

Theddlethorpe GDF
Community Partnership
Meeting 19

19<sup>th</sup> September 2024 14:00 – 16:30

Meeting Agenda			
Meeting Name	Theddlethorpe GDF Community Partnership (CP) – Meeting 19		
Meeting Date	Thursday 19 <sup>th</sup> September 2024		
Meeting Time	14:00 – 16:30		
Type of Meeting	In Person / Virtual		
Location	The Dunes Complex, Central Promenade, Mablethorpe, LN12 1RG		
	Invitees		
Independent Chair	David Fannin		
<u>CP Members:</u> Council Representatives	Cllr Martin Hill, Leader – Lincolnshire County Council Cllr Craig Leyland, Leader - East Lindsey District Council Cllr Simon Acklam, Parish Council Representative - Withern & Theddlethorpe Cllr Claire Arnold, Town Council Representative – Mablethorpe & Sutton		
Voluntary Sector Representatives	Tammy Smalley, Head of Conservation – Lincolnshire Wildlife Trust Rob Druce, Station Manager - Mablethorpe Coast Watch Ken Smith, Chair - Guardians of the East Coast (GOTEC)		

Invitees				
Business Sector Representatives	Gareth Rowland, Director for Lincolnshire – British Holiday & Home Parks Association Carl Richardson, Director – Dunes Family Entertainment Centre Ltd; Managing Director – Dunes Food Events Company Ltd Helen Fisher, Proprietor – We Are Carbon			
Nuclear Waste Services (NWS) Representative	Sarah Fletcher, Regional Manager – GDF Siting			
Official Observers	Andy Gutherson, Executive Director of Place – Lincolnshire County Council Lydia Rusling, Assistant Director of Economic Growth – East Lindsey District Council Pranali Parikh, Director of Economic Development – East Lindsey District Council			
Nuclear Waste Services	Nicky Kirkby, Community Partnership Operations Manager Nicola Clarke, Community Partnership Engagement Manager Anneline Wilson, Regional Communications Manager Victoria Mana, Community Partnership Assistant Joe Blissett, Grants Manager Simon Hughes, Siting & Communities Director Matt Swift, Senior Project Manager			

Invitees			
Guest Presenters	Candida Lean, Nuclear Waste Assessor – Environment Agency Themis Kantara, Nuclear Regulator – Environment Agency Peter Howden, Principal Inspector – Office for Nuclear Regulation Martin Walkingshaw, Chief Operating Officer – Nuclear Waste Services Neil Hyatt, Chief Scientific Adviser – Nuclear Waste Services Chris Keenan – Head of Community, Operations & Land – Nuclear Waste Services		
Apologies			
	Cllr Martin Hill Tammy Smalley Rob Druce Simon Hughes Pranali Parikh		

Agenda Agenda					
Item	Time	Discussion	Action	Lead	
1	14:00 – 14:05	Introductions and apologies	Standing item	David Fannin	
2	14:05 – 14:15	CP Chair opening remarks	For noting	David Fannin	
3	14:15	Declaration of interests (any new / changes)	Standing item	All	
4	14:15 – 14:20	Minutes of previous meeting, action log and matters arising	Standing item	David Fannin	
5.1	14:20 – 15:00	Environment Agency (EA) and Office for Nuclear Regulation (ONR) offering an insight into how they regulate NWS	Presentation contents are for noting	Candida Lean Themis Kantara Peter Howden	
5.2	15:00 – 15:20	Q & A invited by EA to whole audience			

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6.1	15:20 – 15:30	An update from Nuclear Waste Services Ltd (NWS) - the developer	For noting	Martin Walkingshaw
6.2	15:30 - 15:50	GDF safety and the multi-barrier approach	Presentation contents are for noting	Neil Hyatt
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7	16:00 – 16:10	Introduction to Property Value Protection Scheme (PVP)	For noting	Chris Keenan
8	16:10 – 16:20	CP Programme of Activities		
8.1		Communications and Community Engagement	For noting	Helen Fisher Cllr Claire Arnold
8.2		Community Investment Funding	For noting	Joe Blissett
8.3		Community Vision for the future	For noting	Carl Richardson

Agenda				
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9	16:20 – 16:30	Responses to previously submitted questions and AOB	For noting	David Fannin



## Environment Agency and Office for Nuclear Regulation

Offering an insight into how they regulate NWS

Candida Lean
Themis Kantara
Peter Howden





## Regulating Geological Disposal

Themis Kantara, Nuclear Regulation Group, Environment Agency

Candida Lean, Nuclear Waste Assessor, Environment Agency

Peter Howden, Principal Nuclear Safety Inspector, ONR

Presentation to the Theddlethorpe Community Partnership 19<sup>th</sup> September 2024





#### Joint regulation

- Environment Agency and Office for Nuclear Regulation
  - Joint regulators in England

- A future geological disposal facility will require:
  - Environmental permit
  - Nuclear site licence







