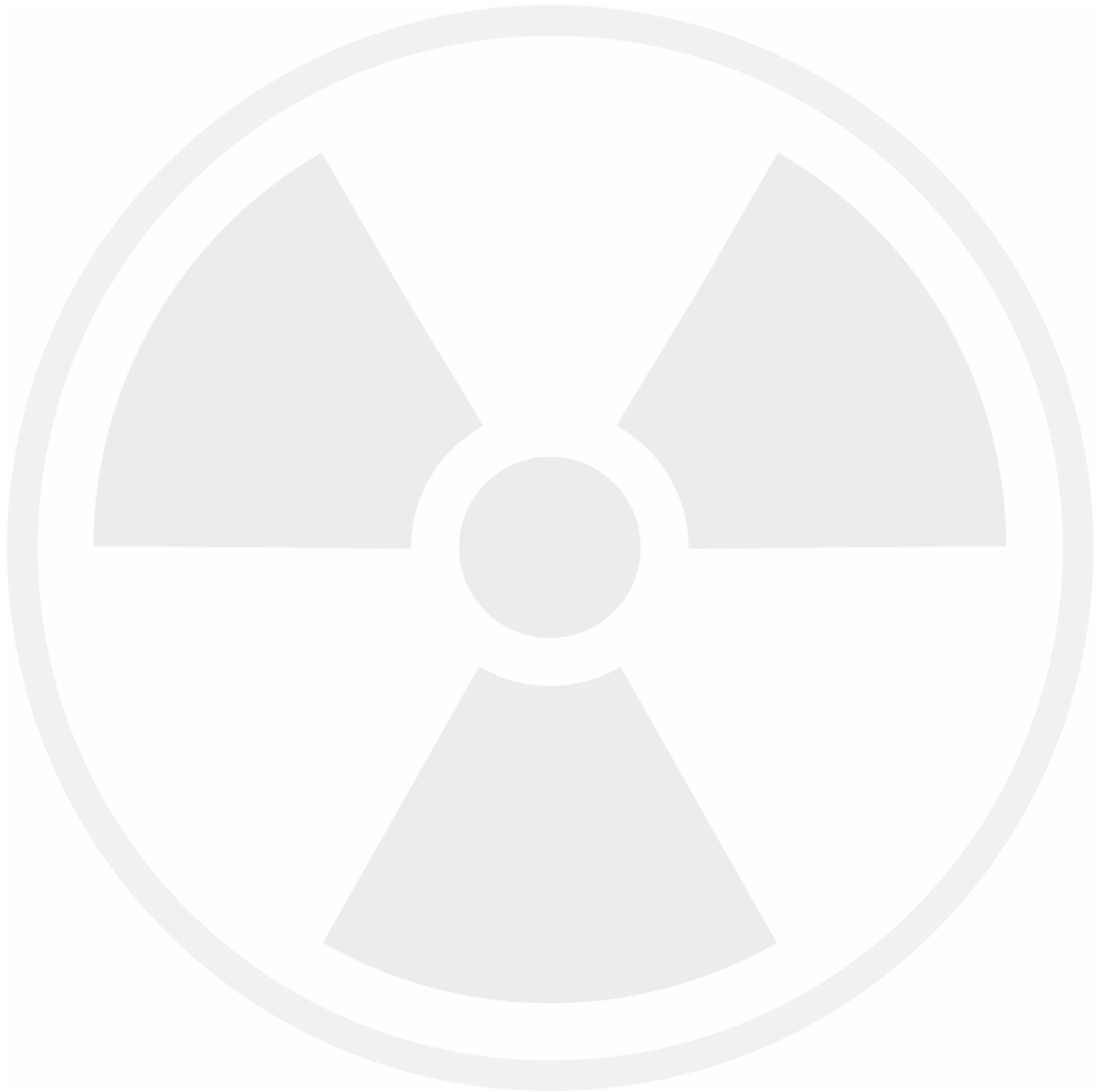




Committee on Radioactive Waste Management

**SIXTEENTH
ANNUAL
REPORT**

June 2020



<i>Report Name:</i>	CoRWM Sixteenth Annual Report
<i>CoRWM Document No:</i>	3641
<i>Issue date:</i>	18 th June 2020
<i>Approved by:</i>	Sir Nigel Thrift
<i>Compiled by:</i>	Mark Kirkbride



Committee on Radioactive Waste Management

INDEPENDENCE
EXPERTISE
SCRUTINY
ADVICE
INTEGRITY

Inside the breeder fuel removal facility at Dounreay

Table of Contents

06

**Chair's
Statement**

08

**Executive
Summary**

11

Introduction

16

**Work Programme
Delivery 2019-2020**

30

**Forward
Look**

32

**Conclusion &
Recommendations**

34	Annex A: CoRWM Expenditure
36	Annex B: CoRWM Membership
40	Annex C: Sub-Groups
44	Annex D: Meetings Schedule
47	Annex E: List of Acronyms



Rail transportation of spent nuclear fuel

Chair's Statement



Sir Nigel Thrift
Chair of the Committee

It is a genuine privilege to be the Chair of the Committee on Radioactive Waste Management (CoRWM).

This is a Committee with an extraordinary history of giving independent, impartial scientific and technical advice on the character and disposition of radioactive waste, advice which has had real impacts on government policy. For example, in December 2018, a new process for identifying a suitable location for a geological disposal facility (GDF) was triggered in England and subsequently in Wales. The GDF is a facility which was originally proposed by CoRWM.

Many countries with a nuclear industry have a body like CoRWM which provides government with independent advice on how to deal safely with radioactive waste using the most up-to-date thinking. CoRWM is an essential element in building public trust that policy on managing radioactive waste will not be skewed by ideology or faction and is going in the right direction. I am proud to be a member of a Committee which is such an indispensable public body.

Through the course of the year, I have seen Committee members working long and hard to scrutinise the UK Government and devolved administrations' development and implementation of radioactive waste policy, giving out independent advice on many difficult issues.

For example, this year, we have provided scrutiny and advice to BEIS, the Welsh Government and RWM on activities related to the GDF siting process and implementation of policy. We have offered scrutiny and advice to BEIS, the Welsh Government and RWM on technical site evaluation.

We have advised BEIS on developing regulation to give the Office for Nuclear Regulation the powers to licence a GDF.

We have advised the Scottish Government and the Welsh Government on the management of radioactive waste.

We have provided scrutiny and advice to BEIS and NDA on the storage of radioactive waste, spent fuel and nuclear materials that may be destined for disposal in a GDF, on the prospects for near surface disposal, and on horizontal borehole technology.

We have provided responsive advice to BEIS on proposals to look at the radioactive waste aspects of the Government's review of Nuclear Decommissioning and Radioactive Substances Policy.

Finally, we have engaged in various outreach activities, including community advice and public talks.

Not only has CoRWM been responsible for giving many different pieces of advice, but it has also had a busy schedule of five plenary meetings (in London, Edinburgh and Cardiff), as well as a large number of subgroup meetings. We also made a very informative visit to Dounreay.

Chairing a committee like CoRWM means that I have incurred many debts. I should begin by acknowledging the help and guidance of the Deputy Chair, Professor Campbell Gemmell.

I want to thank all of the other Committee members for the energy and dedication they have shown which has often been over and above the call of duty. In particular, I must also thank the members of CoRWM who have stepped down from the Committee during the course of this year, namely Professor Gregg Butler, Stephen Newson, Professor Julia West, and Dr Janet Wilson. They gave service of the highest order.

I should end by thanking the enhanced CoRWM Secretariat for their hard work and exceptional dedication, especially in the latter part of the year in which the Covid-19 epidemic has meant that for some months all Committee working has had to be remote. The Committee has made a variety of administrative and process improvements as a result of an enhanced Secretariat which now includes a permanent Technical Secretary.

In particular, the CoRWM Framework Document has been approved and now sits at:

<https://www.gov.uk/government/publications/committee-on-radioactive-waste-management-framework-document/>

Executive Summary

This Annual Report (CoRWM doc. 3641) covers the full range of CoRWM Committee activities in 2019-20 and the associated documents produced from them.

