



## WYLFA SITE, ANGLESEY, WALES (MAGNOX LIMITED)

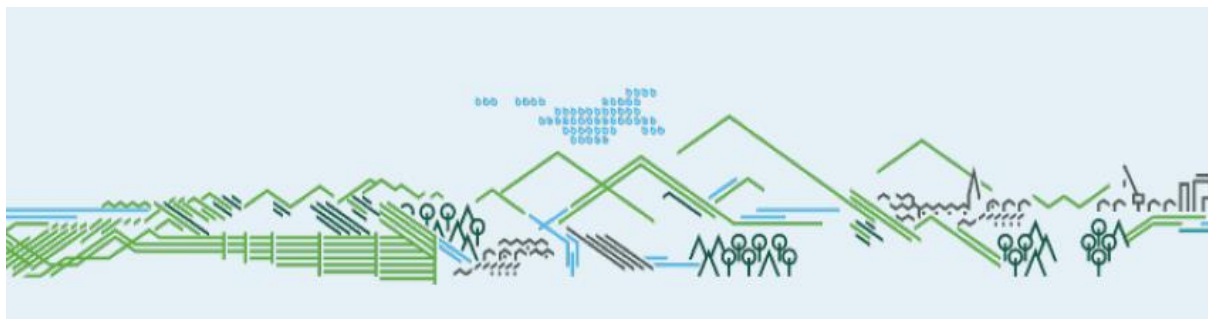
### REPORT TO THE SITE STAKEHOLDER GROUP MARCH 2020

#### FOREWORD

This report is issued to the Site Stakeholder Group (SSG) to provide a brief summary of the regulatory activities of Natural Resources Wales (NRW) and the Environment Agency (EA) relating to the Wylfa nuclear site.

NRW is accountable to the Welsh Government for the environmental regulation of nuclear sites in Wales. NRW has a contractual arrangement in place which enables them to draw on the experience and resources of the Environment Agency's specialist Nuclear Regulation Group, to assist in the delivery of on-site inspection work and associated assessments.

We regulate the disposal of radioactive waste, operation of combustion plant, discharges to water and conventional waste. Please see Annex 1 for further information on our role.



## Introduction

This report covers the period since the last Site Stakeholder Group (SSG) meeting on 24 September 2019 and highlights some key activities and areas of interest.

## Discharges from Wylfa

All radioactive discharges from Wylfa remain well within the annual limits set in the site's radioactive substances environmental permit.

All non-radioactive discharges to water remain within the limits set in the site's water discharge permits.

## Environmental monitoring

Magnox Ltd are required to carry out routine environmental monitoring under their radioactive substances permit. This involves taking a wide range of environmental samples from locations in the vicinity of the site and analysing them for radioactivity content.

Concentrations of caesium-137 in fish sampled in quarter 3 of 2019 were slightly elevated compared to recent results, but there is no indication of linkage with discharges from Wylfa and the concentrations remain low and within previously observed ranges.

Other results from the programme are in line with those from previous periods and show no cause for concern.

The Environment Agency also undertakes an independent programme of environmental monitoring, on behalf of NRW. This enables us to check the levels of radioactivity in the environment arising from permitted discharges from nuclear licensed sites, and so assess dose to the public to ensure that this remains within statutory limits. The results are widely reported, along with results from monitoring programmes around other UK nuclear sites, in the Radioactivity in Food and the Environment (RIFE) report. The report for 2018 was published in November 2019 and can be found at:

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

## Routine regulatory matters

Magnox Ltd completed defueling and fuel-free verification at Wylfa in October 2019, and the site formally transitioned into the Care & Maintenance Preparations phase in November 2019.

We inspected Magnox Ltd.'s arrangements for managing routine arisings of solid radioactive waste on 11 September, and their arrangements for project waste management on 19 November. We discussed current projects, arrangements for ensuring compliance with the waste acceptance criteria for the site waste will be transferred to, periodic review of the waste fingerprints, proposed changes to the staffing of the Waste team and implementation of the updated safety case for the radioactive waste management facilities. We inspected several waste management facilities around the site, and a sample of waste consignment records. We also reviewed how information is transferred throughout the process from processing of waste at the waste sorting facility to its eventual consignment off-site.