### Environment Agency - What we do

**Biodiversity** 



Flood risk management



Radioactive substances regulation



**Industry regulation** 

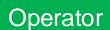


angling

Fisheries and



Regulator



Advisor



Water resources



**Agriculture** 



Water quality



**Contaminated land** 



Waste management







#### Animation

 A short animation about the regulators' role in geological disposal is available on YouTube at <a href="https://youtu.be/IPahJts\_GV8?feature=shared">https://youtu.be/IPahJts\_GV8?feature=shared</a>

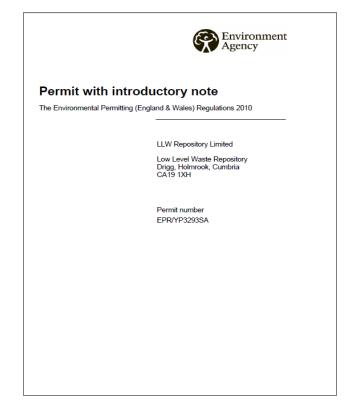






## Our role as an environmental regulator

- We regulate disposal of radioactive waste under the Environmental Permitting Regulations (2016)
- Permits include conditions and limits to control radiological discharges and disposals to the environment
- An acceptable Environmental Safety Case is required before we will issue a permit for disposal of radioactive waste



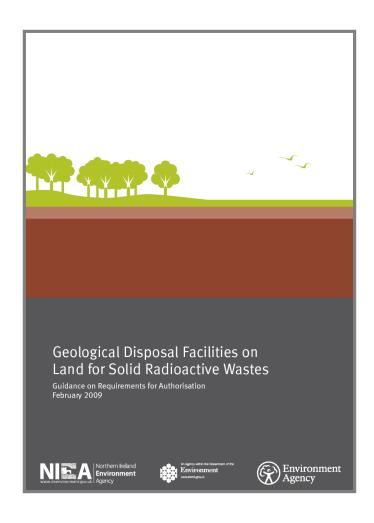






### Our standards and expectations

- We set high standards for protection of people and the environment now and in the future
- Our guidance on requirements for authorisation (GRA) sets out the principles and requirements that a developer needs to address in an Environmental Safety Case
- Geological disposal facilities on land for solid radioactive wastes (publishing.service.gov.uk)



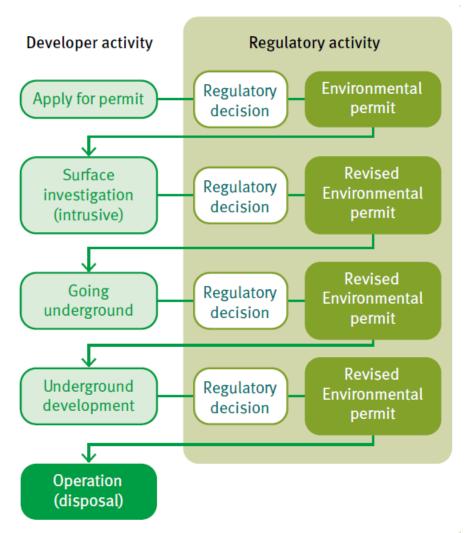






### Staged environmental regulation

- The developer will need an environmental permit to begin surface investigation e.g. drilling boreholes
- The environmental permit will need to be revised to enable development, operation, and closure of the facility







#### Our independence

- The Environment Agency is an independent regulator
- We will say 'No' if proposals do not meet our regulatory requirements
- Regulators do not consult Government when making regulatory decisions

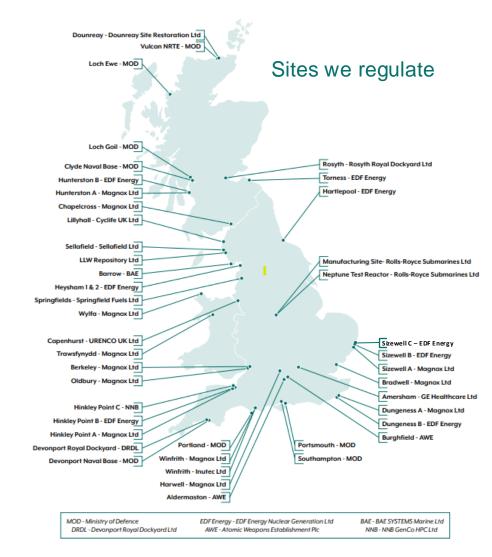




### Office for Nuclear Regulation – who we are and what we do

The ONR is an independent regulator responsible for:

- Regulation of safety and security at 36 nuclear licensed sites
- Regulation of transport of radioactive materials
- Ensuring safeguards obligations are met on behalf of UK Government
- Our mission is to: protect society by securing safe nuclear operations







