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SaND Safety of Nuclear Waste Disposal Discussions

The Half-Life Afterlife

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Abstract.

Although situated firmly in the present, *The Half-Life Afterlife* is a speculative, time-travelling sculptural and text-based artwork reflecting on the geological disposal of radioactive waste and the entangled nature of our human-generated atomic activities from the vantage point of an unspecified, undefined and possibly post-nuclear future. It assumes the form of a collection of ancient looking bentonite clay objects, recently discovered in the vicinity of Gloucestershire Airport which was thought to have become the site of a Geological Disposal Facility or GDF where the UK's most hazardous and long-lived nuclear waste was eventually buried, deep underground.

Possibly created as radioactive waste burial charms or above ground protection devices, these found objects have been subject to speculative research methods, fusing nuclear fact and fiction, before being catalogued and displayed in a very human attempt to imbue them with cultural significance and meaning as future nuclear artefacts.

At the heart of this artwork is the notion that we are asked to place our trust in the science and engineered barriers of the GDF but at the same time we cannot know with any certainty how societal and cultural changes will impact on our long-term future understanding and relationship with our atomic past and the waste we have left behind.

Also, in terms of addressing our domestic waste, geological disposal is presented as both a safe and neat and tidy solution, but we should also consider this within the context of our wider global nuclear footprint and keep in mind the ongoing and enduring legacies of uranium mining, atomic weapons testing and unplanned radiological releases are not so tidily managed or contained and will continue to unfold over both human and geological timescales.

The Half-Life Afterlife.

This article briefly describes the background to *The Half-Life Afterlife*; a speculative, sculptural and text-based artwork combining elements of geological disposal, archaeology, cultural heritage and future nuclear memory into a work of nuclear

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fiction, but one that is also (selectively) underpinned by nuclear fact. The artwork itself is included as a supplement to this paper.

Background Readings.

As of 2026, the UK is 8 years into its current search to find a suitable site and willing community to host a Geological Disposal Facility or GDF for the permanent containment of high-level and high activity domestic radioactive waste leftovers from 80 years and counting of civil and military nuclear programmes. The GDF programme is being implemented by Nuclear Waste Services (NWS) in their role as the developer along with their suitably optimistic mission statement to "make nuclear waste permanently safe, sooner". Formed in 2022, NWS are a subsidiary organisation within the larger UK government funded Nuclear Decommissioning Authority (NDA).

With several previously failed attempts to address the domestic nuclear waste issue since the mid 1970s, it comes as no surprise this latest iteration is also proving to be similarly problematic and protracted, even under the new model of volunteerism and with the additional enticement of £1m rising to £2.5m per year of funding available for participating local communities. In a programme that is nominally open to any area within the UK (excluding Scotland and Northern Ireland), just two GDF Community Partnerships are actively engaged in the siting process at present, both of which are situated, perhaps not all together unsurprisingly, in West Cumbria where nuclear activities have increasingly underpinned the region's economy since the late 1940s. Two previous Community Partnerships, Allerdale (also in West Cumbria) and Theddlethorpe in Lincolnshire were also established in 2022 but have since both been dissolved for geological and political (local opposition) reasons respectively. A fifth area, South Holderness in the East Riding of Yorkshire, very briefly formed a GDF Working Group in January 2024 but this was terminated the following month when the local council voted almost unanimously by 53:1 to withdraw from the siting process with immediate effect (East Riding Council, 2024).

Although the current GDF siting process is nominally transparent, there is a distinct opaqueness associated with the very early stages. The rules of engagement explicitly allow for any individual (or group) to contact NWS with a suggestion to nominate their local area (or a site within their local area) for consideration. However, once initial contact is made, all early discussions between NWS and the "Interested Party" (or parties) take place behind closed doors until such time as they either break down or it is felt that a GDF Working Group could be formed at which point a representative from the local council is required to join. It is only then that the results of those early discussions officially become public. However, even with the formation of a Working Group, the identity or intentions of the original interested party or parties may remain protected, and the reality is that the formal announcement of a working group may come as complete surprise to the local community as happened at both Theddlethorpe and South Holderness. This raises the question as to whether it is possible for the process to be considered truly transparent and consent-based from start to finish. Even the rules of the final test of public support (assuming a GDF

