

South Copeland GDF Community Partnership Newsletter



Hello and welcome to the South Copeland GDF Community Partnership newsletter

I hope you find this issue interesting and informative as we continue on the journey to see if South Copeland is a suitable location to host a Geological Disposal Facility (GDF) and whether our community wants it to be here.

This issue looks at what exactly a Geological Disposal Facility is and why the UK needs one; explores upcoming aerial surveys by the GDF developer; provides detail on our community events to find out more; introduces the GDF regulators (the Office for Nuclear Regulation and the Environment Agency); and updates on Community Investment Funding (CIF).

As detailed in our last issue earlier this year, the South Copeland Search Area had to change its boundaries due to Local Government Reorganisation.

The Search Area now covers the Cumberland electoral wards of Millom and Millom Without which incorporates the parishes of Drigg and Carleton, and Irton with Santon.

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South Copeland Search Area

Millom Without and Millom electoral wards



These parishes previously formed part of the Mid Copeland Search Area as they were within the Copeland Council electoral ward of Gosforth and Seascale, but now sit within the South Copeland Search Area.

This is the first newsletter residents in those areas will be receiving from us.

As always, areas within the Lake District National Park continue to be excluded from consideration.

We are looking forward to working with the new unitary authority around the subject of geological disposal, and the local authority representative on the Community Partnership will be confirmed in due course. David Moore, formerly Nuclear Portfolio Holder for Copeland Borough Council, will continue on the Partnership as interim local authority lead in the short term.

We have also welcomed Bob Kelly to the Partnership as Cumberland Councillor

for Millom, Andy Pratt (Mid Copeland GDF Community Partnership's Chair) as Cumberland Councillor for Millom Without, and Chris Gigg who represents Drigg and Carleton Parish Council.

Over the last couple of months, it has been really interesting for me to find out more about the other areas taking part in this siting process for a GDF, including Theddlethorpe in Lincolnshire where I visited recently, as well as Mid Copeland and Allerdale in Cumbria. I look forward to learning more about these communities and their approaches to GDF as we continue in this process.

As always, do get in touch with us to have a conversation, ask a question, or raise a concern.

Ged McGrath

Chair, South Copeland **GDF** Community Partnership



Going underground: What a GDF is and why geological disposal is the preferred solution

There is consensus internationally that geological disposal is the best long-term option to deal with higher activity radioactive waste - the most radioactive kind.

A Geological Disposal Facility (GDF), infrastructure created to receive and safely and securely dispose of this type of waste, is designed to last and protect people and the environment for hundreds of thousands of years.

It involves building a series of specially designed and engineered vaults and tunnels deep underground. The facility could potentially be as deep as England's highest mountain, Scafell Pike, is high.

Solid radioactive waste is packaged in secure engineered containers, typically made of metal or concrete, and then placed in a stable rock formation hundreds of metres below the surface, with the containers surrounded by clay or cement. This is called the multi-barrier approach.

Once the waste is placed deep underground, the facility is permanently sealed, closed and the radioactivity will reduce naturally over time.

Early focus: beyond the coast

A GDF is made of two parts – a surface site and an underground facility. In South Copeland, for the underground part of a GDF, the area of focus at the moment is the inshore area, between the coast and the limit of UK Territorial Waters, which extends 12 nautical miles (22km) out to sea.

A surface facility on or near the coast would provide access to a disposal area deep in rock beyond the coast.

From a geological perspective, there is little difference between a GDF constructed within rocks deep below land or within rocks deep below the seabed. In either case, the objective is to isolate material from whatever is at the surface for long enough that its radioactivity can reduce naturally.

A marine geophysical survey, commissioned by the GDF developer Nuclear Waste Services (NWS), was carried out last year in Mid and South Copeland.

A vessel spent three weeks off the coast so scientists could collect data by sending sound waves through the rock and measuring the time it took to reflect off different deep layers before returning to the surface.