#### The Nuclear Site Licence

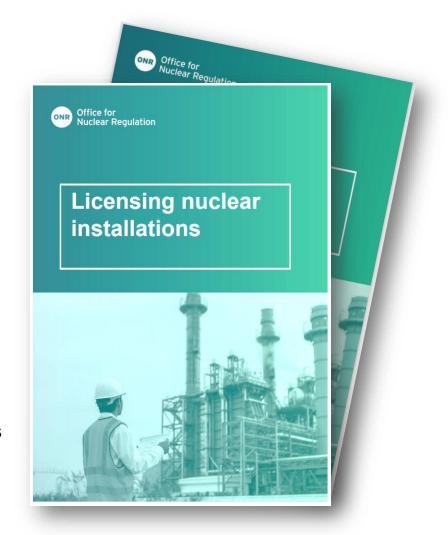
- A GDF is not currently an installation of a prescribed kind, but it is the UK Government's intention that it will be.
- As such, a GDF will require a Nuclear Site Licence and will be subject to the requirements of the Nuclear Installations Act 1965 during its design, construction, operation and closure, and regulated for nuclear safety and security purposes by ONR.
- The licence will need to have been granted before construction commences, to ensure it is adequately conceived and executed so as not to pose nuclear safety risks when it is operational.
- The licence will remain in place until all licensable activities cease and it meets the criteria for delicensing.





#### The Nuclear Site Licence

- ONR attaches conditions to all site licences in the interests of safety. Standard licence conditions are used; these are goal setting that ensures they are proportionate to the risk from the activities conducted on the site.
- ONR will be responsible for assessing the safety and approving security & safeguarding arrangements for the facility, and for securing compliance with those arrangements once a nuclear site licence has been granted.
- Licensing Nuelear Installations sets out our expectations and the process for granting of a nuclear site licence.
- Granting of a nuclear site licence takes a number of years and requires a detailed analysis of the licence application.

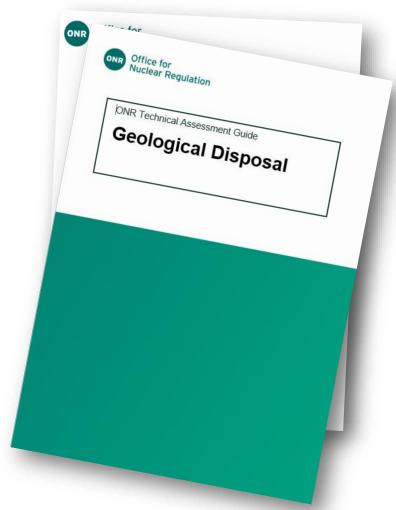






#### The Nuclear Site Licence

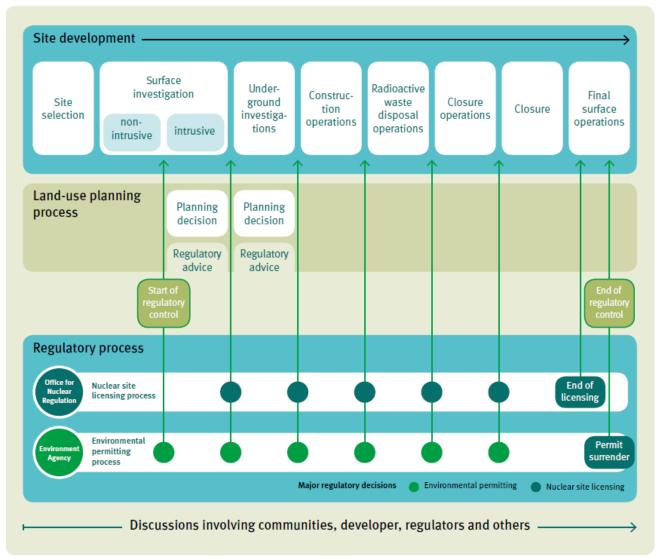
- Licensing Nuclear Installations includes a GDF specific annex.
- Application for a Licence is underpinned by a safety case. ONR has published Safety Assessment Principles (SAPs), together with the supporting Technical Assessment Guides (TAGs), to guide our regulatory decisions on nuclear permissioning. Underpinning such decisions is the legal requirement on nuclear site licensees to reduce risks so far as is reasonably practicable.
- A TAG specific to Geological Disposal has been developed and is available on the ONR website.
- ONR has used relevant good practice from IAEA safety standards and international GDF programmes to inform this guidance.