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Community Partnership reaches this point) are yet to be defined by NWS. Will ratification be decided by a unanimous or simple majority decision or some other mechanism? To complicate things still further, short term, day to day economic considerations, potential political opportunism and embedded fears and perceptions around nuclear safety and waste all combine to create a series of very human barriers when it comes to agreeing on how and where our most hazardous waste should finally reside and who would be prepared to live alongside (or above it), however deep it might be buried. The government are obliged to be optimistic though and according to NWS, "the door still remains open for new communities to join the process". However, this does not make it clear exactly how long the door will remain open. In 2024, I contacted NWS to ask if they could tell me exactly at which point it will become closed but only received the following non (but not entirely unexpected) answer: "The policy also requires NWS to raise awareness of geological disposal with the public and invite anyone with an interest to have initial conversations to find out more and this remains the case" (Nuclear Waste Services, 2024).

My personal interest in the GDF programme began a couple of years earlier in 2022 while I was studying for my master's degree at the University of Gloucestershire and beginning to explore aspects of the UK's present day nuclear activities within my practice. I found out about and attended an NWS GDF Community Partnership public event in Theddlethorpe, not long after its formation. On a warm, sunny day in June that year, representatives and subject matter experts from NWS, members of the newly formed Community Partnership and the public came together in the village hall car park, all under the watchful eye of a private security company which took me completely by surprise. After questioning this, an NWS representative explained to me that the first round of public events held a few months earlier were quite fractious affairs with tensions running high following the initial announcement of the GDF Working Group prior to its subsequent transition to a Community Partnership. The additional security this time around had been provided for our "safety".

Since then, I have been keeping my own watchful eye on the UK's ongoing GDF activities and in 2024, in the interests of transparency and exploring the process on a personal level, I considered it a worthwhile exercise to submit public questions to my local borough and county councils to ask what their thoughts were on joining the GDF programme (Cheltenham Borough Council, 2024) and (Gloucestershire County Council, 2024), [Figures 1 and 2].

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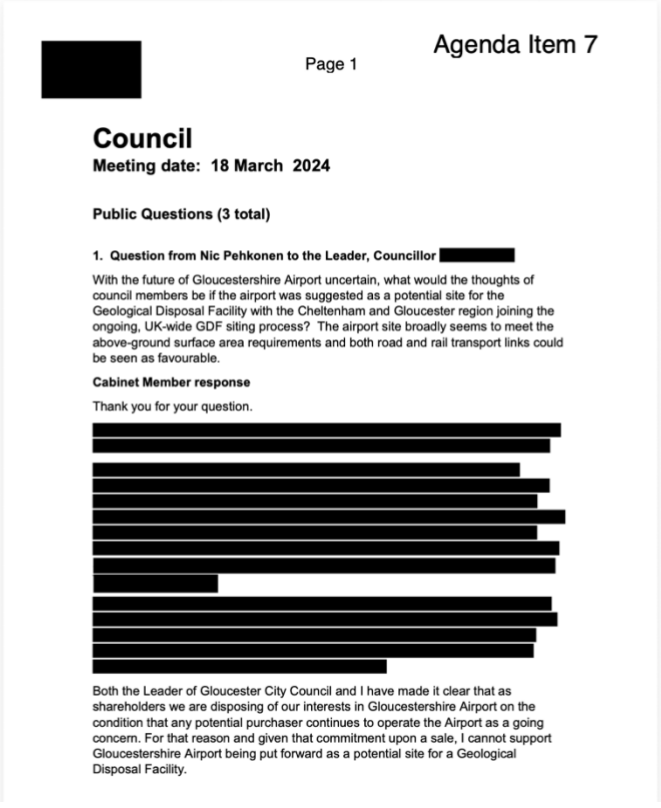

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Agenda Item 7

Council

Meeting date: 18 March 2024

Public Questions (3 total)

1. Question from Nic Pehkonen to the Leader, Councillor [redacted]

With the future of Gloucestershire Airport uncertain, what would the thoughts of council members be if the airport was suggested as a potential site for the Geological Disposal Facility with the Cheltenham and Gloucester region joining the ongoing, UK-wide GDF siting process? The airport site broadly seems to meet the above-ground surface area requirements and both road and rail transport links could be seen as favourable.

Cabinet Member response

Thank you for your question.

