

Understanding the scale and needs of a Geological Disposal Facility

By Clare Bond

Understanding the need and scale of the UK's radioactive waste is an important part of ensuring the effective and timely delivery of a geological disposal facility. This includes consideration of the current storage solutions and the lengths of time these will be needed for, as well as innovative solutions to minimise the volume of waste that requires to be disposed of. With this in mind six CoRWM members travelled to Sellafield in July to get an overview of the task in hand.

It was July 19, the hottest day on record in Britain, when the [CoRWM members](#) met in Cumbria. Temperatures had topped 40 degrees centigrade for the first time in the UK and Britain's transport infrastructure was 'melting' in the heat. I had left my home in Aberdeenshire in the early morning, while the southern contingent had rented a car and were on a journey northwards, punctuated by CoRWM member pick-ups, as train cancellations rolled out across the country.

After a cooling lunch time dip with a view to the Sellafield site at St Bee's, I met the others in preparation for our tour the following day. Our half dozen comprised of the CoRWM chair and deputy chairs and the three 2022 recruits to CoRWM: Simon Webb with expertise in large scale project management, Catherine MacKenzie a legal expert, and me, a geoscientist. We had a full day tour ahead taking in the first-generation Magnox Storage Pond Facility, the Waste Monitoring and Compaction Plant, HALES the Highly Active Evaporation and Storage Plant and finishing off with a tour of the Vitrification Lines. Rather than give a blow-by-blow account of the day I am going to focus on what struck me most. First-up security!

Security

Security, both in terms of site access but also in the security of one's own personal health and safety, was paramount. For our first site visit to the Ponds, personal safety included no facial hair, dosimeter badges (which we wore throughout our visit), clothing, steel toe-capped shoes and additional electronic personal dosimeters. The storage ponds are kept at a highly alkaline PH of 11.4, similar to domestic bleach, that allows long-term storage of the fuel canisters with minimal corrosion. We were able to access the roof above the ponds to look down on them and to see the robotics (remotely operated underwater vehicles (ROVs)) deployed to move and clean the canisters of waste stored.

[Robotic use has revolutionised the working processes in the ponds](#), allowing work to be done remotely which ensures that workers can carry out their roles without exposure to higher doses of radioactivity, meaning that work can be carried out by individuals more safely and for longer time periods. Robotic

use has required micro-innovations that may sound simple, like the fact that the RoVs use toothbrushes to clean the cannisters in the ponds, but that have a large impact on operational health and safety. Waste currently stored in the ponds will go in a geological disposal facility so ensuring long term up-keep and maintenance is essential whilst the process of securing a site for and building a geological disposal facility takes place.

Time

The knock-on effects of both security checks and health and safety protocols is time. I am sure if you worked at Sellafield on a day-to-day basis, you would be much more efficient at changing and decontamination checks, as well as ensuring your steel-toed shoes are stored in the right place and that you haven't breached protocols. But for a novice it is quite a learning curve. With work length restrictions in some areas and all the changing, hand washing, radiation contamination monitoring it struck me that this was a business that could not be rushed and that the processes in place to ensure personal safety and site integrity were important, thorough, and time intensive.

Scale

The scale of the site hadn't really struck me before. Tucked away on the far side of the Lake District and bordering the sea, it is not immediately obvious that the site is huge. Only when you're being transported inside the compound, and its internal compounds within compounds, does the scale of the operation really hit home. It has the hustle, bustle, and noises of a massive industrial site and I wouldn't dare to guess the meters, or kilometres, of ducting for steam and other services that cross the site. The complexity of the linked buildings and facilities that over Sellafield's lifetime have been erected to ensure the next stage in the process is met and the continual evolving modernisation of processes (from wheel-turned valves to electronically controlled systems) is hard to comprehend.

The history is fascinating, the site is immense, and the interlinked processes and contingent stages make the scale of the job, compounded by longer-term uncertainties, such as the timing of an operational geological disposal facility, challenging. This is where further innovations such as the [laser cutting](#) of waste crates are being deployed. In the laser cutting process 2 crates are cut and stored in a third crate that is then compacted to minimise the storage volume required. Learning about the scale of the linked operations and onsite processing and storage of waste made me think of a kind-of intricate chess game in which radioactive material is moved around the site being prepared and waiting for final positioning in the geological disposal facility.