Through our numerous Committee meetings and subgroup meetings in Edinburgh, Cardiff, London, and other locations, we have interacted continuously with our sponsors and partners.

In all, we contributed 280 working days supporting the UK Government and the devolved administrations, the Nuclear Decommissioning Authority (NDA) and Radioactive Waste Management (RWM).

Our work programme for 2019-22 (CoRWM doc. 3543) shows another year of concentrated activity.

The appointment of seven new members means that we are now at full strength again and able to commit even more time and effort to providing scrutiny and advice.



CoRWM Committee Members, November 2019

(L-R: Geraldine Thomas, Neil Hyatt, Ray Kemp, Derek Lacey, Campbell Gemmell, Stephen Tromans, Richard Shaw, Gregg Butler (retired), Penny Harvey, Janet Wilson (retired), Nigel Thrift, Mark Kirkbride (members not in photo: Andrew Walters and Claire Corkhill))

Our advice and counsel were sought on many different issues, far too many to list in detail here.

However, the highlights included:

- an active programme of outreach which included an open plenary with invited speakers, a programme of visits to key sites, the publication of a further position paper summarising the state of knowledge on deep borehole disposal, advice to communities as requested, public talks, and making the full archive of CoRWM papers, which have been developed since the inception of the Committee in 2003, available in The National Archives.
- advice and support to the NDA and RWM on a variety of issues including community engagement, site evaluation, the transformation of RWM into a delivery body, the storage of radioactive waste, near surface disposal, and forging a single radioactive waste strategy for the whole inventory with appropriate measures of progress.
- advice and support to the Scottish and Welsh Governments' on a range of issues.
- advice to BEIS (Department for Business, Energy and Industrial Strategy) on the radioactive waste aspects of the Government's review of Nuclear Decommissioning and Radioactive Substances Policy and the National Policy Statement on Geological Disposal Infrastructure.

I end by restating how firmly convinced I am that the Committee's work is of national importance for building and maintaining public trust in a clear and coherent radioactive waste strategy through the provision of impartial scientific and technical expert advice on the full range of relevant issues.



Sir Nigel Thrift
Chair, Committee on Radioactive Waste Management



Sellafield Site from St Bees Head, West Cumbria

1 Introduction

- 1.1 This is the sixteenth Annual Report of the Committee on Radioactive Waste Management (CoRWM). It describes the Committee's work in the financial year from April 2019 to March 2020 and outlines CoRWM's current views on the status of UK Government and devolved administrations' plans and arrangements for the long-term management of radioactive wastes.

Scope of CoRWM's Work

- 1.2 CoRWM's sponsors are the Department for Business, Energy and Industrial Strategy (BEIS) of the UK Government, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland. The Committee's work programme for 2019-22 (CoRWM doc. 3397) was agreed with its sponsors and carried out within CoRWM's agreed budget (Annex A).
- 1.3 The purpose of the Committee is to give independent advice, based upon its remit and utilising the skills and expertise of its members and to provide informed scrutiny of the available evidence to UK Government and devolved administration Ministers on the management of radioactive waste, arising from civil and where relevant defence nuclear programmes, including storage and disposal.
- 1.4 CoRWM's objectives are to provide independent evidence-based advice:
- a. To Ministers of the UK Government and devolved administrations, Nuclear Decommissioning Authority (NDA) and Radioactive Waste Management Ltd (RWM) on proposals, plans and programmes to deliver geological disposal, together with robust interim storage, for the UK's higher activity radioactive waste.
 - b. On other radioactive waste management issues as requested by sponsor Ministers, including advice requested by the Scottish Government in relation to its policy for the management of radioactive wastes.

- 1.5 CoRWM’s full terms of reference can be found on its website¹.
- 1.6 In fulfilling its remit to provide independent and evidence-based advice, CoRWM is expected to maintain an independent overview of issues relevant to the delivery of UK Government and devolved administrations’ radioactive waste management programmes. It should bring to the attention of sponsor Ministers issues that it considers to be either: a) positive and worthy of note; or b) concerns that, in the Committee’s opinion, need to be addressed.
- 1.7 During its work in the past year, CoRWM has primarily engaged with officials within BEIS, Scottish Government, Welsh Government, the NDA and RWM. RWM is the public sector developer for geological disposal facility infrastructure. The Committee has also engaged with officials in the Department of Agriculture, Environment and Rural Affairs in Northern Ireland and the nuclear safety, security, and environmental regulators.
- 1.8 The latest work programme for 2019-2020 (CoRWM Doc. 3543) is available via the CoRWM website².

CoRWM Membership

- 1.9 Membership of the Committee has changed significantly during the year with four members leaving and seven new members appointed, through an open and transparent recruitment process.
- 1.10 The appointments of three committee members were extended to enable the Committee’s work programme to continue and to enable a smooth handover to take place to the new members. (See Section 2). These were Stephen Newson (until 31st May 2019) and Professor Gregg Butler and Dr Janet Wilson (until 30th November 2019).
- 1.11 The new members have integrated well and are all proving to be a substantial asset, adding their talents to those of the existing members.

¹ Available on CoRWM webpage:
<https://www.gov.uk/government/publications/committee-on-radioactive-waste-management-framework-document>

² Available on CoRWM webpage:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/804119/CoRWM_Work_Programme_Document_2019.pdf

CoRWM's Outreach Activities

- 1.12 The Committee remains committed to holding plenary meetings in public despite the Covid-19 challenges that have limited this possibility in the current year.
- 1.13 The committee shall look at options for public participation, including via on-line meeting platforms.
- 1.14 Members have attended a large number of events run by other organisations. CoRWM considers that it is important for the Committee to engage fully with the public and other stakeholders to gain an understanding of their views and concerns on radioactive waste management in the UK and aims to carry out more outreach activities in the years to come as soon as the current Covid-19 social distancing restrictions are adequately relaxed.
- 1.15 CoRWM held three plenary meetings throughout the Financial Year 2019-2020; only one (the plenary on 9th May) was opened to members of the public. The minutes of the CoRWM Open Plenary on 9th May are available at the link below³
- 1.16 This event provided a welcome opportunity for members of the public to talk informally to Committee members and really understand what the Committee is all about.
- 1.17 Unfortunately, the open Plenaries were attenuated because of the need, in the first instance, to make new appointments and, in the second, because of the Covid-19 epidemic together with both the general election and Brexit.
- 1.18 The last year has seen a continuation of the population of CoRWM's website with a large amount of material. In particular, a position paper – on deep borehole disposal - has been added to our website alongside the six already published. Various CoRWM responses to Government consultations can also be found there.
- 1.19 All of the 1,500 plus open documents which comprise CoRWM's long history are now available on the National Archives website, named by document number. Also available on the website is a searchable Excel spreadsheet to make it easier to see what content is available and to find documents of interest.

³ Available on CoRWM webpage:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/854441/corwm-meeting-minutes-9-may-2019.pdf

1.20 The Secretariat has worked well this year and has proved vital to the Committee's functioning.

Summary of Year

1.21 In the financial year 2019-20, CoRWM has provided advice and undertaken scrutiny in the following areas:

- advice to BEIS and RWM on the GDF siting issues arising from the Implementing Geological Disposal – Working With Communities Policy Paper, including developer led communications, public and stakeholder engagement and the regulatory framework;
- scrutiny of both BEIS's and RWM's activities relating to the management of higher activity waste (HAW);
- advice to BEIS and RWM on the role of the safety case in the GDF siting process, especially in relation to the need for high-level descriptions of GDF designs and safety cases for the three geological settings namely: hard rock, clay and salt;
- advice to the Welsh Government on the implementation of Welsh policy on geological disposal including community engagement, and scrutiny of the Welsh Government approach to the management of HAW;
- advice to the Scottish Government on progress with its HAW Implementation Strategy; and
- scrutiny of the transition of RWM into the implementation stage of geological disposal.