[redacted]

Both the Leader of Gloucester City Council and I have made it clear that as shareholders we are disposing of our interests in Gloucestershire Airport on the condition that any potential purchaser continues to operate the Airport as a going concern. For that reason and given that commitment upon a sale, I cannot support Gloucestershire Airport being put forward as a potential site for a Geological Disposal Facility.

95 Figure 1. Cheltenham Borough Council, public question response Page 1 [redacted by the author for your safety from the original unredacted Council document]. Contains public sector information licensed under the Open Government Licence v3.0.

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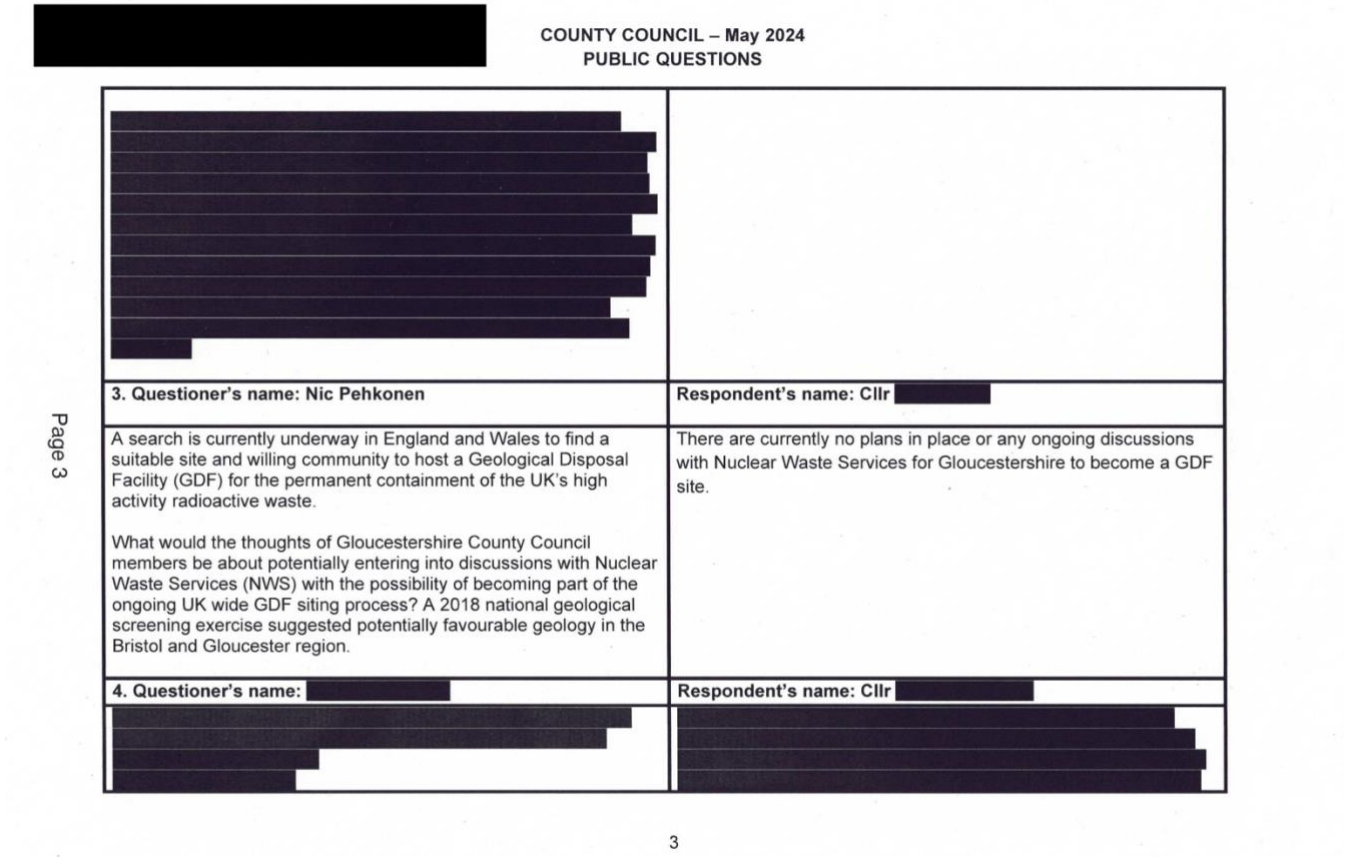

[redacted]

