SEPA
Scottish Environment Protection Agency

Radioactive Substances Act 1993 (as amended)

APPLICATION FORM

For

Authorisation to accumulate and dispose of radioactive waste

PLEASE SEND TO THE REGISTRY DEPARTMENT AT THE APPROPRIATE AREA OFFICE:

Aberdeen Office
Greyhope House
Greyhope Road
Aberdeen
AB11 9RD
Tel: 01224 248338
Fax: 01224 248591

East Kilbride Office
5 Redwood Crescent
Peel Park
East Kilbride
G74 5PP
Tel: 01355 574200
Fax: 01355 574688

Dingwall Office
Fodderty Way
Dingwall Business Park
Dingwall
IV15 9XB
Tel: 01349 862021
Fax: 01349 863987

Perth Office
Strathearn House
Broxden Business Park
Lamberkine Drive
Perth
PH1 1RX
Tel: 01738 627989
Fax: 01738 630997

Edinburgh Office
Clearwater House
Heriot Watt Research Park
Avenue North
Riccarton
Edinburgh
EH14 4AP
Tel: 0131 4497296
Fax: 0131 4497277

The Data Protection Act 1998
"The Scottish Environment Protection Agency is responsible for maintaining and improving the environment and regulating environmental emissions. It has a duty to discharge its functions to protect and enhance the environment and to promote conservation and recreation.
The information provided will be processed by the Scottish Environment Protection Agency to deal with your application, to monitor compliance with the licence/permit/registration conditions, to process renewals, and for maintaining the relevant public register(s).
We may also process and/or disclose it in connection with the following:

- offering/providing you with our literature/services relating to environmental affairs
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, Local Authorities, Emergency Services, Scottish Executive) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving our service.

We may pass it on to our agents/representatives to do these things on our behalf.

You should ensure that any persons named on this form are informed of the contents of this Data Protection Notice

THE SCOTTISH ENVIRONMENT PROTECTION AGENCY
APPLICATION FOR AUTHORISATION TO ACCUMULATE AND DISPOSE OF RADIOACTIVE WASTE UNDER SECTION 13 AND 14 OF THE RADIOACTIVE SUBSTANCES ACT 1993 (as amended)

Please complete this form clearly in black ink. Further information may be submitted on additional sheets that should be clearly marked with the name and address of the applicant. Applications that are incorrect or incomplete may be deemed not to be Duly Made.

To assist with completing this form, guidance notes are provided in each section.

1. APPLICANT DETAILS

Guidance Note: This section requires you to provide details of the Registered Company (as defined by the Companies Act), NHS Board Head Office etc. Do not give details here of a local office or the premises that are to be authorised etc unless it is the same as that of the Registered address or head office etc. Details of the premises on or from which radioactive material is to be accumulated or disposed must be given in section 5. Where possible SEPA will try to process applications in accordance with the needs of the applicant. However applicants should normally allow up to 4 months from the date an application is deemed Duly Made for an authorisation to come into effect.
It is an offence under the Act to accumulate or dispose radioactive material without a valid authorisation.

1a Please state the company registered address

Name: MAGNOX NORTH LTD

Address: BERKELEY CENTRE

BERKELEY, GLOUCESTERSHIRE

Postcode: GL13 9PB Telephone No: 01453 814200

1b Please state the registered company number (if applicable)

2264251

1c If there are existing certificates of registration or authorisation at the address on or from which radioactive waste will be accumulated or disposed provide details below

Registration Certificate number/s:

Authorisation Certificate number/s: RSA/W/21042 RSA/W/21043 RSA/W/21044

Please give details of why a new authorisation is being sought?

SEE SECTION 1 OF ATTACHED REPORT.

1d Please state when would you like the authorisation to come into effect?

Date: 01 JANUARY 2012

(This can take up to 4 months from the date of receiving the application with all information and fee. After you receive your authorisation there is usually another 28 days before you can start accumulating and disposing of radioactive waste.)

2. CONTACT DETAILS

Guidance Note: The person named below should be authorised by the company to be the primary contact for queries about the application. Queries are likely to be of a technical nature.

