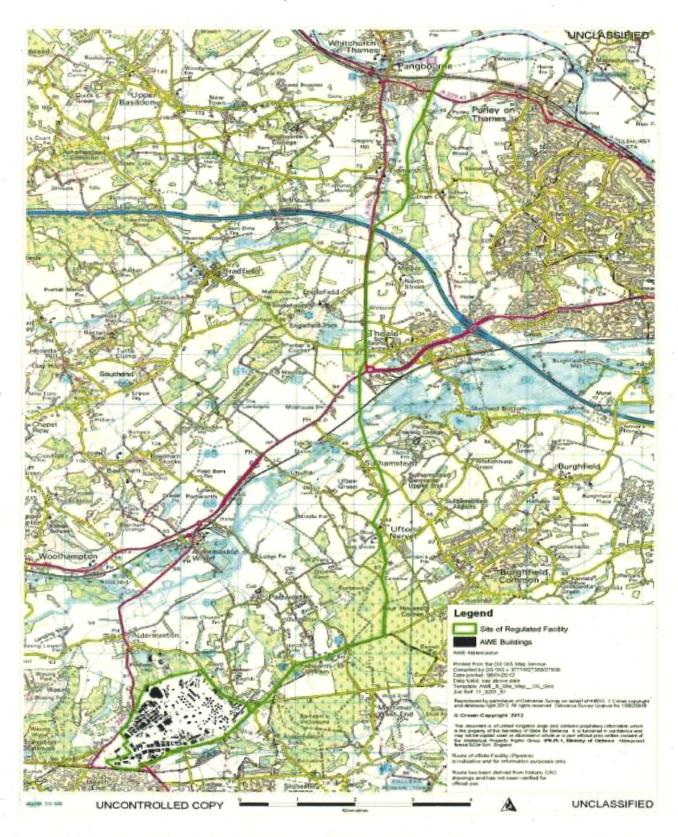
"week" means a period of 7 consecutive days commencing at a day and time to be notified in writing to the Environment Agency by the Operator at least 14 days before any disposal of radioactive waste is made under the terms of this permit, any subsequent change being notified in writing to the Environment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

"year" means any period of 12 consecutive months;

## Schedule 7 - Site plan



# Schedule 7 - Site Plan including Pangbourne pipeline



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**END of PERMIT** 