1.22 Progress on each of these is reported in later sections.



Transportation of spent fuel from Sizewell A

2 Delivery of 2019/2020 Work Programme

2.1 Communications and Working with Communities

- 2.1.1 Scrutiny of and advice to BEIS and RWM on activities related to WWC policy and related siting and community engagement documents.
- 2.1.2 *Task 1A: To scrutinise and advise on the integrated communication strategy of BEIS, NDA and RWM.*
- 2.1.3 CoRWM stress the importance of a cohesive messaging strategy to support effective stakeholder engagement around the management and disposal of radioactive waste. CoRWM members are willing to support attempts by RWM, NDA and BEIS to integrate their communication plans. A half day meeting between CoRWM and RWM (in March 2020) was an opportunity for RWM to introduce their new management team and current communication strategy - and for new members of CoRWM to discuss current strategy and communication plans.
- 2.1.4 The Committee is compiling a register of key contacts within RWM, NDA and BEIS for internal use and to support coordination.
- 2.1.5 In the past two years considerable effort has been made to make the many materials on CoRWM's website more accessible both to CoRWM members (for closed documents) and to the general public. Work on the CoRWM document archive has been progressed - including collaboration with RWM to help identify missing documents. The archive is an important resource for CoRWM and RWM.
- 2.1.6 Public documents on the website also include an account of the history of nuclear waste in the UK (including changes in procedures and notable differences between DAs). For example, CoRWM noted that the Welsh Government (by contrast with the UK Government preparing materials for England) publish all comments alongside their responses to public consultations. Sub-group 1 suggested that RWM may wish to consider this approach in responding to their recent consultation on GDF siting evaluation.
- 2.1.7 CoRWM assumes the role of observer in key engagement events with NGOs, and site stakeholder groups - in conversation with BEIS, NDA/RWM.
- 2.1.8 Unfortunately, key meetings over the last four months have been postponed but we continue to follow key websites for communications that can be discussed in more detail once it is again possible to participate in these key public fora.

- 2.1.9 *Task 1B: To scrutinise implementation of community engagement policy in England and Wales.*
- 2.1.10 The Committee continued to meet with BEIS and RWM (doc. 3569: May; doc. 3591: September) to discuss the Working with Communities policy implementation. SG1 were pleased to be informed that BEIS are performing a scoping exercise regarding Property Value Protection schemes, to determine what might need to be done and when in relation to the GDF project. Sub-group 1 advised that some CoRWM members have expertise in this field which BEIS could utilise.
- 2.1.11 CoRWM responded to the request from Welsh Government and Natural Resources Wales to scrutinize and suggest improvements to their generic briefing document on Geological Disposal of Higher Activity Radioactive Waste
- 2.1.12 CoRWM recognises that the COVID-19 pandemic will probably affect community engagement strategies in the short term, and as a result members are willing to support RWM as they adapt strategies and find new opportunities for on-line engagement during what seem likely to become extended periods of lock-down and social distancing.
- 2.1.13 *Task 1C: To act as a source of independent information to communities if approached.*
- 2.1.14 RWM agreed to inform interested parties of CoRWM's willingness to discuss concerns and answer questions. CoRWM does not deem it appropriate to approach communities directly as it is important to maintain a clean stance of neutrality.
- 2.1.15 The committee continues to discuss the challenges of the siting process, and the requirement for 'interested parties' to open discussions and consider forming a Working Group to open the discussion to the public locally. RWM and the interested parties would then be required to inform and involve all principal local authorities and work together with an independent chair to move towards the formation of a Community Partnership. The precise geography for any siting process will depend on the search areas developed in discussion with interested parties, local authorities and the public.
- 2.1.16 Members of sub-group 1 responded to invitations to meet with Copeland Borough Council and subsequently with officials from Allerdale Borough Council (doc. 3608). Presentations on CoRWM's role and independent expertise were followed by discussion with Councillors.
- 2.1.17 *Task 1D: To report to the main CoRWM Committee to enable the development of advice to Ministers, NDA and RWM.*
- 2.1.18 Sub-group 1 continued to lead on this task with close co-ordination with other sub-groups to ensure a consistent approach is taken by the Committee.

2.2 Site Evaluation Criteria

- 2.2.1 *Task 2A: Scrutiny and provision of advice to BEIS and RWM on GDF siting activities, including selection criteria, methods of investigation, and the timescale for carrying out site selection in the three rock types. This will include the scrutiny of RWMs application their Site Evaluation process and preparations for development of a GDF and examination where the GDF programme could be progressed faster (may be rock type dependant).*
- 2.2.2 Following RWM's Site Evaluation Consultation meetings held in the last quarter of last year sub-group 2 prepared and submitted CoRWM's response to the Consultation (one for England and one Wales) which were published on CoRWM's website in June 2019⁴. In the response CoRWM noted that environmental components could be more thoroughly covered in the document, and raised a query to RWM about how sites in different areas with different geologies will be differentiated in order to determine which to take forwards, taking into account that communities could show interest at different times.
- 2.2.3 In October 2019 the sub-group's chair met with RWM's Site Evaluation Manager and his senior team members and was pleased to note that many of CoRWM's concerns and suggestions had been addressed in their revised Site Evaluation documentation and that the revised document would be much more user friendly.
- 2.2.4 *Task 2B: Watching brief on new technologies that could be applicable to the development of a GDF including those in the mining and construction sectors and their potential impacts on a GDF programme. This will include continued examination of the possible role of deep borehole disposal for parts of the UKs radioactive waste inventory and the implications of any adjustments in the inventory.*
- 2.2.5 Sub-group 2 prepared a CoRWM Position Paper on Deep Borehole disposal which was published on the CoRWM web site in August 2019 (CoRWM doc. 3574). This paper reviews CoRWM's previous considerations of deep borehole disposal and considers recent developments in the approach.
- 2.2.6 It concluded that there are likely to be a number of problems with this approach that will be difficult to resolve for the UK inventory meaning that deep borehole disposal is unlikely to be a practical option for most of the UKs radioactive waste inventory.
- 2.2.7 Sub-group 2 attended a meeting with Deep Isolation⁵ on 11th September 2019 hosted by BEIS and also attend by RWM regarding their ideas for directionally drilled boreholes (initially vertical and then turned

⁴ <https://www.gov.uk/government/publications/geological-disposal-facility-site-evaluation-corwm-response-to-the-rwm-consultation>

⁵ <https://www.deepisolation.com/>

approximately horizontally for waste emplacement zones and produced a note (CoRWM doc. 3585) after this meeting. CoRWM's views on deep borehole disposal were not changed following this meeting.

2.2.8 *Task 2C: Watching brief on RWM on any activities that may have implications for a GDF safety case.*

2.2.9 The sub-group has continued its monitoring on RWM activities but has nothing substantive to report this year.

2.3 GDF Process, Policy Implementation, Planning and Regulation

2.3.1 The main development to note is the publication of the National Policy Statement (NPS) on Geological Disposal Infrastructure, which was published after public consultation on 4th July 2019, and laid before Parliament alongside the Government's response to the Commons Committee for Business, Energy and Industrial Strategy.

2.3.2 The NPS completed the required 21 Parliamentary sitting days and was formally designated on 17th October 2019. The purpose of the NPS is stated as being:

- implementation of government policy on geological disposal for higher activity radioactive waste and the need for such infrastructure;
- to establish a clear and transparent planning process to guide the preparation and development of nationally significant infrastructure projects relating to the geological disposal of higher activity radioactive waste in England;
- to provide a planning process that enables infrastructure to be developed which will provide a long term, secure, safe and sustainable solution to the disposal of higher activity radioactive waste;
- to provide guidance to nationally significant infrastructure developers on the relevant infrastructure, generic impacts and general siting considerations that may need to be taken into account when planning for the development of geological disposal infrastructure;
- to provide the primary basis for examination by the Examining Authority and for decisions by the Secretary of State on development consent applications for geological disposal infrastructure; and
- to provide policy and guidance on generic impacts to support any relevant local planning authorities in preparing their local impact reports, which they will be invited to prepare under section 60 of the Planning Act.