This will allow experts to build a 3D picture of the underlying rocks, to assess the deep geology and its potential suitability to host the underground elements of a GDF.

Data acquired in the seismic survey is being processed and will then be interpreted. It is likely the results will begin to be assessed towards the end of 2023, with further evaluation continuing into 2024. The Community Partnership and the public will be kept updated as the results progress.

There are different challenges and considerations when looking at a GDF off the coast, such as avoiding disruption to marine environments during preliminary investigations and construction. The developer will undertake a number of long-term studies, liasing with stakeholders in the fishing and maritime sectors, to understand the suitability of the site.

Geology in the South Copeland area

A National Geological Screening exercise has been carried out by the GDF developer, based on British Geological Survey data.

Initial work indicates geology in the Copeland area that could potentially host a GDF – the mudstone and salt layers in the Mercia Mudstone Group, several kilometres off the coast.

An aerial view

NWS will begin marine and coastal aerial surveys across South Copeland, Mid Copeland and Theddlethorpe this October to gather baseline environmental information. NWS are in the process of commissioning local firm HiDef Aerial Surveying Ltd., based in west Cumbria, to conduct the surveys.

This work will record the presence and numbers of birds and marine wildlife using aircraft, flying monthly surveys initially between October 2023 and March 2024. You may well see the plane undertaking its assessments during this time.

This baseline of seasonal data will inform future environmental survey and assessment work.

Further information on the aerial surveys will be available on our website shortly.



Facilities above ground

GDF surface facilities could require around one square kilometre of land, depending on how the site is laid out and if any of the facilities were off-site. No potential site has yet been identified within the Search Area - we will update the public if or when new information becomes available.

These surface facilities would be linked to the larger underground GDF amenities by sloping tunnels and/or vertical shafts.

The primary purpose of the surface facilities would be to receive solid waste packages from a rail and road network and transfer them to the underground facilities, and to support ongoing construction of new underground vaults.

A return to nature

Under current plans, at the end of the operation phase the surface facility would be removed, with the area being restored to natural habitat.

Independent regulators, including the Office for Nuclear Regulation (ONR) and the Environment Agency (EA), will review the designs and safety cases for a GDF, the proposed site and the science to make sure that both people and the environment are protected – during operation and, for the long term, after the closure of the site.

A GDF will be built only if both regulators are completely satisfied.

In addition, choosing a suitable site for hosting a GDF requires the explicit support of the local community. They Potential Host Community must be willing to have the facility in order for it to go ahead.



Learning more about geological disposal together



NWS' Kelly Anderson and Anne Broome, South Copeland GDF Community Partnership's Engagement Team, are both from west Cumbria and will be out in the community along with other Partnership members, in the coming months.

Kelly, who sits on the Partnership to represent the GDF developer, Nuclear Waste Services, said: "Now that we have a regular programme of community drop-ins and events underway, I'm looking forward to meeting with more members of the public, so do come along, ask questions and raise concerns."

"Although I represent the views of the developer on the Community Partnership, my role is twofold. I am also here to listen to the Partnership members and the wider community and feed back to the developer. Without representation from the developer on the Partnership, it would be challenging for us to understand local concerns and for Partnership members to get community members the information that they need about GDF development.

"I'll be at the upcoming community events, along with Engagement Co-ordinator, Anne, and other members of the Community Partnership including the Chair, Ged."

Here, the Community Partnership answer some of your most-asked questions about our role and explain how you can get involved and find out more.

What is the role of the Community Partnership?

A Community Partnership is a group made up of people including community members, the GDF developer and the local authority.

Its role includes ensuring the community has the information they need when considering the possibility of hosting a GDF. This includes taking forward discussions around geological disposal and what it could mean locally by finding out people's views and providing factual responses to questions and concerns.

The Community Partnership holds its meetings in public, organises drop-in events, takes part in talks and discussions, answers questions and discusses any concerns or opportunities.