2a Please provide details about the person that we may contact about the application

Name: WILLIAM STIRTON

Address: HUNTERSTON A SITE

WEST KILBRIDE, AYRSHIRE

Postcode: KA23 9RA Tel No: 01294 824171

Email WILLIAM.STIRTON@MAGNOXNORTHSITES.COM

Position/Designation ENVIRONMENT MANAGER

3. NATIONAL SECURITY

Guidance Note: ***National security.*** You may claim that your application includes information that needs to be protected for reasons of national security. Any such claim should be submitted for determination by the Scottish Ministers, who will direct SEPA. If you believe there is any information in your application that should be kept from the public register for reasons of national security, please **do not write anything on the Application Form that reveals this information.** Rather, you should provide details on a separate sheet and attach a copy of the application that you have made to the Scottish Ministers for a national security direction. You should contact the appropriate SEPA office before submitting the application to ascertain who is authorised to receive such information. You should then submit the full application in a sealed package with the name of that person clearly marked upon it. To assist prompt processing, the Application Form only, (i.e. not any attachments) should be photocopied and, together with any application fee, should be sent at the same time as the full application to the relevant SEPA office.

3a Please inform us about any National Security claim

Is there any information that you believe should be kept from the public register on the grounds of national security?

Yes ☐ No ☑

If you have ticked yes please:

- Give full information on separate sheets
- Provide a copy of the application form to Scottish Ministers for a Direction on the issue of national security.

4. DETAILS OF PREMISES TO WHICH THE APPLICATION RELATES

Guidance Note: Details of the premises on or from which it is intended to accumulate or dispose of radioactive waste must be provided in this section. The name provided here should identify the premises to which this application relates e.g. A particular hospital, campus, department etc.

4a Please provide details of premises to be authorised

For offshore installations operating in Scottish area, please go to 4f

Name: HUNTERSTON A SITE

Address: WEST KILBRIDE

AYRSHIRE

Postcode: KA23 9RA

Telephone No: 01294 824000

Fax: 01294 824200

4b Please provide details of the location of premises

Please enclose a map detailing the location of the above premises and delineate the site boundary by marking this clearly in red on each copy. The map scale must be sufficient to allow the location to be identified and a clear distinction to be made between the premises for which authorisation is being sought and surrounding premises.

Please give the grid reference of the main entrance to the premises NS 182512

SEE FIGURES 1 AND 2 IN SECTION 2.2 OF ATTACHED REPORT.

4c Please provide a detailed site plan

Please enclose 3 copies of a plan showing the extent of the premises for which authorisation is being sought by marking this clearly in red on each copy.

In circumstances where the premises comprise a building that is occupied by more than one organisation, a site that contains several buildings or where only part of a building or premises is to be used, then the plan must clearly delineate the boundary or boundaries for which authorisation is being sought.

SEE FIGURES 1 AND 2 IN SECTION 2.2 OF ATTACHED REPORT.

4d Please provide a description of the premises to be authorised

Please give a sufficiently detailed written description of the premises to support the plan provided. Together the plan the description must clearly allow identification of the locations on the authorised premises where radioactive waste will be accumulated and disposed.

SEE SECTION 2 OF ATTACHED REPORT.

4e Please state the local government area in which the premises are situated.

NORTH AYRSHIRE

4f Please give details of offshore installations operating in the Scottish area.

Only list those sub-sea facilities under the direct supervision and managerial control of the installation operator.

Name of installation: _____

Name of installation operator: _____

Location (block number): _____

List sub-sea installations tied-back to this installation:

4g Please give the operational contact who will have the responsibility for the day to day overall supervision of the accumulation and disposal of the radioactive waste?

Name: WILLIAM STIRTON

Address: HUNTERSTON A SITE

WEST KILBRIDE, AYRSHIRE

Postcode: KA23 9RA

Telephone No: 01294 824171 Fax: 01294 824032

Email: WILLIAM.STIRTON@MAGNOXNORTHSITES.COM

Position/Designation: ENVIRONMENT MANAGER

5. DETAILS OF THE UNDERTAKING FOR WHICH PREMISES ARE USED

Guidance Note: "Undertaking" is defined in Section 47 of the Radioactive Substances Act 1993 as follows - "includes any trade, business or profession, and, in relation to a public or local authority, includes any of the powers or duties of that authority, and, in relation to any other body of persons, whether corporate or unincorporate includes any of the activities of that body."

5a Please provide details of the undertaking carried on by the applicant at the premises specified at question 4 (a) or 4 (f) above

SEE SECTION 2 OF ATTACHED REPORT.

5b Please say how the radioactive wastes are produced

SEE SECTION 4 OF ATTACHED REPORT.

5c Do any of the processes result in the accumulation or disposal of alpha emitting radionuclide?

Yes ☑ No ☐

5d Describe the process and the modifications considered for reducing the quantities of radioactive waste likely to arise.

SEE SECTION 5 OF ATTACHED REPORT.

5e Do you intend to receive and dispose of radioactive waste from other premises? (give details)

NO.

6. GASEOUS WASTE – DISPOSAL OF GASEOUS RADIOACTIVE WASTE

6a Do you intend to dispose of radioactive waste in the form of gas mist or dust?