Heat

So, it was a hot a day, not 40 degrees, but hot. The site is full of steam and vents, and the big concrete buildings were reflecting the heat of the day. But there is also the heat of the waste – no central heating is needed

in the vitrification cylinder store. Having been taken through the vitrification process, we ended in the store. Here the vitrified canisters are stored in 'plugs' ready for movement elsewhere, including being shipped back to those countries whose waste we have vitrified. You can walk over the top of the store and see the circular tops to the plugs below that contain the carefully shielded vitrified waste. Bend down and touch the floor and you can feel the heat of the waste being emitted from below. Not the comfiest place to be on one of the hottest days of the year, but another insight into the challenges of a geological disposal facility. The geological disposal facility design will include spacing between canisters to ensure that the heat produced by the waste can be effectively conducted out of the facility over the timescales of radioactive decay and the geological disposal facility life.

The people

Last but by no means least I want to mention the people I met. We were joined on our tour by specialists in the different areas and engineering challenges that we visited. Many were people who had worked on the site for years and had huge experience and lots to share. Their enthusiasm for their work and their contribution towards ensuring safe practice and storage is not to be underestimated. They shared their knowledge, stories, and thoughts on future challenges without prejudice, making the visit truly informative and rewarding. As we move forward towards a geological disposal facility, people are going to be as much a key to the process as the engineering and geology of the facility. An engaged host community, workers, and many other people will be required for an effective geological disposal facility.

[A417 Missing Link development consent decision announced](#)

Please note that, although the letter refers to the decision of "the Secretary of State", the Rt Hon Mark Harper has not personally been involved in this decision, which has in practice been allocated to and taken by the Minister of State for Transport, Hugh Merriman, but by law has to be issued in the name of the Secretary of State. Accordingly, the letter refers to the Secretary of State throughout.

The proposed scheme would provide a dual carriageway to improve the current "Missing Link" section of single carriageway of the A417 between Cowley roundabout and Crickley Hill.

The application was submitted to the Planning Inspectorate for consideration by National Highways on 01 June 2021 and accepted for Examination on 29 June 2021.

Following an Examination during which the public, Statutory Consultees and Interested Parties were given the opportunity to give evidence to the Examining Authority, recommendations were made to the Secretary of State on 16 August 2022.

This is the 119th Nationally Significant Infrastructure Project and 46th transport application to have been examined by The Planning Inspectorate within the timescales laid down in the Planning Act 2008.

The Planning Inspectorate's interim Chief Executive, Navees Rahman said:

"The Planning Inspectorate has now examined more than 100 nationally significant infrastructure projects since the Planning Act 2008 process was introduced, ensuring local communities, the local authority and other interested parties have had the opportunity of being involved in the examination of projects that may affect them.

"The Examining Authority listened and gave full consideration to all local views and the evidence gathered during the Examination before making its recommendation to the Secretary of State."

The decision, the recommendation made by the Examining Authority to the Secretary of State for Transport and the evidence considered by the Examining Authority in reaching its recommendation are publicly available on the project pages of the [National Infrastructure Planning website](#).

Journalists wanting further information should contact the Planning Inspectorate Press Office, on 0303 444 5004 or 0303 444 5005 or email: Press.office@planninginspectorate.gov.uk

The [Planning Inspectorate's National Infrastructure Programme of Projects](#) details the proposals which are anticipated to be submitted to the Planning Inspectorate as applications in the coming months.

[Secretary of State statement on social housing standards](#)

Members across this House and people across the country will, of course, have been horrified to hear about the circumstances surrounding the tragic death of Awaab Ishak.

Awaab died in December 2020, just days after his second birthday, following prolonged exposure to mould in his parents' one bedroom flat in Rochdale.

Awaab's parents had repeatedly raised their concerns about the desperate

state of their home with their landlord, the local housing association Rochdale Boroughwide Housing.

Awaab's father first articulated his concerns in 2017 and others, including health professionals, also raised the alarm, but the landlord failed to take any kind of meaningful action.

Rochdale Boroughwide Housing's repeated failure to heed Awaab's family's pleas to remove the mould in their damp-ridden property was a terrible dereliction of duty.

Worse still, the apparent attempts by Rochdale Boroughwide Housing to attribute the existence of mould to the actions of Awaab's parents was beyond insensitive and deeply unprofessional.

As the Housing Ombudsman has made clear, damp and mould in rented housing is not a lifestyle issue and we all have a duty to call out any behaviour rooted in ignorance or prejudice.

The family's lawyers have also made clear that, in their view, the inaction of the landlord was rooted in prejudice.