- 2.3.3 Members of sub-group 3 participated fully in both the formal consultation process and in discussions with representatives of BEIS and influenced the final form of the NPS, in particular its statement as to the relationship between geological disposal and nuclear new build.
- 2.3.4 The next stage in the regulatory process for a Geological Disposal Facility (GDF) is the introduction of the necessary changes to the law on nuclear site licensing which will be required to bring a GDF within the site licensing regime. This process is currently with the Office for Nuclear Regulation (ONR), and sub-group 3 is prepared to assist with and comment upon any legislative proposals which may be advanced.
- 2.3.5 Building on the helpful meeting held with ONR in 2018, one of sub-group 3's aims has been to develop sound links with ONR and the Environment Agency (EA) (as the environmental regulator in England).
- 2.3.6 Following the appointment of new members to CoRWM in 2019, and the consequent reconstitution of sub-group 3, the following work programme was agreed upon by sub-group 3 members in December 2019:
- establish lines of contact with ONR and EA and Natural Resources Wales (NRW) as regulators of a GDF in England or Wales, with a view to establishing regular meetings to discuss regulatory issues arising during the GDF siting process. These to include:
 - prescription of GDF for nuclear site licensing purposes;
 - how the licensing (and ultimately de-licensing) and staged environmental permitting processes will work and will interact;
 - the role of regulators in the working with communities' process; regulators' examination of Radioactive Waste Management's (RWM's) safety, security and environmental safety cases as these develop; and
 - examining regulators' appreciation of the challenges and risks associated with the licensing process.
 - meet and discuss with RWM what they see as the main regulatory challenges, risks and preparedness (noting the acknowledgement of legal/regulatory risk in their Annual Report and Accounts 2018-2019).
 - work towards publication of a comprehensive and definitive CoRWM Position Paper on regulation of a GDF during 2020.
 - review and advise on "Sector Guidance" on in-situ disposal of low-level waste through the planning system.
 - keep under review the implications of the proposed update to Nuclear Decommissioning and Radioactive Substances policy for the regulatory processes and provide advice, as necessary.

- keep under review any further implications of the UK's exit from Euratom and the EU as this develops and provide advice to BEIS and Devolved Administrations.
- 2.3.7 Work is under way on these tasks.
- 2.3.8 A meeting with the Environment Agency at Director level took place on 4th February 2020, followed by a substantial meeting with relevant Environment Agency personnel at regulatory and operational level on 12th March 2020. This ranged over a number of topics including "risk informed regulation" in the context of nuclear decommissioning.
- 2.3.9 Another important issue discussed was the role of the Agency as a trusted regulator and its communication of risk as part of the Working with Communities process.
- 2.3.10 A similar meeting has been arranged with ONR and it is hoped and envisaged that a structure for regular meetings with both ONR and the EA will be established, with liaison also with Scottish Environment Protection Agency (SEPA) and NRW through CoRWM's Scottish and Welsh sub-groups.
- 2.3.11 The aim of sub-group 3 is to produce a Position Paper on Regulation by the end of 2020. Work has begun on this to produce a skeleton of its content. The focus will be on regulation of a GDF, but there are a number of issues which will need to be addressed as part of that context. These include: the proposed update of Nuclear Decommissioning and Radioactive Substances policy; the emergence of the prospect of use of near-surface disposal; and the role of Euratom and / or IAEA standards after the end of the transitional period for withdrawal from Euratom and the EU.
- 2.3.12 Once work is further advanced on the draft Position Paper, the intention is to meet with RWM to discuss their preparedness to be a regulated entity and their approach to managing regulatory risks.
- 2.3.13 Sub-group 3 members are conscious of the important regulatory role of planning authorities and will be actively participating in CoRWM's review of any radioactive waste management policy developments.
- 2.3.14 One of sub-group 3's members, Andrew Walters, has regularly attended Review Meetings on Sector Guidance on in-situ disposal of low-level waste through the planning system.
- 2.3.15 The focus of this group is providing sector wide advice on the potential disposal of radioactive material, as supplemental to existing planning guidance on conventional waste disposal. Andrew has provided direct support to BEIS on the language and intent of the guidance as an introductory document to in-situ waste management providing a first point of reference for those seeking to understand the planning consenting process for the on-site disposal of materials on a current or former nuclear

licensed site. He has included an additional perspective on the guidance as it might apply to both planning and permitting regimes across the UK.

2.3.16 In the planning context, CoRWM engaged and attended meetings with the Advanced Nuclear Technologies (ANT) Public Dialogue Oversight Group. The ANT Project's aims and objectives are to explore potential participant communities' view on matters such as;

- 'small' nuclear facilities in relation to 'big' nuclear power plants;
- advanced nuclear technologies in relation to conventional nuclear;
- advanced nuclear in the context of mitigating climate change;
- the siting and deployment of advanced nuclear;
- regulation of advanced nuclear technologies;
- potential uses of advanced nuclear (electricity generation, industrial heat, CHP etc); and
- potential features and/or benefits which would help communities support advanced nuclear development.

2.3.17 The role of the Oversight Group is to scrutinise any consultation associated with the updating of the policy, in order to seek to ensure that through effective communications key questions are being effectively presented and seen to be addressed, that background and stimulus materials are comprehensive, balanced and neutral and are accessible to a lay audience, and that the outputs from the dialogue exercises, including written reports, are comprehensive.

2.4 Scottish Government Activities

- 2.4.1 The main developments from the somewhat limited work programme implementable this year were the following:
- 2.4.2 *Task 4A*
- 2.4.3 A number of changes happened this year in the Scottish Government (SG) team. A new team structure was created with a new team leader, one new staff member, and a new unit manager working under the deputy director.
- 2.4.4 The main significant development was the re-convening of the Higher Activity Waste in Scotland Strategy Implementation Group (HAWSSIG) and a workshop meeting where a number of relevant issues was discussed, including: the scope and scheduling of a decadal review of the SG's waste policy on higher activity waste, in particular in relation to near site near surface (NSNS) storage; the upcoming BEIS UK policy review; the NDA fourth strategy review process and developments in relation to waste classification and disposal and storage options more generally and the fit and sequencing of all of these elements.
- 2.4.5 The Chair of sub-group 4 (Campbell Gemmell) attended the only SNS meeting held in this year (the second 6-monthly meeting was cancelled). A briefing was provided on relevant CoRWM developments including member recruitment and wider UK activities and the meeting received briefings on the Magnox decommissioning and Dounreay Programmes as well as the approach to be taken to Guidance on Release Requirements for nuclear sites from radioactive substances regulations.
- 2.4.6 Members of sub-group 4, the Committee Chair and Secretariat visited Dounreay in September and the Chair met with SG Cabinet Secretary for the Environment, Roseanna Cunningham MSP in November.
- 2.4.7 *Task 4B*
- 2.4.8 Sub-group 4 was also connected to sub-group 6 activities looking at the total inventory and fit with developments on classification and management in the UK arena.
- 2.4.9 *Task 4C*
- 2.4.10 There were no other areas of work this year, with the exception of a briefing meeting held with the new Scottish Government staff team.

2.5 Welsh Government Activities

- 2.5.1 On 22nd November 2019, Gerry Thomas met in Preston with Gregg Butler for a handover meeting (CoRWM doc. 3610).
- 2.5.2 Gerry also met with representatives from the Welsh government and Natural Resources Wales for an introductory meeting at Cathays Park, Cardiff on 28th January 2020 to discuss areas of interest in Wales regarding radioactive waste management and future nuclear development in Wales (CoRWM doc. 3620).
- 2.5.3 There is a need for better communication around nuclear matters in Wales. Gerry explained that Sub-group 1 of CoRWM had been set up to aid better communication of matters under the Committee's remit, and that CoRWM would be providing advice to BEIS on public communication. Gerry offered to speak to members of WG, NRW and the local community in North Wales in general terms regarding radiation and health effects to help dispel some of the myths around radiation.
- 2.5.4 She also provided the links⁶ to the Radiation Restatement by the Oxford Martin School which is designed to be understandable to the non-specialist audience.