Yes ☑ Please continue with the rest of this section

No ☐ Please go to question 7

6b For each discharge point please give a full description of the waste and identify or describe the discharge point.

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

SEE SECTION 4.2 OF ATTACHED REPORT.

6c List the radionuclides you intend to discharge

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Maximum discharge in a single day (Bq)	Maximum discharge in a year (Bq)
SEE SECTION 4.2 OF ATTACHED REPORT		

Maximum number of days in a year aqueous waste will be discharged

6d For each of the radionuclides listed above, what will be the concentrations in the waste disposed of?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Concentration in waste disposed of (m^3)
SEE SECTION 4.2 OF ATTACHED REPORT	

6e How do you intend to measure or estimate the activity of the discharge? Please explain

SEE SECTION 6.1 OF ATTACHED REPORT.

6f Please attach your radiological assessment of the proposed discharges to this form.

Assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. SEE SECTION 7 OF ATTACHED REPORT.

For each discharge point you should give details of

- The height of the discharge point
- The height of the discharge point above the highest part of the nearest building
- The distance between the discharge point and the nearest building or place to which the public has access
- Describe the nature and purpose of the adjacent building or place
- Plan of the premises showing the discharge points, the premises and adjacent buildings
- The discharge efflux velocity in meters per second
- Details of any filtration on the discharge system

7. LIQUID WASTE – ACCUMULATION AND DISPOSAL OF LIQUID RADIOACTIVE WASTE

7a Do you intend to accumulate or dispose of radioactive aqueous waste, including organic combustible waste?

Guidance note: This includes accumulation of waste to enable short-lived radionuclides to decay.

Yes	☑	Please continue with the rest of this section
No	☐	Please go to question 8

7b What is the chemical and physical nature of the waste you intend to accumulate or dispose of?

SEE SECTIONS 4.3 AND 4.5 OF ATTACHED REPORT

7c Why do you intend to accumulate aqueous waste?

SEE SECTIONS 4.3 AND 4.5 OF ATTACHED REPORT

7d How do you intend to accumulate aqueous waste?

Guidance note: Describe the facilities and controls that will be used to store the accumulated aqueous waste safely.

SEE SECTIONS 4.3 AND 4.5 OF ATTACHED REPORT

7e How long do you intend to accumulate aqueous waste for?

Guidance note: Please give the maximum time that radioactive aqueous waste will be stored from creation or receipt until final disposal

3 MONTHS

7f How much radioactive waste do you intend to accumulate?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Maximum Activity (Bq)	Maximum Volume at any one time (m^3)
SEE SECTION 4.3 OF ATTACHED REPORT		

7g Where will you dispose of the aqueous waste?

Please tick all that apply and answer the questions shown

- ☑ To a public sewer, water course or water body section 7h to 7m
- ☐ to premises own sewage treatment works or septic tank section 7n to 7t
- ☐ Incineration on own premises section 10
- ☑ Transfer of the waste to a contractor (other than the operator of the nuclear site at Drigg or Sellafield) section 11

DISPOSAL TO A PUBLIC SEWER, WATER COURSE OR WATER BODY

7h What is the name and 8 figure National Grid Reference of the sewerage treatment to which your premises discharges liquid radioactive waste?

RADIOACTIVE LIQUID EFFLUENT FROM HUNTERSTON A IS DISCHARGED TO THE CLYDE ESTUARY VIA HUNTERSTON B'S COOLING WATER OUTFALL (GRID REFERENCE NS 1725 5125).

7i What is the approximate daily total volume of water which you intend to discharge from the premises into the sewer?

SEE SECTION 4.3 OF ATTACHED REPORT. Cubic metres

7j What is the maximum monthly total of each radionuclide you intend to discharge?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Maximum total activity in any single month (Bq)	Concentrations in the waste disposed of (Bq/m^3)
SEE SECTION 4.3 OF ATTACHED REPORT		

7k **Will the waste include any substances liable to render it unacceptable for disposal to the drainage system serving the premises?** If yes, please explain

No

7l **How do you intend to measure or estimate the activity of the discharge?** Please explain

SEE SECTION 6.2 OF ATTACHED REPORT.

7m **Please attach your radiological assessment of the proposed discharge to this form**

Assess the dose should to the most likely exposed individual(s) who are not involved in the work with the radioactive material. You could include consideration of discharges to the sewerage treatment works which treats your discharge, give details of the calculations you use. Please include a copy of the Trade Effluent Consent from your sewerage undertaker.