The coroner who investigated Awaab's death, Joanne Kearsley, has performed a vital public service in laying out all the facts behind this tragedy and I wish, on behalf of the House, to record my gratitude to her.

As she said, it's scarcely believable that a child could die from mould in 21st century Britain or that his parents should have to fight tooth and nail as they did – in vain – to save him.

I'm sure the whole House will join me in paying tribute to Awaab's family for their tireless fight for justice over the last two years.

They deserved better. Their son deserved better.

As so many have rightly concluded, Awaab's case has thrown into sharp relief the need for renewed action to ensure that every landlord in the country makes certain that their tenants are housed in decent homes and they are treated with dignity and fairness.

So that's why the Government is bringing forward further reforms. Last week, this House debated the Second Reading of the Social Housing Regulation Bill. The measures in that Bill were inspired by the experience of tenants leading to the terrible tragedy of the Grenfell fire.

The way in which tenants' voices were ignored, and their interests neglected in the Grenfell tragedy, is a constant spur to action for me in this role.

However, before I say more on the substance of those wider reforms, I would first like to update the House on the immediate steps my department has been taking with regards to this case.

Firstly, as the excellent public-service journalism of the Manchester Evening

News shows, we are aware that Awaab's family was not alone in raising serious issues with the condition of homes managed by the local housing association.

I have already been in touch with the Chair and the Chief Executive of Rochdale Boroughwide Housing to demand answers. To explain to me why a tragedy like Awaab's case was ever allowed to happen. And to hear what steps they are now undertaking immediately to improve the living conditions of the tenants for which they are responsible.

I have also been in touch with the Hon Member for Rochdale and indeed the Hon Member for Heywood and Middleton, both of whom are powerful champions for the people of Rochdale, and I have discussed with them finding suitable accommodation for tenants in Rochdale who are still enduring unacceptable conditions.

I also hope to meet Awaab's family and those who live in the Freehold Estate so that they know that government is there to support them.

And it is right that the Regulator of Social Housing is considering whether this landlord has systematically failed to meet the standards of service required to provide for its tenants.

They have my full support in taking whatever action they deem necessary.

And finally, the coroner has written to me. And I can assure the House that I will act immediately on her recommendations.

Madame Deputy Speaker, if I can turn to the broader urgent issues that this tragedy raises.

Let me be perfectly clear, since some landlords apparently still need to hear this from this House: every single person in this country, irrespective of where they're from, what they do, or how much they earn, deserves to live in a home that is decent, safe and secure. And that is the relentless focus of my department and I know everyone across this House.

And since the publication of our Social Housing White Paper, we have sought to raise the bar on the quality of social housing while empowering tenants so that their voices are truly heard.

We started by strengthening the Housing Ombudsman Service, so all residents have somewhere to turn when they are not getting the answers they need from their landlords.

In addition, we have changed the law so that residents can now complain directly to the Ombudsman instead of having to wait 8 weeks while their case was handled by a local MP or another 'designated person.'

One of the principal roles of the Housing Ombudsman Service is to ensure that robust complaint processes are put in place, so problems are resolved as soon as they are flagged. It can order landlords to pay compensation to residents whom they have mistreated.

They can also refer cases to the Regulator of Social Housing who, in future, will be able to issue unlimited fines to landlords that they find at fault. And, of course, all decisions made by the Ombudsman are also published for the whole world to see which landlords are consistently letting tenants down.

It's clear from Awaab's case – which sadly did not go before the Ombudsman – that more needs to be done to ensure this vital service is better promoted and that it reaches those who really need it.

We've already run the nationwide 'Make Things Right' campaign to ensure that more social housing residents know how they can make complaints.

But we're now planning, and I think it is necessary, another targeted, multi-year campaign so that everyone living in the social housing sector knows their rights, knows how to sound the alarm when their landlord is failing to make the grade and knows how to seek redress without delay.

Where some providers have performed poorly in the past, they have now been given ample opportunity to change their ways and to start treating residents with the respect they deserve.

The time for empty promises of improvement is over and my department will now name and shame those who have been found by the regulator to have breached consumer standards or who have been found by the Ombudsman to have committed severe maladministration.

And while there is no doubt that this property fell below the standard which we expect all social landlords to meet, Awaab's death does make painfully clear why we must do everything we can to better protect tenants.

So our Social Housing Regulation Bill will bring in a rigorous new regime that holds landlords like these to account for the decency of their homes.