COUNTY COUNCIL – May 2024
PUBLIC QUESTIONS

[redacted]	
3. Questioner's name: Nic Pehkonen	**Respondent's name: Cllr** [redacted]
A search is currently underway in England and Wales to find a suitable site and willing community to host a Geological Disposal Facility (GDF) for the permanent containment of the UK's high activity radioactive waste. What would the thoughts of Gloucestershire County Council members be about potentially entering into discussions with Nuclear Waste Services (NWS) with the possibility of becoming part of the ongoing UK wide GDF siting process? A 2018 national geological screening exercise suggested potentially favourable geology in the Bristol and Gloucester region.	There are currently no plans in place or any ongoing discussions with Nuclear Waste Services for Gloucestershire to become a GDF site.
4. Questioner's name: [redacted]	**Respondent's name: Cllr** [redacted]
[redacted]	[redacted]

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Figure 2. Gloucestershire County Council, public question response page 3 [also redacted by the author for your safety from the original unredacted Council document]. Contains public sector information licensed under the Open Government Licence v3.0.

Although Gloucestershire Airport will almost certainly not become the location of the UK's GDF, I began to imagine a contrary and inexplicable scenario where, for reasons unknown, it did. These speculative thoughts immediately raised a host of potentially unanswerable questions. What caused the existing West Cumbrian GDF Community Partnerships to withdraw? How was a Community Partnership able to form in Gloucestershire without the required council participation? Was the local geology found to be suitable and if so, how did it pass the final test of public support? Was there was a sudden, albeit highly unlikely shift in public perception around nuclear waste? Was the consent-based GDF site-selection process ultimately abandoned in favour of a more autocratic model? Were there any questionable, underlying political or economic motives at

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play? If there is one thing artists are particularly good at, it's asking questions with no clear or ready answers and in respect of this fictitious GDF siting scenario, the list of questions goes on and on as transparency and opaqueness seemingly become as one.

Coincidentally, this current iteration of the UK GDF programme also seems to be happening under the warm startup glow of our so-called Nuclear Renaissance where a renewed political tilt towards civil nuclear (fission) power is driving and talking up the development of a new generation of large, "small" and advanced reactors of varying types. Of course, the deployment of any new nuclear facilities also guarantees an equivalent future increase in our spent fuel stockpile and associated high and intermediate level atomic leftovers which ultimately will be destined for geological disposal. When combined with our already existing nuclear legacies and liabilities, I began to wonder what distant future generations will come to understand of our 20th and 21st century atomic activities once the watts and weapons have come and gone and our long-decommissioned surface infrastructure has largely disappeared. What will be remembered? What will be forgotten? What will become valued and what will be deemed unimportant? I then wondered how I might explore this creatively though the lens of geological disposal with its associated long and deep timescales of implementation and operation and began to ask myself what form it might take as an artwork?

Leading the way in our official golden age of nuclear are the twin gigawatt plants of Hinkley Point C and Sizewell C along with the recently chosen Small Modular Reactor (SMR) site at Wylfa following a close (or perhaps slightly more distant) third. All three are classified as Nationally Significant Infrastructure Projects (NSIPs) which interestingly not only combines elements of the present and future but also of the past. There is a requirement within NSIPs that archaeological works are carried out prior to main construction taking place. For example, between 2012 and 2016, a lengthy programme of work was carried out on the Hinkley Point C site and surrounding locality with equivalent explorations currently ongoing at Sizewell C (due to be completed by the end of 2026). As the archaeological dust begins to settle on both sites, I began to think about the new nuclear sites themselves as potential locations of future archaeological exploration and applied this line of enquiry more specifically to the UK's GDF, as imagined being located at the former site of Gloucestershire Airport. What telling traces of our nuclear past might our GDF reveal in time and what stories might we construct from the objects that may come to be unearthed around the site and surrounding area? The timelines associated with geological disposal are stretched out over hundreds, thousands, tens and hundreds of thousands of years and most likely way beyond human civilisation. However, as we are all too human, it is arguably impossible to imagine and describe an unspecified and undefined and possibly post-nuclear future in anything other than familiar human terms. To make an artwork on the subject would require a similarly familiar approach, drawing on the reality of our existing nuclear past and present to describe a speculative future where nuclear fact and fiction have become increasingly blurred, albeit in a highly selective manner of my own choosing. In other words, storytelling.