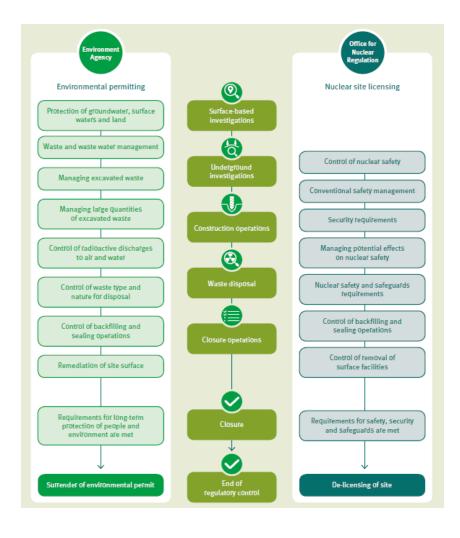
### Links between processes







#### Examples of regulatory controls

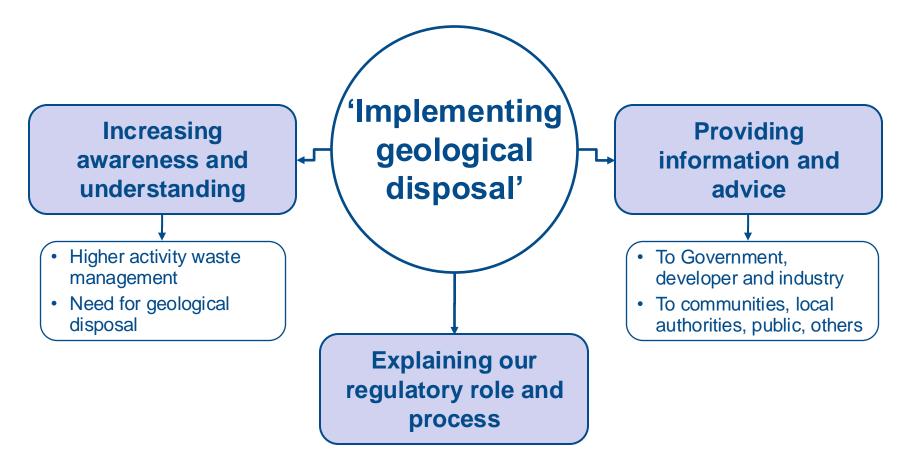


- Office for Nuclear Regulation
  - Conventional and nuclear safety
  - Security
  - Safeguards
  - Transport of radioactive materials
- Environment Agency
  - Protection of people and the environment





### Our role in the siting process



In implementing our role, we will not compromise our regulatory independence: EA and ONR are independent regulators and have no statutory role in the site selection process.





#### Supporting stakeholders

#### Providing information

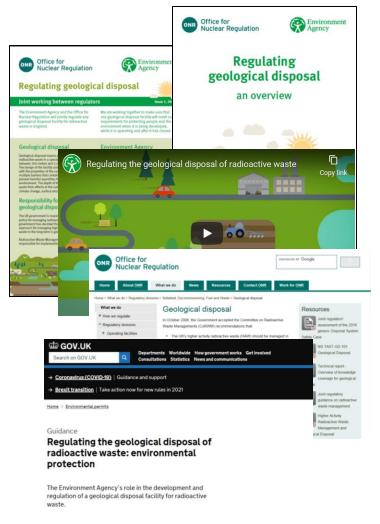
 webpage, guide to regulating geological disposal, animation, ebulletins, social media

#### Gathering information

events/meetings, social media, GDF mailbox

#### Consultation

- Workshops, focus groups, surgeries and public consultations
- We can tailor our support to meet your needs







# Guidance on Requirements for Authorisation (GRA) – consultation on updates

- Updating and combining the 2 existing GRAs for near surface and geological disposal
- Aim: to publish up to date, consistent, concise and accessible guidance for any type of dedicated disposal facility
- Takes account of:
  - Lessons learnt since 2009 versions issued
  - Changes in national and international policy, guidance and standards
  - User and public feedback
- Public consultation planned for early autumn 2024
- Look out for briefings and online events
- Levels of protection for humans and environment will not change







## Thank you Any questions?

#### More information at:

Link to our webpages on geological disposal:

https://www.gov.uk/guidance/regulating-the-geological-disposal-of-radioactive-waste-environmental-protection
http://www.onr.org.uk/geodisposal.htm

Link to our annual scrutiny reports (published each Autumn):
 https://www.gov.uk/government/publications/geological-disposal-scrutiny-of-rwms-work-annual-reports

• Link to our guides to regulating geological disposal:

http://www.onr.org.uk/documents/2019/geological-disposal-joint-working.pdf http://www.onr.org.uk/documents/2019/geological-disposal-overview.pdf

E-mail us at:

nuclear@environment-agency.gov.uk contact@onr.gov.uk







Q & A invited by Environment Agency to the audience

Agenda				
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6.1	15:20 – 15:30	An update from Nuclear Waste Services Ltd (NWS) - the developer	For noting	Martin Walkingshaw
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An update from Nuclear Waste Services