The Post-Defueling Hazard & Waste Removal project included several small-scale, time-limited tasks to dispose of redundant portacabins, equipment and other items. We reviewed Project Waste Management Plans (PWMPs) and a sample of clearance monitoring records and inspected the area of pile cap where the redundant fuelling machine hoist ropes had been size-reduced and packaged. The projects appeared to have been well planned and demonstrated good application of the waste management hierarchy. We observed good practices in relation to records management, waste segregation and active oversight by the Waste team.

We carried out an inspection of the environmental monitoring laboratory on 19 February 2020. The laboratory has been relocated from The Firs to an on-site location. We inspected the sample preparation areas and talked through the procedures for preparing and analysing routine environmental samples with the Health Physics staff who manage this work.

We did not identify any non-compliances with the conditions of the radioactive substances permit during these inspections but made a number of minor recommendations to improve processes (principally in respect of non-radioactive waste management).

We have continued to engage with Magnox Ltd as they plan for removal of the Operations shift staff at Wylfa, which is due to take place in late March 2020. The site will operate more limited hours, and emergency response arrangements will be in place out of hours. This change is underpinned by an environmental risk assessment. Plant alarms will be monitored by Security staff out of normal working hours, with a Duty Controller and Incident Responder available to attend site if necessary. We have reviewed the arrangements, including re-routing of alarms, development of alarm response protocols and contingency plans, and training of staff. Subject to completion of a few outstanding actions, we are satisfied that the revised arrangements should be sufficient to respond to any environmental events.

### **Permitting**

We issued a variation to the radioactive substances permit for Wylfa on 1 November 2019. This included reduced notification levels for discharges and new conditions requiring Magnox Ltd to develop a waste management plan and site-wide environmental safety case, setting out how they will manage radioactive waste from decommissioning of the site.

Further environmental permit variations are expected to be requested in the coming year to reflect reduced hazards on the site and changes to gaseous discharge routes.

### **Events & enforcement**

We regularly review summaries of all events reported and discuss those relevant to environmental compliance with Magnox Ltd as part of our routine regulation.

There have been no significant environmental events at Wylfa during this reporting period. We have not taken any enforcement action in the period since the last report.

## Contact details

If you have any queries, please contact the following:

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## Annex 1: The role of Natural Resources Wales & the Environment Agency at nuclear sites

Operating and cleaning up nuclear sites generates radioactive and non-radioactive wastes. Our role as the environmental regulator is to ensure that the impact of those wastes on people and the environment, now and in the future, is as small as it can be. We also aim to prevent pollution, enhance the environment, and contribute to the sustainable development of the UK.

We inspect nuclear sites and assess proposals from operators, to provide assurance that the operator is complying with the limits and conditions of the permits we issue under the Environmental Permitting Regulations 2016 (as amended) and other relevant legislation and policy.

We supplement direct regulation with a partnership approach, working with the operators, the Nuclear Decommissioning Authority (NDA) and the Office for Nuclear Regulation (ONR) to solve problems jointly.

We expect operators to comply fully with all relevant legislative requirements and permits. If this does not happen, we will not hesitate to use our enforcement powers to ensure that action is taken to protect the environment or to secure compliance.