SEE SECTION 7 OF ATTACHED REPORT

7n **What is the name of the watercourse or body of water that your sewage treatment works discharges into and your SEPA consent to discharge reference (i.e. – WPC/X/XXXX)?**

7o **What is the approximate daily total volume of water which you intend to discharge from the premises?**

Cubic metres

7p How do you intend to treat your liquid waste to minimise the radioactivity being disposed of?

7q What is the maximum monthly total of each radionuclide you intend to discharge?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 11 of this application form.

Radionuclide	Maximum total activity in any single month (Bq)	Concentrations in the waste disposed of (Bq/m^3)

7r What do you intend to do with any sludge or solids which are left after treatment?

7s How do you plan to assess the activity of any sludge or solids which are left after treatment before final disposal?

7t Please attach your radiological assessment of the proposed discharge to this form

Assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material. You could include consideration of discharges to the sewerage treatment works which treats your discharge. Please give details of the calculations you use.

8. SOLID WASTE – ACCUMULATION AND DISPOSAL OF SOLID WASTE

8a Do you intend to accumulate of solid waste?

Yes	☑	Please continue with the rest of this section
No	☐	Please go to question 9

8b How much radioactive waste do you intend to store?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Maximum Activity (Bq)	Maximum time of accumulation
SEE SECTION 4.4 OF ATTACHED REPORT		

8c How will you record and label this solid waste?

SEE SECTIONS 4.4 AND 6.3 OF THE ATTACHED REPORT.

8d How will you store the accumulated waste until it is disposed of?

Guidance note: Please give details of measures and controls used to keep the waste safe, for example security, fire precautions and alarms, etc.

SEE SECTIONS 4.4 AND 6.3 OF THE ATTACHED REPORT.

8e Do you intend to dispose of solid waste?

Yes ☑ Please continue with the rest of this section

No ☐ Please go to question 10

8f How do you intend to dispose of solid waste?

Please tick all that apply and answer the questions shown

☐ Disposal with ordinary refuse containing no other radioactive waste section 8g to8k
☑ Special precautions burial at a controlled landfill site section 8l to 9p
☑ Transfer of waste to the operator of the nuclear site at Drigg or Sellafield sites section 9
☑ by other means 'Other methods of solid waste disposal' section 11?
☐ Incineration on own premises section 10
☑ Transfer of the waste to a contractor (other than the operator of the nuclear site at Drigg or Sellafield) section 11

DISPOSAL OF SOLID WASTE WITH ORDINARY REFUSE CONTAINING NO OTHER RADIOACTIVE WASTE

8g What is the company name of the disposal site operator?

8h What is the address and National Grid Reference of the disposal site which will receive the waste?

Name: _____

Address: _____

_____

Postcode: _____

Telephone No: _____

National Grid Reference e.g. NB1234 5678 _____

8i In which local authority area is the disposal site operator's premises?

If premises are on a boundary please give names of all relevant authorities

8j What is the maximum amount of very low level solid waste you intend to dispose of with normal refuse in any one month?

Cubic metres

8k What is the average volume of normal refuse to landfill in any one month?

Cubic metres

SPECIAL PRECAUTIONS BURIAL

Please provide details and include supporting evidence with your application.

8l Please give details of any environmental licences held by the site operator?

SEE SECTION 4.4 AND TABLE 8.2 IN SECTION 8 OF THE ATTACHED REPORT.

8m How much radioactive waste do you intend to bury at the operator's disposal site?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Maximum Activity in any one month (Bq)	Concentration (Bq/m^3)
SEE SECTION 4.4 OF THE ATTACHED REPORT		

9. TRANSFER TO THE OPERATOR OF THE NUCLEAR PREMISES AT DRIGG OR SELLFIELD SITES

Please provide details and include supporting evidence with your application.

9a What is the chemical and physical nature of the waste?

SEE SECTION 4.4 OF ATTACHED REPORT.

9b What is the maximum annual disposal activity (at the time of transfer) for each of the following?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Becquerels
Uranium	SEE SECTION 4.4 OF ATTACHED REPORT
Radium 226 plus thorium 232	
Other alpha-emitters	
Carbon 14	
Iodine 129	
Tritium	
Cobalt 60	
Other beta-emitting radionuclides (half-life greater than 3 months)	
Other beta-emitting radionuclides (half-life less than 3 months)	

9c What is the maximum amount of waste you plan to send to the operator of the nuclear premises at Drigg or Sellafield in any one year?

SEE SECTION 4.4 OF ATTACHED REPORT. Cubic metres

9d How many consignments are intended for the operator of the nuclear premises at Drigg or Sellafield in a year?

SEE SECTION 4.4 OF ATTACHED REPORT.

10. INCINERATION ON THE PREMISES

10a What is the SEPA reference of any environmental licence held in respect of your incinerator? (i.e. PPC/X/XXXX or WML/X/XXXX)

10b What type of incinerator do you have?