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This leads on to the third element of *The Half-Life Afterlife* which are the objects themselves. From reading the published results of the Hinkley Point C archaeological excavations, it became clear a large proportion of the finds were clay based, usually made from material of local origin (Mudd et al., 2024). Within the UK's geological disposal system, (sodium) bentonite clay of non-UK origin is proposed as one of the engineered barrier materials to slow down the potential migration of harmful radioactive particles from corroding waste packages over time. In this context it seemed obvious to me that bentonite should become the time-travelling material of choice for the sculptural elements of the artwork through which I could draw on past and present to create a fictional collection of future nuclear artefacts. The intention was to use these "found" objects as devices through which to highlight selective aspects our intertwined civil and military nuclear activities as seen or imagined through the lens of historical time. Our nuclear technologies, programmes and infrastructure will eventually become obsolete and redundant, but we have already guaranteed their legacy will continue to live on through the waste and other associated material we have left behind.

As an end note, most pottery is generally unearthed incomplete in the form of sherds, and it is less common to discover whole objects which makes the strangely surviving items from *The Half-Life Afterlife* particularly intriguing, especially when you consider they have been made from unfired bentonite and should have almost certainly succumbed to dissolution or disintegration over time.

Supplement: *The Half-Life Afterlife.*

Taking an untroubled approach to time, *The Half-Life Afterlife* is a speculative, sculptural and text-based artwork reflecting on the geological disposal of radioactive waste and the entangled nature of our human-generated atomic activities from the vantage point of an unspecified, undefined and possibly post-nuclear future. It assumes the form of a collection of ancient looking bentonite clay objects, recently discovered in the vicinity of Gloucestershire Airport which was thought to have become the site of a Geological Disposal Facility or GDF where the UK's most hazardous and long-lived nuclear waste was eventually buried, deep underground (Figure3).

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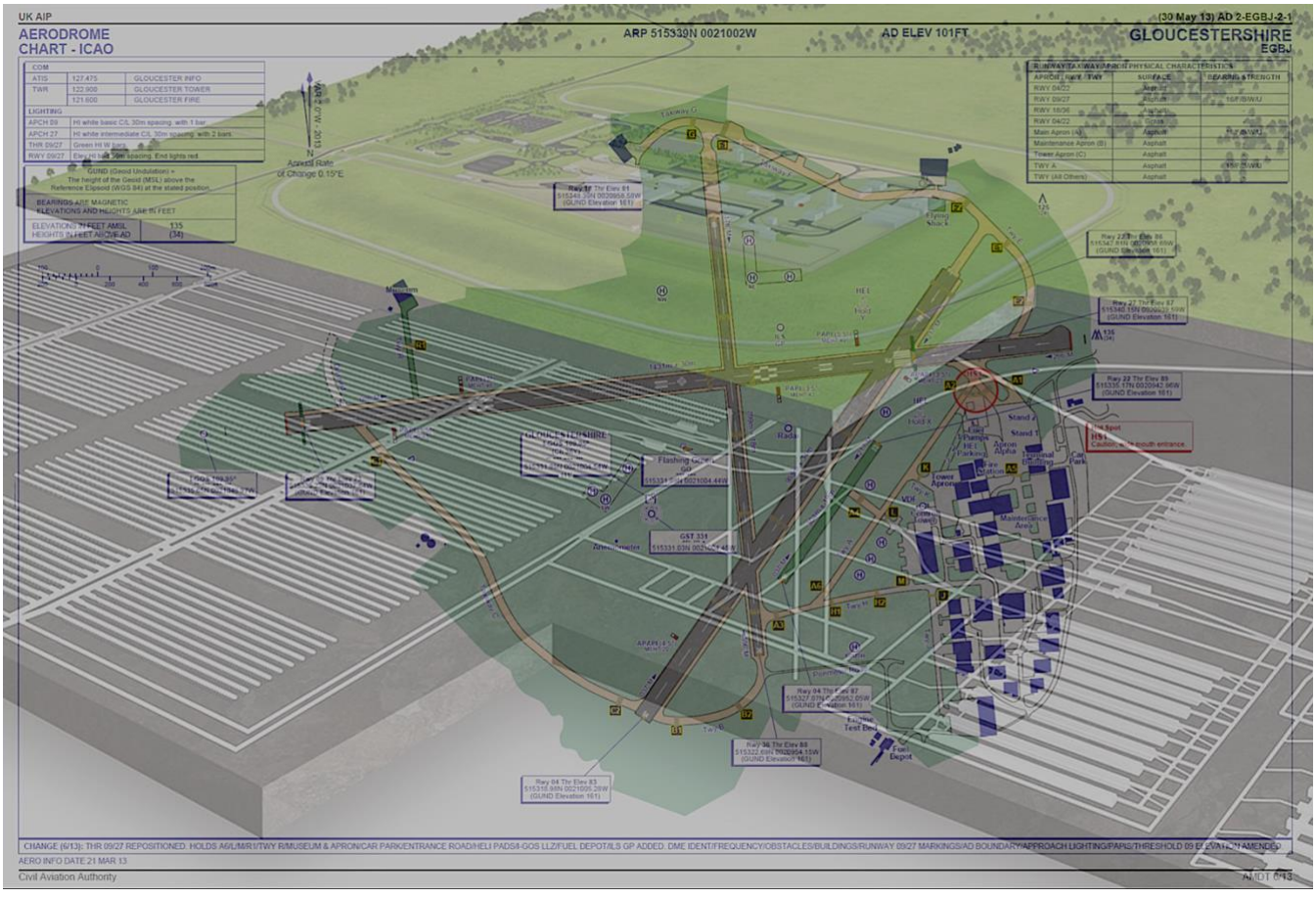