the GDF developer

Martin Walkingshaw



## GDF Safety and the Multi-Barrier Approach

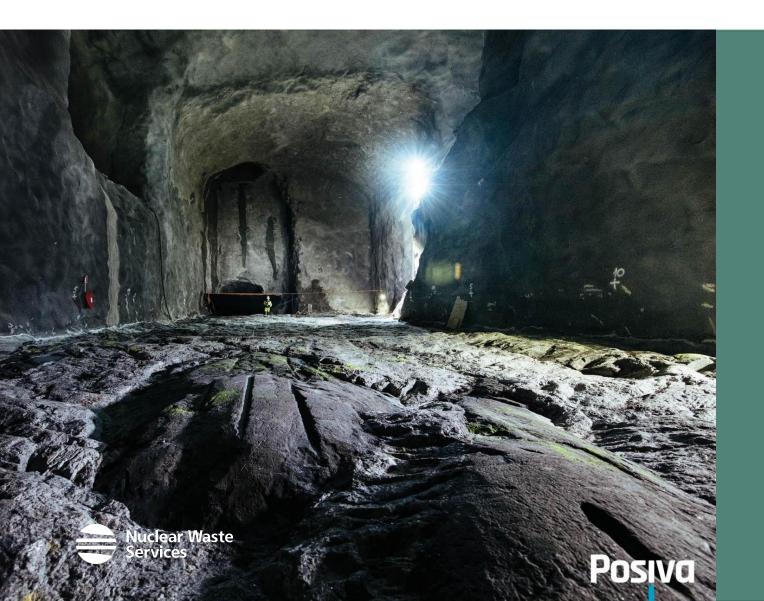
Neil Hyatt



# Safe geological disposal of radioactive waste

Professor Neil Hyatt
Chief Scientific Adviser

#### Overview



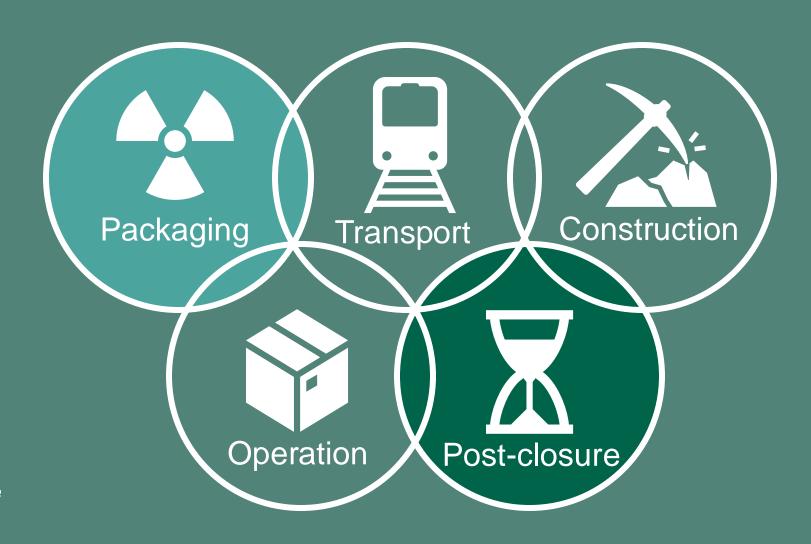
- Set out the basis of GDF safety at high level and in big buckets
- Basis for future conversation and workshops –not a one off presentation
- Stimulate thinking what are you interested in, what do you need to know more about?
- Role of the NWS CSA in supporting the programme and communities.



My drivers and the drivers for my role:

- Expertise
- Evidence
- Action
- Accountability
- Independence
- Integrity

#### GDF Safety – full picture





#### GDF Safety – radioactive decay

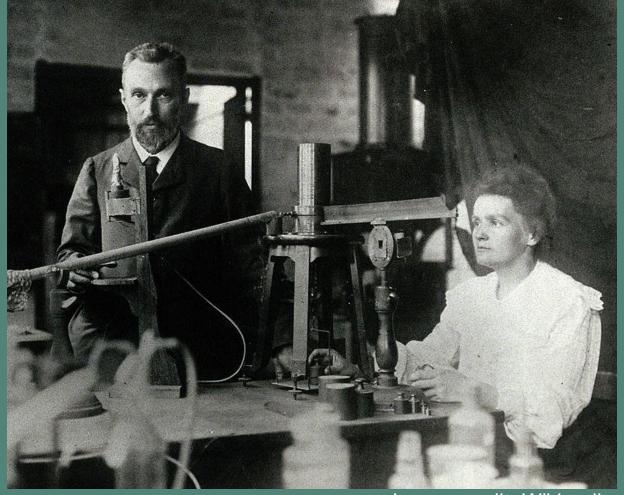




Image credit: Wikipedia

#### GDF safety – fundamental requirements



- 1. Isolate the waste from the surface
  - Depth of 200 1000m
  - Stable host rock
- 2. Contain the radioactivity for sufficient time to decay
  - Properties of the rock
  - Design and engineering
  - Waste packaging

## GDF safety – host rock



**Evaporite** rocks

for example: Rock Salt



Lower strength sedimentary rocks

for example: Clay



Higher strength rocks

for example: Granite

Our demonstrable safety period is around 100,000 years

To achieve this, we select a target geology:

- That has been stable for millions of years
- With predictable and extremely slow (or no) movement of water