Please give the manufacturer and model or type number

10c Briefly describe any gas clean-up system or filtration on your incinerator.

10d What is the maximum daily and monthly activity of each radionuclide which you intend to incinerate?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Physical form of radionuclide	Maximum total activity in any single day (Bq)	Maximum discharge in a month (Bq)

Maximum volume in any one day in cubic metres

Maximum volume in any one month in cubic metres

10e How do you intend to access the activity content of the ash from the incinerator or solids from any filtration system?

10f How do you intend to dispose of ash from the incinerator or solids from any filtration system?

10g What will you do if your incinerator fails or breaks down?

10h Please attach your radiological assessment of the proposed disposal to this form

You should assess the dose to the most likely exposed individual(s) who are not involved in the work with the radioactive material.

You should give details of

- The height of the incinerator discharge point
- The height of the discharge point above the highest point of the nearest building
- The efflux velocity in meters per second
- Details of any filtration on the incinerator

Please give details of the calculations you use.

11. TRANSFER TO A CONTRACTOR (OTHER THAN THE OPERATOR OF THE NUCLEAR SITE AT DRIGG OR SELLAFIELD)

Please attach a brief summary of your agreement with the contractor to this form.

11a Give details of the radioactive waste you intend to transfer to your contractor?

Guidance note: Should you require more space than is available in this table, please ensure that any additional information is supplied in the same format, is clearly identified and listed in section 12a of this application form.

Radionuclide	Physical form of radionuclide	Maximum annual activity (Bq)
SEE SECTION 4.5 OF ATTACHED REPORT		

Maximum volume of solids in any one year (m^3)

Maximum volume of combustible/liquid in any one year (m^3)

11b What is the registered company name of the contractor?

11c What are the contact details and address of the contractor's site which will receive the waste?

Name: _____

Address: _____

_____

Postcode: _____

Telephone No: _____ Fax: _____

Email: _____

Position/Designation: _____

11d **In which local authority area is the contractor's premises?**

11e **Please describe contingency arrangements if your planned transfer routes become unavailable.**

SEE SECTION 4 OF ATTACHED REPORT.

12. SUPPORTING DOCUMENTS AND ATTACHMENTS

12a **Please list any supporting documents or additional pages supplied**

Guidance Note: All supporting documents and attachments should be signed and dated by the applicant.

HNA/3800/TC/SR/981 : INFORMATION IN SUPPORT OF APPLICATION BY MAGNOX NORTH LTD FOR AUTHORISATION UNDER RSA 93 TO DISPOSE OF RADIOACTIVE WASTE FROM THE HUNTERSTON A SITE.

13. COMMERCIAL IN CONFIDENCE

13a Absence of relevant processes or trade secrets

I accept that the information contained in the application form will form part of the publicly available information held by the Scottish Environment Protection Agency and relevant public registers.

SIGNED: P Roach. DATE: 29/3/10.

AUTHORISED ON BEHALF OF: (Company, corporate body, firm etc) MAGNOX NORTH LTD HUNTERSTON A.

14. DECLARATION

I/we hereby apply for authorisation under section 13 & 14 in respect of the premises referred to in Section 4 and in respect of the accumulation and disposal of radioactive material of the description and quantities referred to above. I/we declare that to the best of my/our knowledge the above particulars are true and accept that the information contained in the application form will form part of the publicly available information held by the Scottish Environment Protection Agency and relevant public registers. I have read the data protection notice and understand the implications of the Data Protection Act 1998. (Also all persons mentioned in the form should sign the data protection part).

SIGNED: P Roach PRINT NAME: PETER N ROACH.

POSITION & DESIGNATION: SITE DIRECTOR. DATE: 29/3/10.

AUTHORISED ON BEHALF OF: (Company, corporate body, firm etc) MAGNOX NORTH LTD HUNTERSTON A

For the application to be deemed to be duly made, all Sections of this application form must be completed legibly, the form signed and the appropriate fee included with the application.

15. COMPLETED FORMS

When completed this form should be sent, addresses to the 'The Registrar, Scottish Environment Protection Agency' [INSERT APPROPRIATE AREA OFFICE ADDRESS – See front page].