At the moment, as I've mentioned, the system has been too reliant on people fighting their own corner and we are determined to change that. The reforms that we're making will help to relieve the burden on tenants with an emboldened and more powerful regulator.

The Regulator will proactively inspect landlords – and of course issue the unlimited fines I have mentioned. And it will be able to intervene in those cases where tenants' lives are being put at risk and, of course, in the very worst cases, it will have the power to instruct that properties are brought under new management.

Landlords will also be judged against "tenant satisfaction measures" – allowing tenants, indeed all of us, to see transparently which landlords are failing to deliver what residents expect and deserve.

But it's the right of everyone to feel safe in the place where they and their loved ones sleep at night, which is universal. That's why both our Levelling Up and Private Rented Sector White Papers set out how we will legislate to introduce a new, stronger, legally binding Decent Homes Standard in the Private Rented Sector as well for the first time.

We've recently consulted on that Decent Homes Standard and are reviewing the responses so that we can move forward quickly.

It's a key plank of our mission to ensure that the number of non-decent homes across all tenures is reduced by 2030 with the biggest improvements occurring in the lowest performing areas.

Madame Deputy Speaker, although the legislation that we're bringing forward is important, we hope that no family ever has to suffer in the way that Awaab's family has suffered.

We hope that we can end the scandal of residents having to live in shoddy, substandard homes – like some of those on the Freehold Estate. And we want to restore the right of everyone in this country, whatever their race or cultural background, to live somewhere warm, decent, safe and secure. A place that they can be proud to call home. And I commend this statement to the House.

[Wildlife to thrive as major Tees restoration project begins](#)

Press release

The scheme at Ormesby Beck will improve the area's resilience to the changing climate and provide a richer environment for residents and nature.



Works taking place at Ormesby Beck Tidal Barrage

A £750,000 project designed to restore parts of the natural Tees Estuary and make way for new wildlife habitats is now underway.

The Ormesby Beck Intertidal Restoration Scheme aims to open the Ormesby Beck and Marton West Beck catchments of the River Tees to allow fish to pass while also restoring its natural tidal cycle and vital wildlife habitats.

The Tees Estuary is one of the most heavily modified and developed estuaries in the UK with less than 10% of the original habitats for wildlife such as wading birds remaining. Ormesby Beck is an urban river that flows through Middlesbrough to the River Tees.

As part of the first phase of the Ormesby Beck Intertidal Restoration Scheme, which will complete in December, the Environment Agency will remove the North Ormesby Tidal Barrage and Navigation Screen, constructed in 1995, to allow the channel to flow as it naturally should, creating a better environment for wildlife to thrive along the river again.

Work is underway on site with Environment Agency contractors, BAM Nuttall, aiming to fully remove the tidal barrage and screen by the end of December 2022.

Joe Reed, Project Manager for the Environment Agency said:

“In many of our estuaries, rising sea levels caused by climate change are threatening tidal habitats. Removing barriers, like here at Ormesby Beck, mitigates some of this loss by allowing the estuary to expand and preserve its natural environment. This will create the correct conditions for wildlife to thrive, without increasing risk to life or property from flooding.”

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[Civil news: extension of HPCDS contracts to 31 October 2023](#)

News story

Providers are being notified of our intention to extend HPCDS contracts until 31 October 2023 with a break clause which can be exercised in July 2023.



Extension notices are being issued shortly to tell providers that Housing Possession Court Duty Scheme (HPCDS) contracts will be extended.

Why is this happening?

We are extending contracts to allow us to put in place new contracts to deliver the Housing Loss Prevention Advice Service. This is the replacement service for HPCDS.

This needs to happen now because HPCDS services are currently being delivered through contingency contracts which were extended from 1 October 2022 to 29 April 2023.

These arrangements, which maintain the 2013 Standard Civil Contract exclusive schedule arrangements, will now be extended further to 31 October 2023.

Extension timescales

All existing HPCDS providers will be offered an extension of their current contract running to 31 October 2023. This includes a break clause which can be exercised in July 2023.

What do I need to do?

We will be writing to all current HPCDS contract providers to confirm our intentions and formally issue extension offers in the next few days.

Providers will need to sign into the contract extension, or where they do not wish to do so, confirm this to the LAA by the date set out in their letter.

Further information

[Standard Civil Contract \(Housing Possession Court Duty Scheme\) 2013](#) – 2013 civil contract (HPCDS) documents are available on GOV.UK

[Housing Legal Aid: the way forward](#) – to view the consultation and consultation response on GOV.UK

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