## GDF safety – the engineering



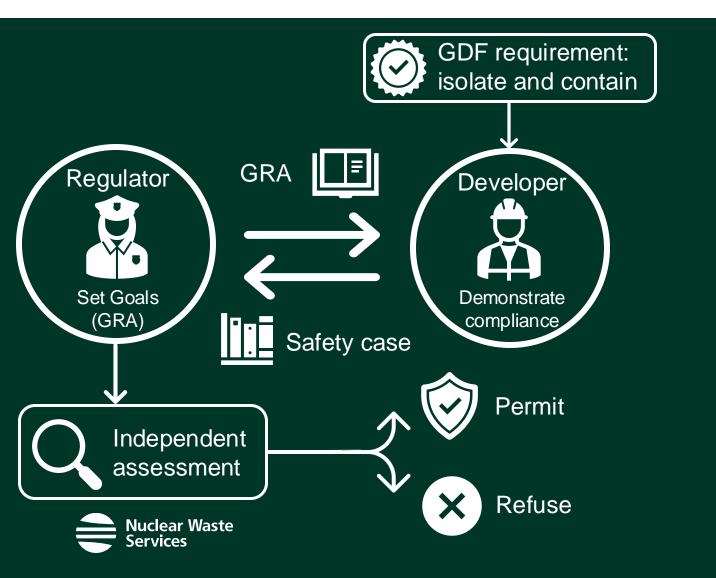
The GDF will be designed and engineered to be compatible with the host rock.

The engineering includes:

- Low solubility waste material
- Durable containers
- Cement or clay backfill

The geology and engineering work together to assure isolation and containment.

## Who decides what is safe?



### **NWS** is accountable for:

- Siting and design of a GDF to meet sponsor requirements.
- Evidencing that the facility will be safe over its full life span.

## The independent regulator:

- Sets the safety goals and standards.
- Assesses the safety case submitted by NWS.
- Issues a permit or licence.

## What is the goal for GDF, in terms of risk?

Dose from a single CT scan

Average annual dose of USA resident

Average annual dose of UK resident

Average annual dose of nuclear power station worker

Dose from a single trans-atlantic flight

"Additional annual dose limit" from a GDF

Dose from a single chest X-ray

6.6 mSV

6.2 mSV

2.7 mSV



0.20 mSV

0.08 mSV

0.02 mSV



0.01 mSV



## Summary of key points



- Our demonstrable safety period is around 100,000 years.
- The host rocks assure isolation of the waste, and containment, together with the engineering.
- Independent regulators set the goal and assess whether it has been met.
- NWS provides the evidence to demonstrate compliance in its safety case.



## Safe geological disposal of radioactive waste

Professor Neil Hyatt
Chief Scientific Adviser



# Community Partnership Member Questions to Nuclear Waste Services

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## Introduction to Property Value Protection scheme

## Chris Keenan

https://www.gov.uk/government/publications/property-value-protection-scheme

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## Community Partnership Programme of Activities



## Communications Helen Fisher

## Community Engagement Cllr Claire Arnold

## PoA Workstream 1 – Communications Update

- Communication and Engagement Strategy
- Keeping up to date

Social media channels – Facebook, LinkedIn, X (Twitter)
Website – news, get involved page (drop-in, events), visioning - online form

### Freelance journalist

Community focused stories – CIF projects and local benefits, visioning feedback and gaining people's thoughts and opinions for newspaper content.

Contact made with freelancer

Option – media/journalism course student

## PoA Workstream 1 – Engagement Update

Theme	Comments	Statistics
Doorstep Engagement, CP Agreed	Completed so far: Great Carlton, Strubby & Beesby and started on Mablethorpe. This phase will finish with one other locality	3 villages complete 1 town work in progress 103 doors knocked Average conversation time, 25 minutes
Holiday Maker & Visitor Engagement, <b>CP Agreed</b>	Took place on the sea front at Mablethorpe	56 engagements Average conversation time, 15 minutes
Coastal Centre, <b>CP Agreed</b>	Every Tuesday	Members of the public, new and regular contacts
Community Group Contacts, CP Agreed	Purpose to build relationships and to identify potential opportunities for engagement	Contacts with 75 local groups and businesses
Events, CP Agreed	Poppies on the Prom - Focus on Visioning	51 engagement conversations with 74 pieces of feedback
Councillor Briefing, <b>CP Led</b>	Regular Councillor briefing to share and update on CP activities	Regular meetings arranged
Mablethorpe Carnival Stand CP Agreed	Focus on Visioning	21 <sup>st</sup> September 2024
Schools - <b>Developer Led</b>	Schools Enrichment Day	60 students engaged with
Discover the World of GDF – Explore, Discover and Connect – Developer Led	Exhibition space	15 <sup>th</sup> to 23 <sup>rd</sup> October 2024