Figure 3. The UK's GDF site [Image Credits: Nuclear Waste Services (NWS) and Gloucestershire Airport].

Possibly created as radioactive waste burial charms these found objects have been subject to speculative research methods fusing nuclear fact and fiction before being catalogued and displayed in a very human attempt to imbue them with cultural significance and meaning as future nuclear artefacts.

It is unclear as to why the area between Cheltenham and Gloucester might have emerged as the location of the UK's GDF; a story forever shrouded in geological, socio-economic and consent-based mystery. It is additionally confusing as a rare surviving digital council record from the year 2024 stated *"*There are currently no plans in place or any ongoing discussions with Nuclear Waste Services for Gloucestershire to become a GDF site*"*.

The long, drawn-out passing of atomic time has also left much for speculative knowledge workers to grapple with. Did nuclear fusion eventually render uranium-based power generation obsolete? What became of nuclear weapons? What other telling traces of our atomic past remain, visible or otherwise? Perhaps we are now in a post-human future, albeit a highly selective one that we only seem to be able to describe in familiar human terms?

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Simultaneously fuelled by the known and the unknown, we find the much-anticipated legacy and significance of the nuclear fission age now weighs heavily on these small, left-behind objects.

So, what exactly are they? What stories do they tell or what stories would we like them to tell?

Token Offerings.

Over the course of many millennia, increasingly stretched out tales have been passed down that collectively point to the existence of scattered 20th & 21st century tribes who lived through a simultaneously pioneering and problematic period that might have become known as both the Atomic Dark Ages and Nuclear Renaissance.

Legend has it that highly engineered and much prized bentonite clay tokens were offered up to the gods by nuclear states as part of a complex tactical and strategic exchange system with the aim of securing unlimited access to the trappings of atomic power.

However, due to the same states increasingly insatiable atomic appetites, the gods eventually grew tired of accepting what was rapidly becoming an uncontrolled proliferation of tokens declaring “ENOUGH!”, forever consigning the messy and entangled remnants of our lustful nuclear dalliances to the environmental and geological dustbin before turning their attention elsewhere, away from humankind.

Surviving examples of these tokens have been found from time to time, like the one pictured in Figure 4, recently discovered just outside the perimeter fence of Gloucestershire Airport, near Emergency Gate number 3.

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Figure 4. Token Offering [NIC/NW/010.1] (Image Credit: Nic Pehkonen).

Radioactive Waste Burial Charms or Radiation Protection Devices?

The curiously shaped objects shown in Figure 5 could have been made as radioactive waste burial charms, designed to accompany copper or steel-clad packages of alpha and beta radiation emitting waste on their final journey deep inside a GDF as they crossed over into the Half-life Afterlife.

Possibly part of an unused batch, they might be leftovers from the one hundred plus years long GDF waste deposition process that began in the latter half of the twenty-first century.