In summary our objectives are to:

- Ensure that environmental permits are up to date, flexible and fit for purpose and that they drive environmental improvement
- Assess compliance with the limits and conditions of the permits
- Reduce risks to the environment and avoid creating further legacies
- Ensure that integrated waste strategies continue to improve
- Ensure that solid waste is packaged in a form suitable for disposal
- Ensure that infrastructure and assets are maintained to minimise environmental impact
- Develop guidance on Best Available Techniques (BAT)
- Influence NDA so that they provide appropriate direction to operators to minimise waste and improve environmental outcomes
- Encourage integrated management of fuel and nuclear materials so as to prevent or minimise the potential environmental impacts
- Ensure land and groundwater contaminated by radioactivity or other pollutants is managed appropriately and protect land and groundwater from further contamination
- Monitor and assess organisational change to ensure that environmental performance is maintained

Natural Resources Wales and the Environment Agency have produced joint guidance on our requirements for decommissioning of nuclear sites, which can be found here: <https://www.gov.uk/government/publications/the-decommissioning-of-nuclear-facilities>



**Cyfoeth  
Naturiol  
Cymru  
Natural  
Resources  
Wales**



**Environment  
Agency  
Asiantaeth yr  
Amgylchedd**

## **SAFLE WYLFA, YNYS MÔN, CYMRU (MAGNOX LIMITED)**

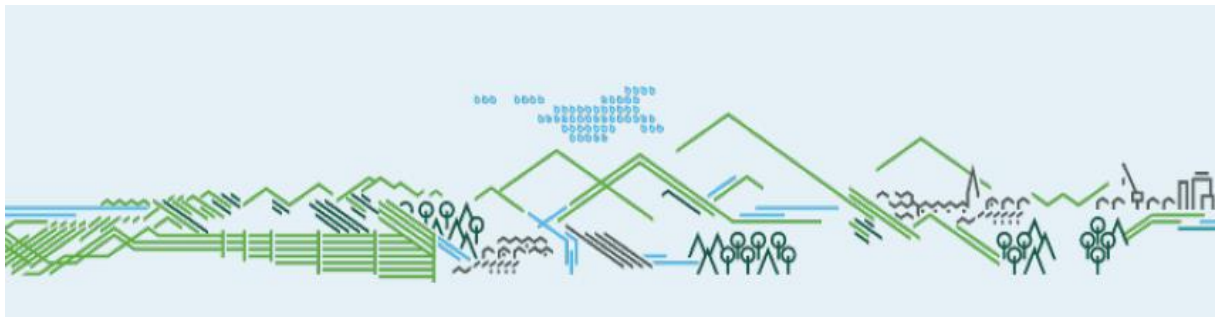
### **ADRODDIAD AR GYFER GRŴP RHANDEILIAID Y SAFEL MAWRTH 2020**

#### **RHAGAIR**

Cyflwynir yr adroddiad hwn i Grŵp Rhanddeiliaid y Safle i ddarparu crynodeb byr o weithgareddau rheoleiddio Cyfoeth Naturiol Cymru ac Asiantaeth yr Amgylchedd mewn perthynas â safle niwclear Wylfa.

Mae Cyfoeth Naturiol Cymru yn atebol i Lywodraeth Cymru am y gwaith o reoleiddio safleoedd niwclear yng Nghymru. Mae trefn gytundebol ar waith sy'n galluogi Cyfoeth Naturiol Cymru i ddefnyddio profiad ac adnoddau Grŵp Rheoleiddio Niwclear arbenigol Asiantaeth yr Amgylchedd i gynorthwyo wrth gyflawni gwaith arolygu ar y safle ac asesiadau cysylltiedig.

Rydym yn rheoleiddio'r trefniadau ar gyfer cael gwared ar wastraff ymbelydrol, gweithrediad y gwaith hylosgi, gollyngiadau i ddŵr, a gwastraff confensiynol. Gweler Atodiad 1 am ragor o wybodaeth am ein swyddogaeth.



## Cyflwyniad

Mae'r adroddiad hwn yn cwmpasu'r cyfnod ers y cyfarfod diwethaf or Grwp Rhanddeiliad Safle (SSG) ar y 24 o Fedi 2019 ac mae'n tynnu sylw at rai gweithgareddau allweddol a meysydd o ddiddordeb.