An outline of the full role and key responsibilities of a Community Partnership can be found in the Implementing Geological Disposal – Working with Communities policy. We have also developed a Members Approach. Both of these can be found on our website.

Is it true that the community will decide if a GDF is built in this area?

The UK Government policy on GDF siting requires both a suitable site and a willing community. If a suitable site is found in South Copeland, a process which could take 10 to 15 years, a decision to develop a GDF could not be taken until the people in the electoral wards directly affected have had a say through a Test of Public Support. If the Test of Public Support is negative, then the siting process will come to an end and a GDF would not be built in South Copeland.

How will a Test of Public Support work?

Before the GDF developer can seek approvals to begin construction, there must be a Test of Public Support to demonstrate whether residents in a Potential Host Community are willing to host a GDF. As a member of the Community Partnership, the local authority would take the decision on when to hold a Test of Public Support and it would be for the Community Partnership to decide how it wishes to approach this.

A Test of Public Support would be undertaken only after extensive community engagement, which means people will have had time to ask questions, raise concerns and learn about a GDF.

How can I get involved and find out more?

There are plenty of opportunities to get involved. Come along to one of our events or Community Partnership meetings, organise a talk, invite us to an event or contact us directly for a discussion and to ask questions.

The Community Forum on Wednesday 20 September is an excellent opportunity to get involved, help influence the work of the Partnership and share your views. Attendees will take part in round table discussions with other members of the community on key themes. To register to attend, go to: *https://scopelandforum.gdfevents.co.uk/* or call 0300 369 0000

Can local people join the Community Partnership?

Our recruitment process is ongoing, and a number of new members have joined the Community Partnership in recent months.

We are currently looking for new members in the sectors of Agriculture, Business, Tourism, Seldom Heard and Youth, so if you would like to join us and help ensure that the community has all of the relevant information that they need about geological disposal and the process, please get in touch.

How can members of the community contact you?

The Community Partnership holds events throughout the year and attends other local events. We are here to provide answers to people's questions, talk through any areas of concern and ensure people have the information they need about GDF.

People can contact the NWS Contact Centre by email at *gdfinfo-southcopeland@ nuclearwasteservices.uk* or call 0300 369 0000.

We see all enquiries and responses, and if an enquiry is specifically directed to us, we will personally respond.

You can also find information on our website, *southcopeland.workinginpartnership.org.uk*

Community Forum

The South Copeland GDF Community Partnership will be hosting its first Community Forum on Wednesday 20 September 2023. Attendees will be able to express their views by participating in round table discussions with other members of the community. This is an opportunity to help influence the work of the Community Partnership and to share your views. Register to attend online: *https://scopelandforum.gdfevents.co.uk/* or by calling: 0300 369 0000



Further drop-in events and Community Partnership meetings in public are planned for later this year. Visit our website to find out more: https://southcopeland. workinginpartnership.org.uk/get-involved/



Your thoughts

At our recent drop-in events, local people have shared their views on a GDF. We've heard a number of opinions, both for and against a GDF, and we welcome all of your thoughts, questions and feedback on the GDF proposal, both positive and negative.

We'll aim to answer all of your questions as we move forward, as soon as we can.



Regulating a Geological Disposal Facility

A GDF will have to meet strict environmental protection and safety and security standards which will be regulated by the Environment Agency (EA) and Office for Nuclear Regulation (ONR) respectively.

The independent regulators will work together to regulate a GDF, scrutinising all aspects of the project, including design, construction, operation and closure.

The UK Government has accepted the recommendation of the independent Committee on Radioactive Waste Management that geological disposal is the best approach for higher activity radioactive waste – and that this should be delivered in practice with community involvement and support.

An environmental permit and a site licence for a GDF will be granted only if proposals meet the high standards of the regulators.

The ONR and EA are both committed to making their work around GDF open and transparent.

Jon Davenport, a Nuclear Regulator at the Environment Agency and lead for both the South Copeland and Mid Copeland GDF Community Partnerships, said:

"We're independent regulators and, although we're not involved in decisions about the location of a GDF, we're getting involved in community engagement now.