Or maybe they were never intended for burial but designed as above ground, long-term radiation protection devices for the local GDF host community and their subsequent generations, possibly replacing Geiger counters and dosimeters as humanity began to embrace new, alternative clay-based technologies.

Perhaps there was also a need for existing engineers to re-train as clay workers following the winding down of the UK's nuclear industries. Could buildings at Capenhurst, Springfields or Aldermaston have been re-purposed to this end? Maybe the Thermal Oxide Reprocessing Plant (THORP) or the Magnox Reprocessing Plant at Sellafield were given new leases of life.

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Figure 5. Radioactive Waste Burial Charms or Radiation Protection Devices? [NIC/NW/010.2] (Image Credit: Nic Pehkonen).

Given the physical properties of unfired bentonite and the likely effects of prolonged exposure to the elements, we could perhaps also question why these objects have not dissolved or disintegrated over time. Perhaps they have been held together by strong cultural forces?

Alpha and Beta Radiation Canoes.

It is somehow known that nuclear fuel, Defence Nuclear Material (DNM) and Special Nuclear Material (SNM) was regularly transported between atomic sites in highly engineered, suitably shielded containers by rail, road or sea. This was generally deemed to be a high hazard but low risk activity with few reportable incidents although routes and timings of transports were deliberately kept fluid for security reasons. Was our ability to control on-site nuclear material and events always as successful? Perhaps these unmanned pea pod-like canoes (Figure 6), laden with their toxic cargos of alpha and beta emitting fission products were created as reminders of less controlled human generated radioactive excursions, travelling wherever wind and water took them.

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Or maybe they were designed to accompany waste packages as they entered a GDF. Possibly to protect against the eventuality of radioactive particles escaping their multi-barriered containment and finding their way back to the surface in levels that could cause harm.

Figure 6. Alpha and Beta Radiation Canoes. [NIC/NW/010.3] (Image Credit: Nic Pehkonen).

Plutonium or "Sellafield Rings".

Although officially kept largely separate, the UKs civil and military atomic activities were known to be uncomfortably intertwined. Interlocking rings, such as the example shown in Figure 7, may have been created to accompany buried waste packages of plutonium that had its origins in both civil and military spheres. Unexpectedly long-lasting and well cared for written records indicate the UKs first commercial nuclear reactors at Calder Hall and Chapelcross were also used to manufacture and supply plutonium to the UK's homegrown nuclear weapons programme. In addition, it has been speculated

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that weapons grade plutonium was sometimes cast into approximately 5kg non-critical rings, each one enough to form the spherical core of one bomb or warhead.

Figure 7. Plutonium or “Sellafield Rings”. [NIC/NW/010.4] (Image Credit: Nic Pehkonen).

Additionally, it was believed the UK once held the largest global stockpile of nominally peaceful plutonium. For many years this toxic inventory remained in limbo at Sellafield awaiting potential conversion into civil nuclear fuel or possibly for military purposes. Ultimately it is thought all the UK’s plutonium was eventually immobilised and put beyond reach deep inside a GDF along with a clay burial charm to watch over each waste package indefinitely.

Perhaps in time, leftover examples of these interlocking objects may become more popularly known as “Sellafield Rings”. Perhaps they already are?

Trident Warhead Keepsake?

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Figure 8. Trident Warhead Keepsake? [NIC/NW/010.5] (Image Credit: Nic Pehkonen).

Thanks to a proliferation of passed down stories we know that for a time, certain so-called civilised peoples developed, deployed and detonated nuclear weapons as a way of demonstrating their power and status under the guise of necessity and protection. Some of them spread out further across the globe and occupied lands where they would continue to stage ritualistic experiments, seemingly at any cost, to appease the various gods of war to whom they were in thrall. The United Kingdom was one such country whose nominally independent defence nuclear activities possibly culminated with the United States leased, submarine-based Trident missile system, albeit armed with Great British Warheads.

Although detailed technical knowledge has long since been forgotten we do know that payloads of varying yields were deployed atop Trident missiles in conical clusters of up to 8 warheads, mounted on Multiple Independently Targetable Re-entry Vehicles or MIRVs.

It is generally believed the UK did not necessarily deploy the full possible complement of warheads on each missile, perhaps on the basis that five per missile was enough?