## Gollyngiadau safle Wylfa

Mae'r holl ollyngiadau ymbelydrol o safle Wylfa wedi aros ymhell o fewn y terfynau blynyddol a osodir yng nghaniatâd amgylcheddol sylweddau ymbelydrol y safle. Mae pob gollyngiad nad yw'n ymbelydrol i ddŵr hefyd o fewn y terfynau a bennir yn nhrwyddedau gollwng dŵr y safle.

## Monitro Amgylcheddol

Mae'n ofynnol i Magnox Ltd gynnal monitro amgylcheddol arferol o dan eu caniatâd sylweddau ymbelydrol. Mae hyn yn cynnwys cymryd ystod eang o samplau amgylcheddol o leoliadau yng nghyffiniau'r safle a'u dadansoddi ar gyfer cynnwys ymbelydredd.

Roedd crynodiadau cesiwm-137 mewn pysgod a samplwyd yn chwarter 3 o 2019 ychydig yn uwch o gymharu â chanlyniadau diweddar, ond nid oes unrhyw arwydd o gysylltiad â gollyngiadau o Wylfa ac mae'r crynodiadau'n parhau i fod yn isel ac o fewn ystodau a arsylwyd yn flaenorol.

Mae canlyniadau eraill y rhaglen yn unol â chanlyniadau cyfnodau blaenorol ac nid ydynt yn dangos unrhyw bryder.

Mae Asiantaeth yr Amgylchedd hefyd yn cynnal rhaglen annibynnol o fonitro amgylcheddol, ar ran Cyfoeth Naturiol Cymru. Mae hyn yn ein galluogi i wirio lefelau ymbelydredd yn yr amgylchedd sy'n deillio o ollyngiadau a ganiateir o safleoedd trwyddedig niwclear, ac drwy hynny asesu'r dos i'r cyhoedd i sicrhau bod hyn yn aros o fewn terfynau statudol. Mae'r canlyniadau hyn, ynghyd â chanlyniadau rhaglenni monitro o safleoedd niwclear eraill y DU i'w gweld yn adroddiad Ymbelydredd mewn Bwyd a'r Amgylchedd (RIFE). Cyhoeddwyd yr adroddiad ar gyfer 2018 ym mis Tachwedd 2019 ac mae i'w weld yn:

<https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports>

## Materion Rheoleiddio arferol

Cwblhaodd Magnox Ltd ddad-ddiffodd a dilysu di-danwydd yn Wylfa ym mis Hydref 2019, a throsglwyddodd y safle yn ffurfiol i'r cam Paratoi Gofal a Chynnal a Chadw ym mis Tachwedd 2019.

Gwnaethom archwilio trefniadau Magnox Ltd ar gyfer rheoli codiadau arferol o wastraff ymbelydrol soled ar 11 Medi, a'u trefniadau ar gyfer rheoli gwastraff prosiect ar 19 Tachwedd. Gwnaethom drafod prosiectau cyfredol, trefniadau ar gyfer sicrhau cydymffurfio â'r meini prawf derbyn gwastraff ar gyfer gwastraff y safle, adolygiad cyfnodol o'r olion bysedd gwastraff, cynnig newidiadau i staffio'r tîm Gwastraff a gweithredu'r achos diogelwch yn dilyn ei ddiweddariad ar gyfer y cyfleusterau rheoli gwastraff ymbelydrol. Gwnaethom archwilio nifer o gyfleusterau rheoli gwastraff o amgylch y safle, a sampl o gofnodion llwyth gwastraff.

Roedd y prosiect Tynnu Peryglon a Gwastraff ôl-danwydd yn cynnwys sawl tasg ar raddfa fach, â chyfyngiad amser, i gael gwared ar bortacabinau, offer ac eitemau eraill diangen. Gwnaethom adolygu Cynlluniau Rheoli Gwastraff Prosiect (PWMP) a sampl o

gofnodion monitro clirio, ac archwilio ardal y cap pentwr lle roedd rhaffau teclynnau codi peiriannau tanwydd diangen wedi cael eu lleihau a'u pecynnu. Roedd yn ymddangos bod y prosiectau wedi'u cynllunio'n dda ac yn dangos cymhwysiad da o'r hierarchaeth rheoli gwastraff. Gwnaethom arsylwi ar arferion da mewn perthynas â rheoli cofnodion, gwahanu gwastraff a goruchwyllo gweithredol gan y tîm gwastraff.