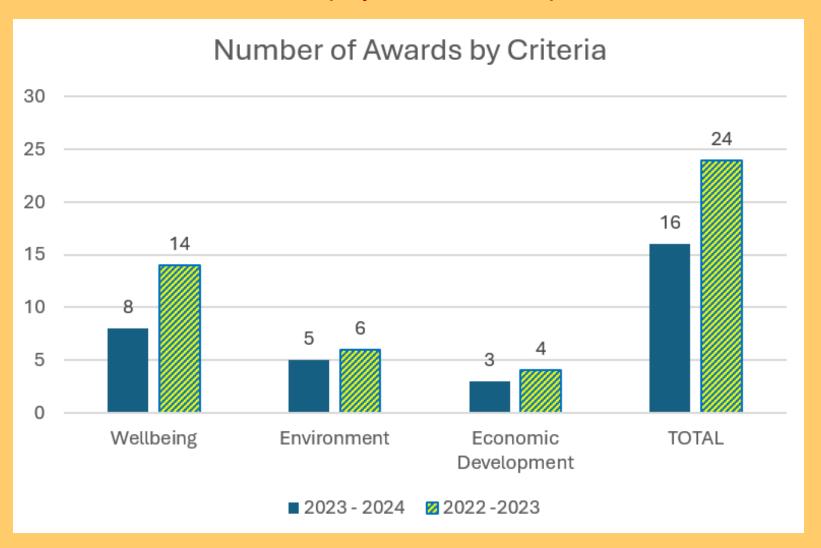
## Community Investment Funding

Joe Blissett

### **PoA Workstream 3 - Community Investment Funding**

- Up to £1m of Community Investment Funding (CIF) is available per year in the form of grants to benefit residents in areas participating in the siting process for a Geological Disposal Facility (GDF)
- It is made available by the Government as part of UK Policy i.e. it is a government requirement that NWS is obliged to make the money available to communities
- CIF is available without prejudice i.e. not linked to support of a GDF or any other nuclear facility
- Community Partnerships can award up to £1m of grants each year in the early part of the process
- If deep boreholes are commenced, CIF rises to up to £2.5m per community, per year
- CIF may be used for Capital or Revenue funding, including staff costs
- Parish Councils could apply for funding on behalf of other groups
- Funding may be used for projects, schemes or initiatives, that meeting one or more of three criteria:
  - Community Wellbeing
  - Natural & Built Environment
  - Economic Development

## CIF Overview: Years One and Two (July 2022 – June 2024)

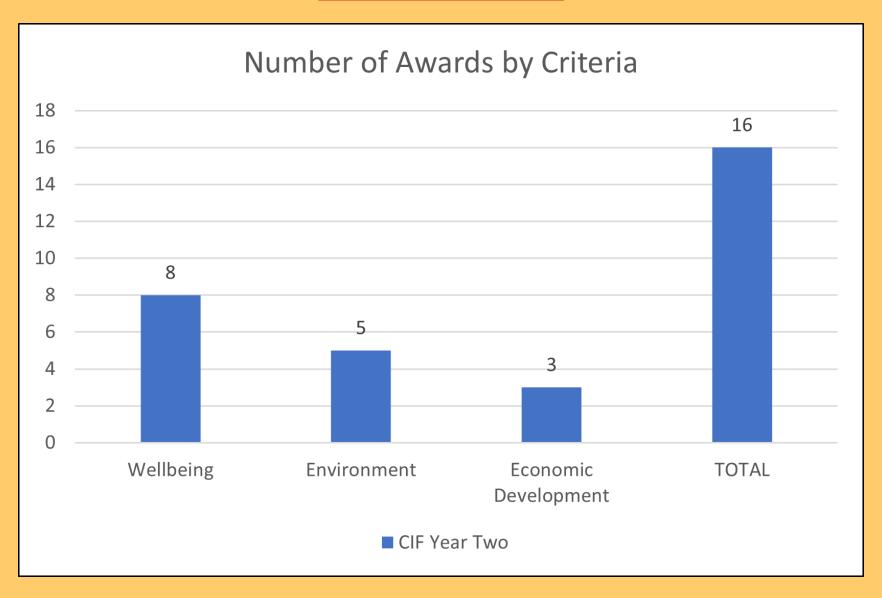


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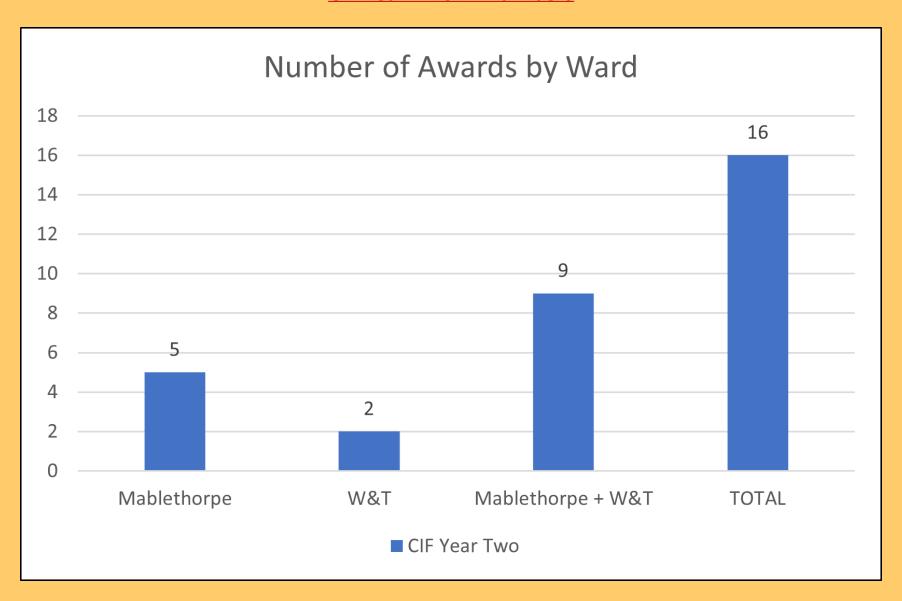
### <u>CIF Year Two</u> (July 2023 – June 2024)