"We want to encourage and enable people's input in to this process in west Cumbria.

"Our formal regulation will start after a site, or sites, have been selected for site investigation.

"Previously we've attended exhibitions organised by the Copeland GDF Working Group to talk to members of the community about how our work will help protect people and the environment.

"We are looking forward to further discussions at Community Partnership events in your area going forwards."

Dr Peter Howden, ONR Principal Inspector, said: "We do not have a role in the site selection process for a GDF or a decisionmaking role in the process for identifying and selecting sites for investigation.



"However, during the site selection process, we will offer our support to local working groups and Community Partnerships and will talk to communities, local authorities and others to explain more about our regulatory role."

The regulators' latest joint annual scrutiny report, available online, provides more information.

If you have questions, email the Environment Agency at *nuclear@environment-agency. gov.uk* or the ONR at *contact@onr.gov.uk*. The regulators will also attend the Community Partnership's meeting in public on 13 September 18:30-20:30 at The Lighthouse Centre in Millom and be available to answer questions.

Learn more at *gov.uk/guidance/regulatingthe-geological-disposal-of-radioactivewaste-environmental-protection#video*







International Focus: Sweden

A number of countries worldwide are progressing plans to develop a Geological Disposal Facility (GDF). They include France, Switzerland, Sweden, Finland, Japan and Canada.

No country has operated a final repository for High Level Waste or spent nuclear fuel yet, but Finland, Sweden and France are at the forefront. In Sweden, there has been community support for a GDF as a way of disposing of spent nuclear fuel.

In 2020, more than 8 in 10 people – 82 per cent of community respondents – told an annual poll in Östhammar Municipality that they were in favour of plans to build a repository in the village of Forsmark.

Two years previously, 77 per cent of respondents told the poll they supported plans to build a GDF, while 79 per cent of those asked in Oskarshamn Municipality said they were in favour of proposals to build an encapsulation plant for spent nuclear fuel.

Plans for the facility were approved by Sweden's Government in January 2022 and it will be developed in Östhammar by the Swedish Nuclear Fuel and Waste Management Company (SKB).

When the go-ahead was given, SKB CEO Johan Dasht said: "It is a historic decision that enables SKB to dispose of the nuclear waste our generation has produced. This decision is met with open arms. We are now looking forward to implementing Sweden's largest environmental protection project."

SKB has estimated that the GDF will create about 1,500 jobs and bring investment of SEK 19 billion – around £1.5 billion. The planned GDF will involve disposing of an estimated 12,000 tonnes of spent nuclear fuel in rock that is 1.9 billion years old.

Above ground will be a small number of buildings from where a five-kilometre ramp – about three miles long – will descend about 500 metres. From here, a system of tunnels will be built with room for more than 6,000 copper canisters of spent fuel.

The site will not be fully developed until the 2080s as, similar to UK plans, new areas underground will be continually constructed as existing ones are filled, but SKB hopes operations can begin 10 years after construction starts.

The Swedish GDF is an extraordinary feat of engineering, with about 2.3 million cubic metres (81m cubic feet) of rock being removed over the decades. The copper disposal canisters are about five metres (16ft) long, will weigh five tonnes when full and have an outer casing that is five centimetres (2in) thick.

Created to withstand corrosion, their placement in the rock will be managed by specially built machines that are controlled remotely.

The canisters will be housed in bentonite clay, which acts as a buffer and protects the canister from corrosion and minor movements in the bedrock. The clay will gradually absorb water and swell to fill the space around it and any cracks in the rock.

The bedrock is the final barrier. If any radioactive substance were to escape from a canister, it would be trapped here.

The rock and depth will help isolate the waste from the environment for at least 100,000 years – making the GDF a safe final repository.

SKB is drawing on more than 40 years of research and development, including extensive analysis of long-term safety and environmental impact.