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The conditions that somehow prevailed to bring about their eventual decommissioning, disarmament and disposal remain unclear but small surviving, possibly keepsake-like objects such as the one shown in Figure 8 occasionally make themselves known, perhaps assuming the role of signifiers or pointers to past human nuclear technologies and weapons of war.

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Continuous 4 Point Object with Hole.

Figure 9. Continuous 4 Point Object with Hole. [NIC/NW/010.6] (Image Credits: Nic Pehkonen).

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There is (or was) a rather lovely exhibit in the Keswick Museum (Cumbria, UK) of mysterious objects with holes that date from around 3700 BC (Figure 9). By chance, the mysterious object with hole that you can also see in Figure 7 was found in the vicinity of Gloucestershire Airport in 2024 which we now know was also the supposed site of a future UK GDF. It is possibly related in some way to radioactive waste arising from the UK's Continuous at Sea Deterrent (CASD), also known as
300 Operation Relentless which deployed up to 4 nuclear powered and nuclear missile armed submarines on rotation, officially keeping us all safe from the most extreme global threats 24 hours a day, 365 days a year.

Thanks to assumed charms such as this, we were and may still be, officially kept safe from now buried radioactive waste 24 hours a day, 365 days a year.

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Infinity Ring.

This object (Figure 10) appears to have been shaped in the form of a continuous or “Mobius” strip. Some radioactive isotope half-lives such as Uranium-235 were known to run into millions of years which, although technically a finite duration, has a certain endlessness to it in terms of human comprehension.

As high-activity, long half-life, radioactive material was engineered to be permanently entrusted to the deep underground, perhaps objects like this were designed to mark the moment of transfer from the human realm into the continuous, non-human care of the GDF?

Figure 10. Infinity Ring. [NIC/NW/010.7] (Image Credits: Nic Pehkonen).

Mushrooms.

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The meaning and purpose of mushroom shaped objects such as the ones you can see in Figure 11 is unclear but culturally intriguing. There is speculation on a possible link between the network of tunnels and vaults that comprise a GDF and the underground fungal threads of a mycelium. Also, strangely thriving written records tell of radiotrophic fungi which may have once proliferated around the Chernobyl area after successfully adapting to use ionizing radiation as an energy source. Perhaps mushroom-like bentonite burial charms were thought to offer protection by absorbing radioactive particles that might have otherwise found their way back up to the surface as the unwanted fruits of a GDF.

Figure 11. Mushrooms. [NIC/NW/010.8] (Image Credits: Nic Pehkonen).

Or perhaps they refer in some way to the proliferation of Small Modular Reactors (SMRs) that spread across the UK and globally during the so-called Nuclear Renaissance, sprouting up from the geosphere as the visible traces of a highly energetic human generated atomic mycelium.

There were also stories of nuclear sites becoming self-propagating, appearing in the most unlikely places, possibly from small modular wind-borne spores.

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It is also believed that fungi and mycelium became popular motifs within 21st century culture and were critically deployed for analogous purposes. Further speculative research may reveal more on this in time but for now these surviving clay mushrooms enjoys their elevated cultural status alongside all the other objects thus far accessioned into *The Half-Life Afterlife*.

340

Competing Interests

The author declares that they have no conflict of interest.

345 **References**

East Riding Council meeting, 21 February 2024, https://www.youtube.com/watch?v=IkP5ekaNL0k (last access: 25 March 2026). Note: the motion to vote on withdrawing from the GDF siting process starts approximately 7 minutes into the recording.

350 Private email correspondence between the artist and Nuclear Waste Services.

Cheltenham Borough Council meeting, 18 March 2024, Agenda item 7, page 1, public question 1. https://democracy.cheltenham.gov.uk/documents/b13082/Public%20and%20Member%20questions%20with%20responses%2018th-Mar-2024%2014.30%20Council.pdf?T=9 (last access: 25 March 2026).

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Gloucestershire County Council meeting, 22 May 2024 public questions, page 3, https://glostext.gloucestershire.gov.uk/documents/b23459/Council%20Questions%20Wednesday%2022-May-2024%2010.00%20County%20Council.pdf?T=9 (last access: 09 January 2026).

360 Mudd, A., Hart, J. and Rippon, C (2024) The Archaeology of Hinkley Point C Nuclear Power Station, Somerset: Excavations in 2016, Volume 1: Rural Settlement and Farming from the Prehistoric to Modern Eras. Cotswold Archaeology.

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