⁶ <https://www.oxfordmartin.ox.ac.uk/publications/oxford-martin-restatement-5-a-restatement-of-the-natural-science-evidence-base-concerning-the-health-effects-of-low-level-ionizing-radiation/>

2.6 Storage of Waste, Spent Fuel and Nuclear Materials

- 2.6.1 *Task 6A: Work programme for a study of how near-surface disposal could be complementary to a GDF.*
- 2.6.2 CoRWM met BEIS and NDA on several occasions to discuss whether near-surface disposal might offer a management option for the disposal of some higher activity wastes. At the November plenary CoRWM decided to create a task and finish group whose remit includes the scrutiny and provision of advice to BEIS and NDA on near-surface disposal.
- 2.6.3 Subsequently, CoRWM provided initial oral comments on near-surface disposal to BEIS (e.g. CoRWM docs 3607, 3618) and provided extensive written comments on the draft consultation document.
- 2.6.4 *Task 6B: Ongoing scrutiny of end of the Magnox reprocessing programme, and of storage and potential disposal of spent fuel, uranium and plutonium.*
- 2.6.5 During the year CoRWM maintained a watching brief on the end of the Magnox reprocessing programme. Towards the end of the reporting period Sellafield Ltd decided to shut down its Magnox reprocessing plant due to an increase in self-isolation by staff as a result of Covid-19. CoRWM will consider the implications of this action for waste management and disposal during the 2020/21 period.
- 2.6.6 Sub-group 6 engaged regularly with NDA on storage and potential disposal of spent fuel, uranium and plutonium. This work included provision of comments to the NDA on their report “Progress on plutonium consolidation, storage and disposition”, published in March 2019.
- 2.6.7 *Task 6C: Review of alternative methods of disposal (including deep borehole disposal) in line with the Government’s commitment that alternative management options should be actively pursued.*
- 2.6.8 CoRWM continues to maintain a watching brief on the various developments ongoing around the world in terms of geological disposal of nuclear waste and associated programmes, approaches and methodologies being developed and promoted. For example, sub-group 2 has a specific task to review new technologies in relation to geological disposal, ranging from proposals for deep boreholes through to innovative tunnelling/ mining techniques for GDF construction.
- 2.6.9 CoRWM intends to issue further position papers on such developments as and when appropriate to do so.

- 2.6.10 *Task 6D: Monitoring and providing advice on NDA integrated waste management strategies and developments including boundary, problematic wastes in Scotland and strategic direction.*
- 2.6.11 Sub-group 6 met with NDA to discuss the preparation of the 2019 UK Radioactive Waste Inventory (published on 10th January 2020) and to discuss topics related to the monitoring and reporting on risk and hazard. It is intended that these ongoing discussions will lead to publicly available information which characterises the situation across the NDA estate more clearly and accurately. Discussions were also held with NDA on the relationship between waste classification and disposal and on NDA's role in driving innovation. Discussions on these topics will continue in 2020/21.
- 2.6.12 CoRWM recognised the need to understand the implications of three related current activities: the BEIS review of radioactive waste management policy review and the planned consultation, the Scottish Government 10 year review of higher-activity radioactive waste policy and the preparation by NDA of its next strategy document (due to be released for comment in August 2020). This resulted in discussions with BEIS and with the NDA and CoRWM attendance at a Scottish Government Higher Activity Waste in Scotland Strategy Implementation Group (HAWSSIG). Scrutiny of these activities remains ongoing.

2.7 Responsive work

- 2.7.1 A clear example of the capabilities and independence of CoRWM can be seen in the recent review of the forthcoming update to the Nuclear Decommissioning and Radioactive Substances policy and its implications.
- 2.7.2 Working through a task and finish sub-group, specific members of the committee participated in an initial review meeting with members of the BEIS team responsible for the drafting of the new policy and its detailed structure and approach. Useful joint discussions were held with positive feedback provided to the author team.
- 2.7.3 Subsequently, all of the committee members were able to provide detailed commentary on a draft version of the updated policy document. This task and finish group will continue to provide advice on the progression of the policy paper up to publication.
- 2.7.4 Through collaborative working and bringing extensive technical experience to the discussions, CoRWM is able to provide independent guidance on policy ahead of publication.

2.8 CoRWM Outreach Activities



CoRWM and RWM meeting with Tokyo University representatives



CoRWM May 2019 Open Plenary

2.9 Visits



CoRWM committee members, site visit to Dounreay

- 2.9.1 CoRWM continues to seek to undertake appropriate and valuable site visits for committee members to visit UK and international facilities and projects, to maintain the quality and relevance of its advice, and to meet with other members of CoRWM's stakeholders and continue outreach and engagement where possible.
- 2.9.2 During 2019 a sub-group of the committee visited the Dounreay site to witness the progress being made in decommissioning and storage at that site.
- 2.9.3 The committee will seek to undertake further and more frequent visits in 2020-2021, including to specific aspects of the Sellafield site decommissioning activities and the Drigg LLW repository site.

2.10 Position Papers

2.10.1 The position papers issued to date by CoRWM are set out in table 1 below.

Name	Content	Date Updated
Deep borehole disposal	CoRWM's position on the potential use of deep boreholes for the disposal of solid radioactive waste	8 th August 2019
Geological Disposal Facility site evaluation	This document sets out CoRWM's response to Radioactive Waste Management's consultation on site evaluation	4 th June 2019
Euratom and the dimensions of interest to Scotland upon the UK's withdrawal from the EU	An approach to waste management issues likely to face the Scottish Government following exit from the Euratom Treaty	26 th February 2019
Why geological disposal?	The current CoRWM view on why geological disposal is the best option for disposal of higher activity radioactive waste	25 th January 2019
Retrievability considerations for geological disposal	CoRWM's current position on retrievability considerations for geological disposal of radioactive waste	25 th January 2019
Geological disposal of radioactive waste - safety requirements	The current position of CoRWM on safety concerns regarding a Geological Disposal Facility (GDF)	7 th November 2018
Transport considerations for radioactive materials	The current position of CoRWM on the safety, security and environmental protection aspects of the transport of radioactive materials	7 th November 2018
Selecting a geological disposal facility (GDF) site based on the best geology	The current position of CoRWM on selecting a site based on the 'best geology' for a geological disposal facility	7 th November 2018
Radioactive waste: support for disposal rather than indefinite storage	The current position of CoRWM on the indefinite storage of radioactive waste	7 th November 2018
Statement on geological disposal	CoRWM's recommendations on geological waste disposal	25 th July 2013 <small>First published during the 2010 to 2015 Conservative and Liberal Democrat coalition government</small>

Table 1: CoRWM Position Papers



Bradwell nuclear power station

3 Forward Look

- 3.1 The Committee's focus for 2019-20 has shifted to the actual mechanics of the delivery of geological disposal, and especially providing scrutiny and constructive feedback on RWM's roll-out of the GDF siting and engagement process.
- 3.2 Particular note will be taken of site evaluation, site selection and early-stage, non-invasive characterization, and of community engagement.
- 3.3 The Committee has rebalanced its skill set in order to build up its expertise in community engagement.
- 3.4 The Committee will also work with NDA to better understand the classification of waste and the opportunity for improved waste classification to contribute to a more effective assignment of waste streams to appropriate disposal paths and programmes, possibly including near surface disposal for specific wastes.
- 3.5 The Committee will keep abreast of, and advise on, the efficacy of new technological developments such as horizontal borehole technology and new mining methods applicable to the GDF construction. It will also consider the role of technological innovation more widely.
- 3.6 More generally, the Committee will continue to provide advice to BEIS and the Scottish and Welsh Governments and liaise with the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland on numerous aspects of radioactive waste policy and its implementation, including the radioactive waste aspects of the Government's review of Nuclear Decommissioning and Radioactive Substances Policy.
- 3.7 The Committee will continue to remain current with respect to the UK nuclear industry and aims to continue site visits to observe activities where possible to do so.