The company says it chose Forsmark due to the area's dry rock with few deep fractures. About 800 scientific reports were produced during site investigations.

South Copeland **GDF Community Partnership**

Friends of Eskdale School rece £31,849 for the installation o Cumbria's first school biodome at St Bega's

South Copeland community projects awarded £460,000 funding from GDF programme

Various community projects in South Copeland are continuing to submit successful grant funding applications to the Community Partnership.

15 local initiatives have successfully applied so far this year, adding to the 27 projects awarded Community Investment Funding (CIF) of £1 million in 2022.

CIF of up to £1million per annum is provided by the GDF developer to fund projects in the Search Areas.

The grants can be used to fund projects, schemes or initiatives which benefit the Search Area that provide economic opportunities, enhance the natural and built environment, or improve community wellbeing.

Two projects, allocated funding in 2022, which are now benefitting from their grant, are Friends of Eskdale School and Bootle and District First Responders.

Friends of Eskdale School received £31,849 for the installation of Cumbria's first school biodome at St Bega's, as well as planters, soil, seeds, seedlings and nutrients for the first year. The biodome, which had its official opening recently, is an important educational resource which will benefit schoolchildren and the wider community.





Paul Botterill, Trustee of the Friends of Eskdale School, said "This project has realised one of the long term aims of the school: to install a biodome in order to provide an inspiring, exciting, multi-purpose and tranquil working space.

"FOES was delighted to make this project happen as it will support the development

"Many projects have benefitted from CIF funding over the last 18 months, and it's great to see the positive legacy this funding is starting to leave." of our children, and hence our community, for many years to come in a wide variety of subjects, such as art, science, maths, economics and English. It is such an amazing resource for the children that will also foster closer relationships between the school and its local community.

"We are really grateful to the South Copeland GDF Community Investment Funding for providing us with support for this amazing project."

Bootle and District First Responders received £8,982 to replace 8 defibrillators and purchase a laminator and additional equipment and clothing for when a CFR (Crash, Fire, Rescue)

occurs. The equipment has now arrived and will be put to good use.

Stephen Hancock, a volunteer with Bootle and District Community First Responders, said: "Funding has allowed us to replace our ageing defibrillators and other equipment that is essential for us to provide emergency support to our local community. Our defibrillators are expensive pieces of equipment and without CIF support it would have been impossible to re-equip the entire team.

"Being in remote, rural, west Cumbria, it might take some time for an ambulance to attend a medical emergency such as a cardiac arrest or heart attack, which is when local resident First Responders can be alerted by the 999 call handler and be on scene in minutes. Trained by the North West Ambulance Service and carrying essential equipment we are able to provide immediate



"We're still considering projects for year two, and I would encourage any local groups, public sector organisations and businesses that want to do something to benefit the community to come forward."

life-saving support prior to the ambulance or medi-helicopter arriving. Having our new kit secures our future for the coming years for which we are extremely grateful."

South Copeland GDF Community Partnership Chair, Ged McGrath, said: "For me, being able to see some of the projects being completed from the Community Investment Funding is particularly rewarding as many of these projects would have struggled to find funding without South Copeland being a part of the GDF conversation."



An invitation

The South Copeland GDF Community Partnership will be hosting its first Community Forum on Wednesday 20th September 2023.

Attendees will be able to express their views by participating in round table discussions with other members of the community. This is an opportunity to help influence the work of the Community Partnership and to share your views.

Register to attend online:

https://scopelandforum.gdfevents.co.uk/ or by calling: 0300 369 0000

Get in touch

Do you have a question? Would you like further information? Are you interested in applying for Community Investment Funding?

Get in touch with the NWS Contact Management Team.

Email: gdfinfo-southcopeland@ nuclearwasteservices.uk

Community Investment Funding email: communityinvestment-southcopeland@ nuclearwasteservices.uk

Telephone: 0300 369 0000

Write: South Copeland GDF Community Partnership, GDF Enquiries, PO Box 130, Seascale, CA28 0DN

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