Magnox

Hunterston A Site

West Kilbride
Ayshire KA23 9RA
Tel: +44 (0)1294 824000
Fax: +44 (0)1294 824200
www.magnoxsites.com

07 October 2011

Miss Iona MacDonald
S.E.P.A
Clearwater House
Avenue North
Riccarton
Edinburgh
EH14 4AP

Direct tel: 01294 824000
Direct fax: 01294 824032

Your ref:
Our ref: HNA/7403/TC/SEPA/1084N

Dear Iona,

RADIOACTIVE SUBSTANCES ACT 1993 – MULTIMEDIA AUTHORISATION APPLICATION UPDATE (HNA/3800/TC/SR/981)

Please find below amendments that the Site wishes to be taken into consideration during your review of the RSA Multimedia Authorisation Application (HNA/3800/TC/SR/981):

General Changes

- The merging of Magnox North and Magnox South means that Magnox North Ltd should be changed to Magnox Ltd throughout the document;
- Nuclear Installations Inspectorate (NII) is now named Office for Nuclear Regulation (ONR) and should be changed throughout the document.

Inclusion of changes already requested to existing authorisations

- Solid RSA Authorisation Variation (RSA/W/21042/VN02) to allow onward disposal from the Low Level Waste Repository (LLWR);
- Request for a variation (letter submitted to SEPA on 17 February 2011, our reference HNA/7403/TC/SEPA/1003N) to the Solid RSA Authorisation for an increase in volume of High Volume Very Low Level Waste (HVVLLW) / Low Level Waste (LLW) from the current limit of 600 m^3 to 1800 m^3. However, we would like to amend this to remove the volume limit as we use BPM to minimise our solid low level waste arisings;
- Request for a variation (letter submitted to SEPA on 17 February 2011, our reference HNA/7403/TC/SEPA/1004N) to the Solid RSA Authorisation to allow direct disposal of HVVLLW to Lillyhall Landfill Site.

IMED

Magnox Limited, a company owned by Energy*Solutions*, Inc.

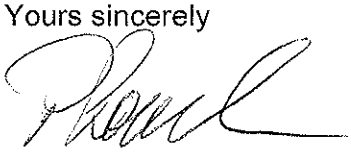
Registered Office:
Berkeley Centre, Berkeley, Gloucestershire GL13 9PB
Registered in England under Company No. 2264251

Changes relating to site developments

- Updates to the radioactive gaseous discharge stack lists (Tables 4.4 and 6.1 in the application) which have been enclosed with this letter;
- We are currently bringing two new Additional Delay Tanks (ADTs) into service alongside the existing Replacement Delay Tank (RDT). Discharges from the ADTs will be subject to exactly the same controls as used at present. There are several references to the RDT throughout the application and we would like to amend these to RDT and ADTs.

If you have any questions relating to the information provided please do not hesitate to contact our Environment Manager, William Stirton on 01294 824171.

Yours sincerely



Peter N Roach
Site Director, Hunterston A
Magnox North Ltd

cc.

Records Office
Radiological and Environment Office

COMMERCIAL

Table 4.4 Discharge stacks to be used under new authorisation

Discharge Point	Origin	Discharge height (m)	Grid Ref. (EASTING)	Grid Ref. (NORTHING)
Reactor 1 roof east	Reactor 1 vessel purge.	62	218115	651220
	East Blimp ventilation	62	218118	651215
	Fuel Separation ventilation.	67	218117	651211
Reactor 1 roof west	R1 West Blimp ventilation	62	218075	651200
	R1 vessel safety valves	62	218074	651205
Reactor 2 roof west	Reactor 2 vessel purge.	62	218193	651246
	West Blimp ventilation	62	218195	651242
	Fuel Separation ventilation.	67	218197	651237
Reactor 2 roof east	R2 East Blimp ventilation	62	218233	651253
	R2 vessel safety valves	62	218232	651257
CCP west wall	CCP Enclosure area ventilation	21	218134	651211
CCP east wall (1)	CCP Fuel Handling Area ventilation	18	218162	651251
CCP east wall (2)	CCP Decommissioning project 1	18	218170	651246
CCP east wall (3)	CCP Decommissioning project 2	18	218175	651237
CCP north wall (1)	Loading Bay facility ventilation	18	218160	651270
CCP north wall (2)	B Bay dewatering ventilation	18	218165	651275
Solid Active Waste Building West	Bunker room & resin storage plant ventilation.	23	218120	651170
LLW Processing Facility NE	LLWPF ventilation	8	218207	651205
FE Skip Refurbishing Plant Roof	Skip refurbishing plant ventilation	23	218121	651177
NCWPF 1	LLW ISO loading facility (CCP)	18	218193	651210
NCWPF 2	LLW ISO loading facility (Reactor 1)	26	218125	651196
MSRT Containment - Tent	Facilitate decommissioning (temporary)	6	218205	651190
MSRT Containment - Tank	Facilitate decommissioning (temporary)	6	218205	651190
MAETP	MAETP maintenance vent system	12	218236	651170
CCP north west Wall	West Blockhouse Motor Room – portable vent plant workshop	18	218130	651230
SAWB Removal Facility	Bunker emptying operations	19	218190	651190
Solid ILW Encapsulation	Boxed ILW encapsulation plant	21	218210	651320
ILW Sludge Encap	CCP ILW Sludge encapsulation operations	18	218170	651150
AETP south wall	AETP Decommissioning operations	4	218220	651167
AETP delay tanks	Delay tank decommissioning	18	218142	651142
ILW Store west wall	ILW store operations	18	218030	651260
LLWPF north wall	LLWPF operations	8	218207	651205
MRT Tank	MRT decommissioning	4	218230	651170
LLWPF west wall	Active Sample Prep Facility	7	218192	651192