Drigg Low Level Waste Repository: Disposal Containers

4 Conclusions & Recommendations

- 4.1 The Committee continues to hold to its conclusion, in the 2006 assessment, that deep geological disposal is the best long-term solution for safely dealing with the inventory of higher activity radioactive waste. Indeed, it cannot currently foresee a scenario in which a GDF would not be a key part of any solution. A GDF must form a vital part of the management of the radioactive waste legacy.
- 4.2 The Committee has amassed an enormous fund of expertise and experience over many years. As a result, we believe that the Committee plays a pivotal role in the development of radioactive waste management policy and strategy, not least because its advice is demonstrably independent and therefore provides public reassurance and inspires trust.
- 4.3 CoRWM is uniquely placed to give expert and independent advice and scrutiny on all parts of the radioactive waste management regime. In so doing, it provides an essential and objective counterbalance to the influence of organisations having a direct interest in particular outcomes. That is why the Committee's existence as a public body and its independent evidenced-based advice are so important.
- 4.4 2019-20 was a year full of positive activity and outcomes and there is every expectation that 2020-21 will present similar demands and results.
- 4.5 The integration of the new Committee members has proceeded apace, and the Committee has shown its usual strong level of energy and unadulterated level of commitment to providing advice and scrutiny on the management of radioactive waste.
- 4.6 It remains the intention of CoRWM to produce and publish position papers on a range of relevant topics over the coming year.
- 4.7 The attention that BEIS and NDA are giving to re-characterising the waste inventory and the consideration being given to alternative means of disposal in a limited number of cases, plus the review of Nuclear Decommissioning and Radioactive Substances Policy, provide specific opportunities to provide further scrutiny and advice.

- 4.8 Additionally, we would be keen to see strong connectivity between the main policy initiatives above and Scottish Government's review of its 2011 Higher Activity Waste Policy
- 4.9 The Committee has made a number of attempts to build on and further strengthen its links with the various regulatory organisations and these will continue.
- 4.10 During the year CoRWM has had to put some of its outreach activities on hold. In the year ahead, we hope to change that situation. We will seek to improve the look and navigation of the website and return to the previous pattern of open plenaries, Covid-19 permitting.
- 4.11 The transformation of RWM into an organisation focusing on delivery preparations, programme management, capability building and community engagement appears to provide excellent opportunities for continuation and deepening of partnership working, ensuring that CoRWM is constructively and closely engaged in providing scrutiny and advice on further programme development as progress is made towards the construction of a GDF.
- 4.12 We therefore look forward to a further year of progress.



Aerial view of the ILW facility
under construction at Dounreay

5 References

Annex A: CoRWM Expenditure 2019-2020

5.1 CoRWM's budget and actual expenditure for the year is set out in table 2, split into the main spending areas. The budget was set at £390k.

Budget Items	Budget (£k)	Actual (£k)
Members' Fees ¹	165.4	99.0
Members' Expenses ²		
Incidental Expenses ³	224.6	88.0
Recruitment and secretariat administration		
Total	390.0	187.0

Table 2: CoRWM's Budget Out-Turn 2019/20

Notes:

¹ Members' fees include Employer National Insurance Contributions.

² Members' expenses include transport costs and incidental expenses when travelling to meetings, visits or other venues.

³ Meetings and visits include venue and members' accommodation costs for Plenary Meeting, visits and other meetings.

5.2 The standard fees are those paid at the rates specified in Members' terms of appointment. These state that:

1. the Chair can claim £450 a day for up to 78 days per year;
2. the Deputy Chair can claim £380 for up to 52 days per year; and
3. members can each claim £350 a day for up to 52 day in a year.

5.3 Seven new committee members, with a diverse set of skills and expertise, were recruited in November 2019 and January 2020 following a number of the previous member's tenures coming to an end in November 2019.

5.4 CoRWM is not required to report the fees that individual members received, but this information is published in the interests of transparency, with table 3 summarising the days worked by each of the CoRWM members in the year period.

Name	Days Worked	Status
Sir Nigel Thrift	68.8	Chair since July 2018
Campbell Gemmell	15.5	Deputy Chair; member since July 2016
Richard Shaw	22.1	Member since Dec 2016
Andrew Walters	32.0	Member since Dec 2016
Stephen Tromans	19.0	Member since Nov 2018
Penny Harvey	4.9	Member from Nov 2019
Neil Hyatt	6.2	Member from Nov 2019
Derek Lacey	19.9	Member from Nov 2019
Ray Kemp	14.5	Member from Nov 2019
Mark Kirkbride	15.0	Member from Nov 2019
Gerry Thomas	5.9	Member from Nov 2019
Claire Corkhill	4.9	Member from Jan 2020
Stephen Newson	3.0	Member until 31 May 2019
Julia West	4.0	Member until 31 May 2019
Gregg Butler	26.0	Member until 30 Nov 2019
Janet Wilson	17.9	Member until 30 Nov 2019
Total	279.6	

Table 3: Days Worked by CoRWM Members

Annex B: CoRWM Membership

Chair Sir Nigel Thrift



Sir Nigel Thrift was appointed Chair of the Committee on Radioactive Waste Management on 2nd July 2018.

Until 2017, Sir Nigel was the Executive Director of Schwarzman Scholars.

Sir Nigel previously served as Vice-Chancellor and President of the University of Warwick and as Pro-Vice-Chancellor for Research at the University of Oxford.

He is one of the world's leading human geographers and social scientists. He is a Fellow of the British Academy and a Visiting Professor at Oxford University and Tsinghua University. He is a Deputy Lord Lieutenant of the West Midlands.

Current term of office ends: **July 2022**

Deputy Chair Campbell Gemmell



Campbell Gemmell is a Partner in Canopus Scotland Consulting, working largely on environment policy and regulation issues in the EU, Australia and China.

Campbell chaired the review of Scotland's Air Quality Strategy for Scottish Government November 2018-June 2019, which reported in August. He produced the recent report on post-Brexit environmental governance options for Scottish Environment LINK, where he is an Honorary Fellow and has also been working on the development of an Environment Rights Centre for Scotland.

Campbell has been a consultant with the World Bank Group and expert advisor on the Organization for Economic Cooperation and Development's regulatory reform programme. He is Visiting Professor at Strathclyde University Law School, Honorary Professor of Environment Research, Policy, Regulation and Governance in the University of Glasgow and Adjunct Professor in the Future Industries Institute at UniSA, Adelaide.

Current term of office ends: **November 2020**

Member Claire Corkhill



Claire Corkhill is currently a Reader and EPSRC Early Career Research Fellow at the University of Sheffield.

With an academic background in both geology and materials science, she has over 10 years of experience in researching nuclear waste material corrosion in geological environments.

She has held research fellowships in both the UK and Japan and leads a team of 12 researchers focused on determining the long-term behaviour of radioactive materials.

Claire is an enthusiastic science communicator and has made numerous media appearances in relation to nuclear waste disposal and nuclear decommissioning.

Current term of office ends: **January 2024**

Member Penny Harvey



Penny Harvey is Professor of Social Anthropology at the University of Manchester.

Penny has an extensive history of research on the social transformations of large-scale infrastructure projects, with a particular focus on the relationship between local communities, government agencies and corporate bodies.

She is a Fellow of the Academy of Social Sciences (UK), and an elected member of the Norwegian Academy of Science and Letters.

Current term of office ends: **November 2023**

Member Neil Hyatt



Neil Hyatt is a Professor of Nuclear Materials Chemistry at the University of Sheffield and Head of Department of Materials Science & Engineering at the University of Sheffield.

Neil has more than 15 years of professional and academic research in radioactive waste management and disposal.

Neil was made a Fellow of the Royal Society of Chemistry in 2015.

Current term of office ends: **November 2023**

Member Ray Kemp



Ray Kemp has been a Member of the Advisory Committee on Carcinogenicity of Chemicals in Foods, Consumer Products and the Environment (COC) Public Interest Representative at the UK Department of Health and Social Care from 2013.