Gwnaethom arolygiad o'r labordy monitro amgylcheddol ar 19 Chwefror 2020. Mae'r labordy wedi'i adleoli o The Firs i leoliad ar y safle. Gwnaethom arolygu'r meysydd paratoi samplau, a thrafod y gweithdrefnau ar gyfer paratoi a dadansoddi samplau amgylcheddol arferol gyda'r staff Ffiseg lechyd sy'n rheoli'r gwaith hwn.

Ni wnaethom nodi unrhyw ddiffyg cydymffurfio ag amodau'r drwydded sylweddau ymbelydrol yn ystod yr archwiliadau hyn, ond gwnaethom nifer o fân argymhellion i wella prosesau (yn bennaf o ran rheoli gwastraff nad yw'n ymbelydrol).

Rydym wedi parhau i ymgysylltu â Magnox Ltd wrth iddynt gynllunio ar gyfer cael gwared ar y staff shifft Gweithrediadau yn Wylfa, a fydd yn digwydd ddiwedd mis Mawrth 2020. Bydd y safle'n gweithredu oriau mwy cyfyngedig, a bydd trefniadau ymateb brys ar waith y tu allan i oriau. Mae asesiad risg amgylcheddol wedi i gwblhau ar gyfer y newid. Bydd larymau safle yn cael eu monitro gan staff diogelwch y tu allan i oriau gwaith arferol, gyda Rheolwr Dyletswydd ac Ymatebydd Digwyddiad ar gael i fynychu'r safle os oes angen. Rydym wedi adolygu'r trefniadau, gan gynnwys ail-gyfeirio larymau, datblygu protocolau ymateb larwm a chynlluniau wrth gefn, a hyfforddi staff. Yn amodol a datrys ychydig o gamau dyledus, rydym yn fodlon y dylai'r trefniadau diwygiedig fod yn ddigonol i ymateb i unrhyw ddigwyddiadau amgylcheddol.

## Trwyddedu

Gwnaethom gyhoeddi newidiadau i'r drwydded sylweddau ymbelydrol ar gyfer Wylfa ar 1 Tachwedd 2019. Roedd hyn yn cynnwys lefelau hysbysu is ar gyfer gollyngiadau ac amodau newydd sy'n ei gwneud yn ofynnol i Magnox Ltd ddatblygu cynllun rheoli gwastraff ac achos diogelwch amgylcheddol ar draws y safle, gan nodi sut y byddant yn rheoli ymbelydrol. gwastraff o ddadgomisiynu'r safle. Disgwylir y gofynnir am amrywiadau pellach o drwyddedau amgylcheddol yn y flwyddyn i ddod i adlewyrchu llai o beryglon ar y safle a newidiadau i lwybrau gollwng nwyol.

Disgwylir y gofynnir am newidiadau pellach i'r trwyddedau amgylcheddol yn y flwyddyn i ddod i adlewyrchu llai o beryglon ar y safle a newidiadau i lwybrau gollwng nwyol.

## Digwyddiadau a gorfodi.

Rydym yn adolygu crynodebau o'r holl ddigwyddiadau yr adroddir arnynt yn rheolaidd, ac yn trafod y rhai sy'n berthnasol i gydymffurfiaid amgylcheddol â Magnox Ltd fel rhan o'n rheoliad arferol.

Ni fu unrhyw ddigwyddiadau amgylcheddol arwyddocaol yn Wylfa yn ystod y cyfnod adrodd hwn. Nid ydym wedi cymryd unrhyw gamau gorfodi yn y cyfnod ers yr adroddiad diwethaf.