Discharge Point	Origin	Discharge height (m)	Grid Ref. (EASTING)	Grid Ref. (NORTHING)
	operations			
HP Baseroom	Chemistry Lab fume hood extract	7	218084	651052
Reactor 1 west wall	Decontamination Facility	26	218073	651187
Reactor 2 Exit Building SE corner	LLW Size Reduction Facility (LLWSRF)	21.6	218098	651179
Reactor 2 Exit Building SW corner	LLW Decontamination and Surface Preparation Facility (LLWDSPF)	21.6	218112	651183
Various	Mobile Extract Unit	TBC	TBC	TBC
Various	Mobile Extract Unit	TBC	TBC	TBC
Various	Mobile Extract Unit	TBC	TBC	TBC
Various	Mobile Extract Unit	TBC	TBC	TBC
Various	Mobile Extract Unit	TBC	TBC	TBC
Various	Mobile Extract Unit	TBC	TBC	TBC

Table 6.1 Summary of Current Gaseous Discharge Points

Discharge Point	Origin and Nature	Monitored
Reactor 1 roof east	Reactor 1 purge	yes
	Reactor 1 Fuel Separation ventilation	yes
Reactor 2 roof west	Reactor 2 purge	yes
	Reactor 2 Fuel Separation ventilation	yes
CCP west wall	CCP enclosure area ventilation	yes
CCP east wall	CCP handling area ventilation	yes
CCP north wall (1)	Temporary Drigg ISO loading facility ventilation	yes
CCP north wall (2)	B Bay Containment	yes
Solid Active Waste Building West	Bunker room & resin storage plant ventilation	yes
LLW Processing Facility NE	LLWPF ventilation	yes
FE Skip Refurbishing Plant Roof	Skip refurbishing plant ventilation	yes
NCWPF 2	ISO loading facility	yes
MSRT Containment - Tent	Facilitate decommissioning (temporary)	yes
MSRT Containment - Tank	Facilitate decommissioning (temporary)	yes
CCP north west Wall	West Blockhouse Motor Room – portable vent plant workshop	yes
Reactor 2 Exit Building SE corner	LLW Size Reduction Facility (LLWSRF)	yes
Reactor 2 Exit Building SW corner	LLW Decontamination and Surface Preparation Facility (LLWDSPF)	yes
Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP)	WILWREP ventilation	yes
Solid Active Waste Bunker Retrieval (SAWBR)	SAWBR ventilation	yes

Variation Request 1

COMMERCIAL

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17 February 2011

Mr Ian Robertson
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Direct tel: 01294 824000
Direct fax: 01294 824032

Your ref:
Our ref: HNA/7403/TC/SEPA/1003N

Dear Ian,

Request for a variation to Hunterston A Sites Authorisation for the Disposal of Solid Waste to increase the volume of waste dispatched from site

As discussed during your site visit on Tuesday 1st February, I would like to formalise the sites request to vary our current Authorisation for the Disposal of Solid Waste by increasing the volume of High Volume Very Low Level Waste (HVVLLW) / Low Level Waste (LLW) from the current annual limit of 600m^3 to 1800m^3.

Hunterston A Site is committed to the waste hierarchy and as such ensures waste produced through decommissioning activities are categorised, segregated, treated and disposed in a manner appropriate to their physical, chemical and radiological properties. The site has been successful in this approach and thus far has segregated circa 500m^3 of waste as HVVLLW. These wastes have been packaged in ISO Containers and are stored onsite awaiting a disposal route.

As you are aware, the site is in the process of determining an approach to the management of legacy contamination in the CP7 compound. One option that is being pursued is the removal and disposal of the contaminated soil from site. This would result in approximately 800m^3 of waste that would require disposal through the sites solids discharge authorisation.

If the above option is implemented it is likely that the waste will be produced in the same twelve month period that the sites legacy HVVLLW is planned to be consigned from site.