In the past, he has worked as an adviser to the Independent Advisory Panel (IAP) for the Australian National Radioactive Waste Management Facility Project.

He has also worked as a Member, then Chair of the Radiation Health and Safety Advisory Council of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) between 2012 and 2015.

Current term of office ends: **November 2023**

Member Mark Kirkbride



Mark Kirkbride has more than 27 years' experience of underground construction techniques and project delivery.

He has been the Chief Executive Officer of West Cumbria Mining since 2014, having previously worked in a wide range of senior roles in the mining, engineering, construction and tunnelling industries.

Mark is a Fellow of the Institute of Materials, Minerals and Mining, a Chartered Engineer and holds a degree in mining engineering and a research masters in geomechanics (underground machine rock cutting).

Current term of office ends: **November 2023**

Member Derek Lacey



Derek has recently completed a term as a Director at the International Atomic Energy Agency.

He previously held senior roles as Deputy Chief Inspector in the Office for Nuclear Regulation (ONR) and Head of Nuclear and Radioactive Waste Management Policy at the UK Department of Energy and Climate Change.

Current term of office ends: **November 2023**

Member Richard Shaw



Richard Shaw is an exploration and mining geologist with over 25 years of experience in the deep geological disposal of radioactive waste. He retired from the British Geological Survey in October 2016.

Previous experience includes 7 years of exploration, environmental impact assessment and mining feasibility for a uranium deposit in Africa. He was Team Leader of the BGS's Radioactive Waste Team until April 2016 with responsibility for all work, both internally funded and commissioned that the BGS undertook in the radioactive waste disposal sector.

He has considerable experience of the Nirex site investigation programmes and relevant experience of other European programmes, in particular those of France and Sweden.

Current term of office ends: **November 2020**

Member Geraldine Thomas



Geraldine Thomas is currently a Professor of Molecular Pathology at Imperial College and Director of Chernobyl Tissue Bank.

In the past, she has been a Clinical Director of the West London Genome Medicine Centre and Professor of Molecular Oncology at the South Wales Cancer Institute.

Current term of office ends: **November 2023**

Member Stephen Tromans



Stephen Tromans QC is a barrister practising at 39 Essex Chambers, London.

He was Joint Head of Chambers from 2011-2015. He was worked as an academic at Cambridge (1981-1987) and as a solicitor (1987-1999). He became a barrister in 1999 and was appointed Queen's Counsel in 2009.

His area of specialism is environmental, energy natural resources and planning law. He has extensive experience of advising companies and government and representing them in court and at public inquiries. He has a particular focus on nuclear law and is the author of the leading text, "Nuclear Law". He is also the author of leading works on environmental impact assessment and contaminated land and has spoken and written widely on these topics.

He has been a member of the UK Environmental Law Association (UKELA) since its formation in 1986 and has been Chair and a Council member of UKELA. He is also a member of the International Nuclear Law Association (INLA) and a director of INLA UK. From 1994-2002 he was a Council Member of English Nature, the predecessor of Natural England and from 2010-2014 was the Chair of the Environmental Law Foundation (ELF).

Current term of office ends: **November 2022**

Member Andrew Walters



Andrew Walters is an Environmental Lawyer and Chartered Town Planner.

He has worked on an extensive range of project and policy work in the public and private sectors with a career stretching across 20 years in the UK and overseas.

He has developed a reputation for delivery of complex environmental consents on a diverse range of infrastructure projects from the construction of deep-water ports and harbours, nationally significant rail, highways, bridges, energy, waste and commercial development projects.

Andrew regularly leads consenting campaigns bringing a deep understanding of the challenges of consenting development projects in multiple legislative environments, often with complex engineering considerations in highly sensitive sites of significant environmental importance.

Current term of office ends **November 2020**



Sellafield ILW surface storage facility

Annex C: CoRWM Sub-Groups 2019-2020

Sub-group 1: Working with Communities Implementation

Primary tasks:

1. To scrutinise and advise on the integrated communication strategy of BEIS, NDA and RWM
2. To scrutinise and advise BEIS, NDA and RWM on communication of activities related to the GDF siting process and implementation of policy
3. To scrutinise and advise BEIS, NDA and RWM on the implementation of the Working with Communities Policy
4. To scrutinise and advise the Welsh Government on the implementation of the Welsh Working with Communities Policy
5. To engage and provide advice and information as requested to interested parties, Working Groups and Community Partnerships

Membership:

Professor Penny Harvey (Sub-group Chair)
Claire Corkhill
Ray Kemp
Geraldine Thomas

Sub-group 2: GDF Geology and Delivery

Primary tasks:

1. Scrutiny and provision of advice to BEIS and RWM on activities relating to the continued development of a GDF safety case
2. Scrutiny and provision of advice to BEIS and RWM on GDF siting activities, including selection criteria, methods of investigation, and the timescale for carrying out site selection in the three rock types
3. Advise on new technologies that could be applicable to the development of a GDF including those in the mining and construction sectors and their potential impacts on a GDF programme

Membership:

Dr Richard Shaw (Sub-group Chair)
Claire Corkhill
Neil Hyatt
Mark Kirkbride

Sub-group 3: Planning and Regulation

Primary tasks:

1. Work towards publication of a comprehensive and definitive CoRWM Position Paper on regulation of a GDF during 2020
2. Review and advise on “Sector Guidance” on in-situ disposal of low-level waste through the planning system
3. Keep under review any further implications of the UK’s exit from the EU as this develops and provide advice to BEIS and DAs

Membership:

Stephen Tromans QC (Sub-group Chair)
Ray Kemp
Derek Lacey
Andrew Walters

Sub-group 4: Scottish Government Activities

Primary tasks:

1. To scrutinise the Scottish Government’s activities in relation to the management of higher activity radioactive waste (HAW) in Scotland
2. To report to the main CoRWM Committee to enable the development of advice to Ministers, NDA and RWM

Membership:

Professor Campbell Gemmell (Sub-group Chair)
Derek Lacey
Andrew Walters

Sub-group 5: Welsh Government Activities

Primary tasks:

1. To scrutinise the Welsh Government’s activities in relation to the delivery of the Implementing Geological Disposal policy in Wales
2. To report to the main CoRWM Committee to enable the development of advice to Ministers, NDA and RWM

Membership:

Geraldine Thomas (Sub-group Chair)
Richard Shaw

Sub-group 6: Waste, Spent Fuel & Nuclear Materials Inventory Management

Primary tasks:

1. Ongoing scrutiny of end of the Magnox reprocessing programme, and of storage and potential disposal of spent fuel, uranium and plutonium
2. Monitoring and providing advice on NDA Integrated waste management developments including boundary, difficult wastes in Scotland and strategic direction

Membership:

Derek Lacey (Sub-group Chair)
Claire Corkhill
Neil Hyatt

Sub-group 7: Task and Finish

Primary tasks:

1. Review of the Nuclear Decommissioning and Radioactive Substances policy and its implications
2. Provide advice in the progression of the policy paper up to publication
3. Work Programme for a study of how near-surface disposal could be complementary to a GDF

Membership:

Mark Kirkbride (Sub-group Chair)
Neil Hyatt
Ray Kemp
Geraldine Thomas
Stephen Tromans QC
Andrew Walters