- Sutton on Sea Residents Association: Furlongs Festival 2023
- Bells & Whistles Exercise Group: Essential maintenance to community space
- Strubby, Beesby & Maltby Village Hall: Improvements to building to enhance hiring opportunities
- Withern Village Hall: Withern Village Hall Replacement Project
- Flanders Friends: Poppies on the Prom festival event
- Lincolnshire Gateways Academy Trust: Extension of playground at Theddlethorpe Primary School
- Sutton on Sea Residents Association: Furlongs Festival 2024.
- Lincoln & Lindsey Blind Society: Benefit Advice for the visually impaired.
- **Eco Learn CIC:** Community growing project
- Furnichurch: 3-year development programme of Foodbank and Furniture Service
- The Boatshed Charity: Mablethorpe Carnival 2024
- Community Learning in Partnership (CLIP): Mobile Classroom to provide education services
- Citizens Advice Lincoln and Lindsey: 3-years of financial & benefits advice to those in need
- Children's Links: Self help groups for women in Mablethorpe & Villages
- Lincoln City Foundation: Sport & exercise classes to help cancer sufferer's recovery
- Bishop Grosseteste University: Residential for 16 year olds to learn about university life

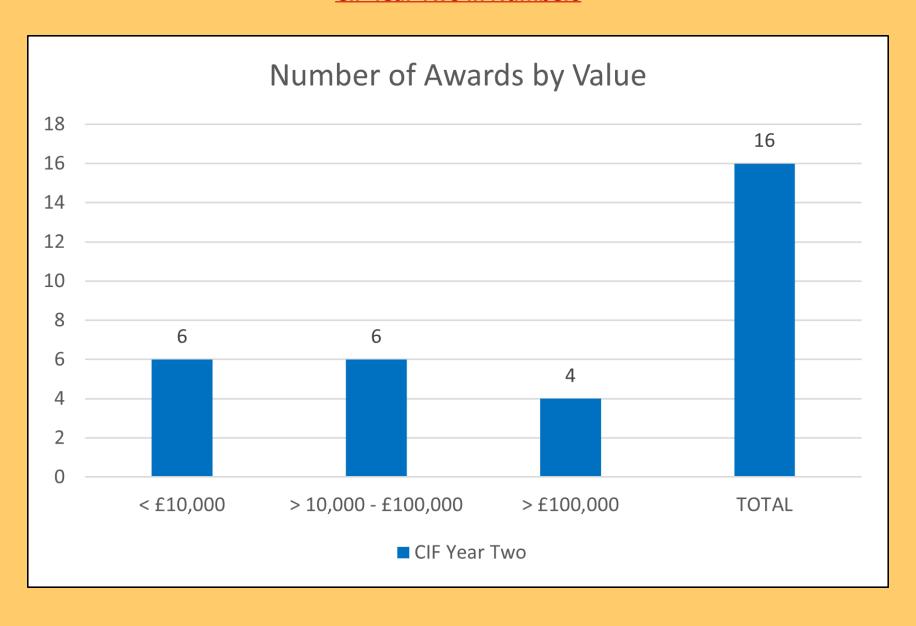
### July 2022 – June 2024 CIF Year Two in Numbers



### July 2022 – June 2024 CIF Year Two in Numbers



### July 2022 – June 2024 CIF Year Two in Numbers





## How do I apply for funding?



## **How to Apply**

The Community Investment Team are encouraging communities across the Search Area to maximise the available funding and support, including guidance on eligibility criteria, how to apply and practical help with the application form.

A newly created How to Apply leaflet has been produced, which will be made available on our website and in printed form.



## Community vision for the future

Carl Richardson

## PoA Workstream 4 - Vision Update - Subgroup

- Subgroup meeting monthly 4th Tuesday of every month until July 2025
- Feedback form and freepost distributed to 4,500 homes and businesses in early September 2024
- Online QR Code uploaded to website
- Feedback responses framework created
- Attendance at 'Poppies on the Prom' in August 74 feedbacks received
- Attendance at Mablethorpe Carnival on 21<sup>st</sup> September
- Agreed specification for consultant support

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9	16:20 – 16:30	Responses to previously submitted questions and AOB	For noting	David Fannin			



Responses to previously submitted questions and Any Other Business