In addition to the above waste quantities, hazard reduction projects are ongoing at Hunterston A Site with HVVLLW and LLW waste continually being produced. Due to the relatively small foot print of the site, space is at a premium. If the contaminated land in the CP7 compound was to be removed, the site would require a storage area to be built to store this waste until it could be consigned under the current volumetric restriction in the current discharge authorisation. This will add additional capital outlay and ongoing management costs for this waste stream and would add several years onto the project.

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The site is required to minimise the quantity of radioactive waste accumulated on the site as far as is reasonably practicable. The site has justified the short term storage of the above mentioned HVVLLW to the NII; based on the disposal of these HVVLLW at the Low Level Waste Repository would not represent the Best Practical Environmental Option. This is unlikely to be a sustainable argument, particularly if a waste route is available and the waste is only being stored onsite due to a volumetric restriction on the discharge authorisation.

We feel that the current limit of 600m^3 per year is no longer an appropriate volumetric limit for the site and could have a detrimental effect on the progress of important hazard reduction projects (e.g. CP7 compound), which are designed to progress the site into a safe and passive state. In addition the volumetric limit set would not allow for acceleration of project work if that became an option.

If you have any further queries please do not hesitate to contact myself or the Environment Manager 01294 824171

Yours sincerely

Peter N Roach
Site Director, Hunterston A
Magnox Limited

cc. Radiological and Environment Office
Records Office

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17 February 2011

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RECEIVED SEPA
23 FEB 2011
EAST KILBRIDE

Direct tel: 01294 824000
Direct fax: 01294 824032

Your ref:
Our ref: HNA/7403/TC/SEPA/1004N

Dear Ian,

Request for a variation to Hunterston A Sites Authorisation for the Disposal of Solid Waste to allow direct disposal of High Volume Very Low Level Waste to Lillyhall Landfill Site

As discussed during your site visit on Tuesday 1st February, I would like to formalise the sites request to vary our current Authorisation for the Disposal of Solid Waste to allow for waste categorised as High Volume Very Low Level Waste (HVVLLW) to be packaged in appropriate containers and consigned for disposal directly to WRG's Lillyhall landfill site. WRG are awaiting a response to their article 37 submission and are expecting this to be approved by the end of February. WRG have already had a readiness review with the EA and expect to be able to receive HVVLLW from the beginning of April (subject to the 28 day notice period in their draft authorisation). Due to the imminent decision on WRG's submission for their Lillyhall site, I thought it prudent to request this variation now in order to allow for an expedient review and processing of this request.

Hunterston A Site is committed to the waste hierarchy and as such ensures waste produced through decommissioning activities are categorised, segregated, treated and disposed in a manner appropriate to their physical, chemical and radiological properties. The site has been successful in this approach and thus far has segregated circa 500m3 of waste as HVVLLW. These wastes have been packaged in ISO Containers and are stored onsite awaiting a disposal route.

As you are aware, the site is in the process of determining an approach to the management of legacy contamination in the CP7 compound. One option that is being pursued is the removal and disposal of the contaminated soil from site. Characterisation studies of the area have shown that there is an opportunity to categorise significant quantities (in the region of 300m3) of the soil as HVVLLW.

The sites current authorisation allows this material to be packaged in ISO containers and disposed of or treated under an authorisation held by the Low Level Waste Repository

(LLWR). The authorisation requires HVVLLW to be transported to LLWR and then consigned from the repository to a licensed disposal site.

The site has been working with LLWR in order to establish a disposal route for the 500m3 of waste currently being stored onsite. The site has recently received a proposal from the repository for the temporary storage of these containers prior to disposal in licensed landfill site. The transfer to and from the repository has added approximately 39% onto the disposal cost for these containers.

In summary, the proposed variation to the sites authorisation would bring the following benefits to the management of the sites legacy and future HVVLLW arisings:

- Reduced environmental impact and financial savings on container costs of future HVVLLW arisings. (Lillyhall would not require HVVLLW to be delivered in IP2 rated containers).

- Conventional waste skips will speed up the waste loading process with the potential to increase packing efficiency.

- Reduced environmental impact and financial savings on transportation costs through increased packing efficiency and eliminating the need for HVVLLW to be transported to LLWR prior to the Lillyhall site.

In addition to the above benefits, HVVLLW can be disposed at Lillyhall under the current authorisation; therefore this request will not alter the final disposal destination of the sites HVVLLW but will streamline the process, offering significant savings to the tax payer.

If you have any further queries please do not hesitate to contact myself or the Environment Manager 01294 824171.

Yours sincerely

Duncan Cunnit

Peter N Roach
Site Director, Hunterston A
Magnox Limited

cc. Radiological and Environment Office
Records Office