Sellafield Nuclear Site

Image courtesy of Google Earth Pro

Annex D: Meetings held during 2019-2020

Date	Meeting	Attending Capacity
04/04/2019	GDPB	Chair
04/04/2019	Work Programme Discussion, Sec and Chair	Chair
16/04/2019	NPS meeting regarding new-build waste	SG3
01/05/2019	Total Decommissioning Conference Manchester	Gregg Butler (GB)
07/05/2019	Sub-group 1 - Meeting (WWC)	Chair, J.Wilson, J.West
08/05/2019	CoRWM Closed Plenary	CoRWM
09/05/2019	CoRWM Open Plenary	CoRWM
14/05/2019	NDA Research Board Meeting	Andrew Walters (AW)
31/05/2019	GDPB	Chair
03/06/2019	ABG (Advisory Bodies to Government)	Chair
02/07/2019	Meeting with David Peattie	Chair
09/07/2019	NDA Meeting - Reporting progress	GB, JWi
09/07/2019	NDA stakeholder summit	Chair
16/07/2019	NDA - NSD and risk-based process	GB
22/07/2019	Meeting with Phil Matthews	Chair
25/07/2019	Geological Disposal Programme Board	Chair
11/09/2019	Deep Isolation Presentation	CoRWM, BEIS
16/09/2019	NDA Meeting - Reporting progress	GB, JWi
17/09/2019	Sub-group 1 - Meeting	J.Wi, GB, NT
23/09/2019	Geological Disposal Programme Board	Chair
25-26/09/2019	6th World Nuclear Industry Congress	Stephen Tromans
01/10/2019	Copeland Borough Council Meeting	Chair, J.Wi, Richard Shaw
17/10/2019	RWM Site Evaluation Strategy	SG2
31/10/2019	Scottish Nuclear Sites Meeting	SG4
31/10/2019	Planning Guidance Work	SG3
31/10/2019	Meeting with Malcolm Morley of RWM	Chair
31/10/2019	Meeting with Bruce McKirdy of RWM	Chair
11/11/2019	CoRWM Closed Plenary	CoRWM
12/11/2019	CoRWM Closed Plenary	CoRWM
18/11/2019	BEIS phone call on NSD policy	SG2

Date	Meeting	Attending Capacity
19/11/2019	Meeting with John Loughhead (Chief Scientific Advisor for BEIS)	Chair
19/11/2019	Planning Guidance Work	AW
19/11/2019	Meeting with Allerdale Council	SG1
22/11/2019	Sub-group 5 - Handover meeting	SG5
26/11/2019	NDA Board meeting	SG3
27/11/2019	Meeting with Roseanna Cunningham	Chair
27/11/2019	Sub-group 3 welcome meeting	SG3, Secretariat
27/11/2019	BEIS Sponsors meeting	Secretariat
02/12/2019	Oversight Group SMRs	AW
04/12/2019	NGO meeting	Secretariat
11/12/2019	GDPB	Chair
19/12/2019	Sub-group 6 - NDA	SG6, secretariat
06/01/2020	OG Meeting 1 - Review Project Proposal	AW
14/01/2020	Sub-group 2 - Meeting	SG2
14/01/2020	Sub-group 4 - Meeting	Campbell Gemmell
15/01/2020	Sub-group 4 - HAWSIG meeting	Neil Hyatt
16/01/2020	Planning guidance meeting	AW
23/01/2020	Sub-group 7 - Policy review	SG7
28/01/2020	Sub-group 5 - WG introductory meeting	SG5
04/02/2020	Sub-group 3 - Meeting with the EA	SG3
11/02/2020	GDPB meeting	Chair
11/02/2020	Meeting with Mark McAllister, ONR Chair	Chair
13/02/2020	Sub-group 3 - Project inception meeting	AW
14/02/2020	Sub-group 6 - Quarterly meeting with NDA	NH/Derek Lacey
17/02/2020	OG Meeting 2 - Review of Materials	AW
20/02/2020	Sub-group 1 - Introductory meeting	SG1
20/02/2020	CoRWM induction RWM	CoRWM
03-04/03/2020	Civil Nuclear showcase	Chair
09-16/03/2020	Oversight Group: Workshop 1 st Dialogue Events	AW
12/03/2020	Sub-group 3 - Meeting with the EA	SG3
17/03/2020	Closed Plenary	CoRWM



ILW containers at Winfrith

Annex E: List of Acronyms

Acronym	Description
AGR	Advanced gas cooled reactor (a type of reactor with a graphite core and Uranium oxide fuel in steel cladding with a graphite sleeve)
ANT	Advanced Nuclear Technologies
AoS	Appraisal of Sustainability
BEIS	Department for Business, Energy & Industrial Strategy
CEO	Chief Executive Officer
CNS	Capenhurst Nuclear Services
CoRWM	Committee on Radioactive Waste Management
CRWG	Community Representation Working Group
DECC	Department of Energy and Climate Change
DESY	Deutsches Elektronen-Synchrotron
DFR	Dounreay Fast Reactor
DNLEU	Depleted Natural and Low Enriched Uranium (found in nuclear fuel cycle)
DRP	Direct Research Portfolio
EA	Environment Agency (England's Environmental Regulator)
EIA	Environmental Impact Assessment
FHP	Fuel Handling Plant
GDF	Geological Disposal Facility
GDPB	Geological Disposal Programme Board
GDS	Government Decontamination Service
gDSSC	generic Disposal System Safety Case
GRR	Guidance on Requirements for release of nuclear sites from radioactive substances regulation
HAW	Higher Activity Waste
HAW-IS	HAW Implementation Strategy
HEU	Highly Enriched Uranium
HM	Heavy Metals
HRA	Habitats Regulations Assessment

Acronym	Description
IAEA	International Atomic Energy Agency
IEA	Institute of Environmental Assessment
IEMA	Institute of Environmental Management and Assessment
IGD	Implementing Geological Disposal
ILW	Intermediate Level Waste
INLA	International Nuclear Law Association
JAEA	Japan Atomic Energy Agency
LoC	Letter of Compliance (previously Letter of Comfort)
LLW	Low Level Waste
LTP	Life Time Plan
LWR	Light Water Reactor
MOD	Ministry of Defence
MOP	Magnox Operating Programme
MOX	Mixed Oxide Fuel
NDA	Nuclear Decommissioning Authority
NDARB	NDA Research Board
NEA	Nuclear Energy Agency of OECD
NERC	Natural Environment Research Council
NGS	National Geological Screening
NIEA	Northern Ireland Environment Agency
NPS	National Policy Statement
NSD	Near Surface Disposal
NSNS	Near Site Near Surface Storage policy in Scotland
NRW	Natural Resources Wales (Welsh Environmental Regulator)
NWDRF	Nuclear Waste and Decommissioning Research Forum (a group convened by the NDA)
OECD	Organisation for Economic Co-operation and Development
ONR	Office for Nuclear Regulation (the regulator of safety, security and safeguards at nuclear facilities and transport of radioactive materials)

Acronym	Description
ORR	Organisational Readiness Review
PBC	Programme Business Case
PCM	Plutonium Contaminated Material
PSE	Public and stakeholder engagement
Pu	Plutonium
RATE	Radioactivity and the Environment (a NERC research programme)
R&D	Research and Development
RRP	Readiness Review Panel
RW	Radioactive Waste
RWM	Radioactive Waste Management Limited, a wholly owned subsidiary of the NDA charged with delivering Geological Disposal, created on 1 st April 2014
SE	Scottish Enterprise
SEPA	Scottish Environment Protection Agency
SG	Scottish Government
SG1-7	Sub-group (number)
SKB	Svensk Kärnbränslehantering AB (Swedish Nuclear Fuel and Waste Management Company)
SLC	Site licence company (a company that runs an NDA site, under contract to the NDA, and holds the nuclear site licence)
SNS	Scottish Nuclear Sites meetings, hosted and chaired by Scottish Government
SNSC	Scottish Nuclear Supply Chain
SRO	Senior Responsible Owner or Officer
TAP	Technical Advisory Panel
THORP	Thermal Oxide Reprocessing Plant
TR&S	THORP Receipt and Storage
U	Uranium
WIPP	Waste Isolation Pilot Project
WNA	World Nuclear Association

Feedback

We welcome feedback on the content, clarity and presentation of the 2020 Annual Report.

Please do not hesitate to contact us if you would like to provide feedback or if you would like further information about radioactive waste management issues.

CoRWM Secretariat
3rd Floor
1 Victoria Street
London
SW1H 0ET
United Kingdom

corwm@beis.gov.uk



**Department for
Business, Energy
& Industrial Strategy**