## **Manylion Cyswllt**

Os oes gennych unrhyw ymholiadau, cysylltwch â'r canlynol

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## ATODIAD 1: Swyddogaeth Cyfoeth Naturiol Cymru ac Asiantaeth yr Amgylchedd ar safleoedd niwclear.

Mae gweithredu a glanhau safleoedd niwclear yn cynhyrchu gwastraff ymbelydrol ac anymbelydrol. Ein swyddogaeth fel y rheoleiddiwr amgylcheddol yw sicrhau bod effaith y gwastraffau hynny ar bobl a'r amgylchedd, yn awr ac yn y dyfodol, cyn lleied ag y gall fod. Rydym hefyd yn anelu at atal llygredd, gwella'r amgylchedd, a chyfrannu at ddatblygiad cynaliadwy'r DU.

Rydym yn archwilio safleoedd niwclear ac yn asesu cynigion gan weithredwyr er mwyn darparu sicrwydd fod y gweithredwr yn cydymffurfio â chyfyngiadau ac amodau'r trwyddedau rydym yn eu rhoi o dan Reoliadau Trwyddedu Amgylcheddol 2016 (fel y'u diwygiwyd) a deddfwriaethau a pholisïau perthnasol eraill.

Rydym yn ychwanegu at reoleiddio uniongyrchol drwy ddull partneriaeth, gan weithio gyda'r gweithredwyr, yr Awdurdod Datgomisiynu Niwclear a'r Swyddfa dros Reoli Niwclear er mwyn datrys problemau ar y cyd.

Rydym yn disgwyl i weithredwyr gydymffurfio'n llwyr â holl ofynion deddfwriaethol perthnasol ac unrhyw drwyddedau. Os na fydd hyn yn digwydd, ni fyddwn yn oedi cyn defnyddio ein pwerau gorfodi er mwyn sicrhau bod camau gweithredu'n cael eu cymryd er mwyn gwarchod yr amgylchedd neu er mwyn sicrhau cydymffurfiaeth. I grynhoi, ein hamcanion yw:

- Sicrhau bod trwyddedau amgylcheddol yn gyfredol, yn hyblyg ac yn addas i'r diben a'u bod yn sbarduno gwellhad amgylcheddol
- Asesu cydymffurfiaeth â chyfyngiadau ac amodau'r trwyddedau
- Lleihau'r risgiau i'r amgylchedd ac osgoi creu etifeddiaethau pellach
- Sicrhau bod strategaethau gwastraff integredig yn parhau i wella
- Sicrhau bod gwastraff soled yn cael ei becynnu mewn ffurf briodol ar gyfer ei waredu
- Sicrhau bod y seilwaith a'r asedau yn cael eu cynnal a'u cadw i leihau'r effaith ar yr amgylchedd
- Datblygu canllawiau ynglŷn â'r Technegau Gorau sydd ar Gael
- Dylanwadu ar yr Awdurdod Datgomisiynu Niwclear fel ei fod yn darparu cyfeiriad priodol ar gyfer gweithredwyr ynghylch sut i leihau gwastraff a gwella canlyniadau amgylcheddol
- Annog dulliau integredig o reoli tanwydd a deunyddiau niwclear er mwyn atal neu leihau'r effeithiau amgylcheddol posibl
- Sicrhau bod tir a dŵr daear sydd wedi cael eu halogi gan ymbelydredd neu lygryddion eraill yn cael eu rheoli'n briodol a sicrhau bod tir a dŵr daear yn cael eu gwarchod oddi wrth halogi pellach
- Monitro ac asesu newid sefydliadol er mwyn sicrhau bod perfformiad amgylcheddol yn cael ei gynnal

Mae Cyfoeth Naturiol Cymru ac Asiantaeth yr Amgylchedd wedi cynhyrchu canllawiau ar y cyd ar ein gofynion ar gyfer datgomisiynu safleoedd niwclear, y gellir eu gweld yma:

<https://www.gov.uk/government/publications/the-decommissioning-of-nuclear-facilities>