

# Latest step of borehole sealing project a success

Nuclear Waste Services (NWS) has successfully sealed existing boreholes at Rosemanowes Quarry, Cornwall, as part of a vital research project for the safe and permanent disposal of higher activity radioactive waste.

In the search for a suitable site for a Geological Disposal Facility (GDF), drilling and sealing boreholes will be key. The GDF developer, NWS, is conducting a £5M+ project to investigate and demonstrate to regulators its approach for deep borehole sealing.

A GDF will make a major contribution to the environment by safely and finally disposing of waste which otherwise would have to be stored and maintained for thousands of years above ground.

The UK search for a suitable site is a nationwide process based on community consent and includes detailed investigations over a number of years. Community Partnerships, which have formed in Mid Copeland, South Copeland, and Allerdale in Cumbria, and Theddlethorpe in Lincolnshire, are engaging in a dialogue with local people to ensure they have access to information about what hosting a GDF might mean.

During the process of exploring if a site is suitable to host a GDF deep boreholes will be drilled to investigate the geology of the location. NWS will then need to seal these boreholes as part of the site restoration programme to minimise impact on the environment.

The initiative is part of the wide-ranging research and development (R&D) programme that will support construction of a safe and secure GDF deep underground.

Prof Simon Norris, Principal Research Manager at Nuclear Waste Services and project technical lead, said:

“The aim of this research project is to demonstrate the process we plan to use for sealing deep boreholes during future investigations into potential sites for a geological disposal facility.

“We want to show that we have the necessary toolkit of approaches, procedures, and equipment to seal any boreholes we may construct in the GDF siting process, and this research was a step closer to achieving this goal.”

The latest phase of this project was carried out at the Borehole Test Facility at Rosemanowes quarry in Cornwall. The site, formerly a working quarry, now offers access to one of the most comprehensively mapped well systems in the world.

Two pre-existing boreholes in granite, one 2km deep and the other 300m deep, were successfully sealed using an innovative technology called a Downhole

Placement System (DPS) tool.

Bentonite clay was used as sealant because of its low permeability and swelling properties, with cement being used for seal support. Commonly found world-wide and used in international waste management programmes, bentonite will also be packed around some GDF waste packages as part of the engineered barrier system that will isolate and contain disposed waste in the UK Geological Disposal Facility.

The DPS tool is being tested in different locations with varying rock types and at varying borehole depths. The first successful test was in Sweden in 2018 in a 200m borehole, followed by a 300m borehole in clay in Harwell, Oxfordshire.

The UK search for a suitable site is a nationwide process based on community consent and includes detailed investigations over a number of years to ensure a GDF can be constructed safely and securely.

[Learn about geological disposal.](#)

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## **Preventing Sexual Violence in Conflict Initiative conference 2022: Foreign Secretary's speech**

Conflict-related sexual violence is morally abhorrent, it is illegal, and yet it is still happening all around the world.

We naturally and rightly feel revulsion at the idea of chemical or biological attacks in war. And With our conventions and treaties – and the power of world opinion – those weapons signal a huge escalation and demand an international response.

Sexual violence in conflict is equally immoral. It is a clear breach of international law, and should be a line that is never crossed.

The very threat of rape and sexual violence as a weapon of war, or as part of its aftermath, should bring immediate international condemnation, and swift action to deter those attacks before they occur.

Today, we stand in solidarity with survivors, determined to bring justice.

And today I want to send an unequivocal message to those who order, allow or perpetrate sexual violence against women and girls: it isn't combat; it isn't strength; it is cowardice. We will not rest in our efforts to protect those potential victims, and prosecute the perpetrators.

I am honoured to be able to hand over to one of our most powerful advocates and campaigners: Nobel Laureate Nadia Murad.

Thank you so very much. In our panel discussion we will consider whether the current response is effective; how we, as an international community, can do better; and how we turn talk today into action tomorrow.

Despite our collective efforts, the tragic reality is that sexual violence is occurring in at least 18 active conflicts today and it is clear that we need a stronger global response. We need to make a lot more noise.

Now There are some small causes of optimism. We can see that our work does make a difference. We have just heard from Angelina on the progress of the last decade, however it is clear that this is a marathon, not a sprint. And we have so much more yet to do.

Because all the time, more lives are wrecked, communities broken, by sexual violence. So today I am launching the [UK's 3-year strategy to escalate the global response](#).

I'm putting a total of £12.5 million of new funding into ambitious programmes, sharpening our analysis, building capacity for prosecutions, and ensuring that survivors know the routes to justice.

Our ACT for Survivors initiative will use £8.6 million of that over 3 years, to increase the number of successful prosecutions.

As part of this, we will continue our support to the [Global Survivors Fund](#) with £5.15 million for the next 3 years.

In the 10 years of this initiative, we have learned that the key to success is putting survivors at the heart of all of our policies, so we are urging states to review their programmes and embed the [Murad Code](#).

We are using the code to develop new partnerships between the UK and International Criminal Court, deploying cutting-edge technology to help safeguard survivors throughout the justice process.

And today, I am launching the Platform for Action Promoting the Rights and Wellbeing for Children Born of Conflict-Related Sexual Violence. This framework for commitments will confront stigma, and build futures: a crucial step in the longer journey.

I am also announcing separate funding to tackle Gender Based Violence in Ukraine: £3.45 million for the UN Population Fund, on top of our £2.5 million to prosecute atrocities.

As part of the overall fund, I am committing £1.8 million over 3 years for projects in priority countries, including Iraq, South Sudan, Colombia, and Bosnia and Herzegovina.

In recent years, this kind of funding has made a real difference. In Bosnia and Herzegovina we supported changes in the law to recognise children born of

wartime rape as civilian victims – providing them with important legal protections. We're now building a global coalition of countries to protect other children in the same situation.

We have increased judicial support for reparations in Iraq, and funded legal support to men in Colombia who have survived conflict-related sexual violence, paving the way for men and boys to be recognised as survivors too.

In Kenya, Ghana and Zambia, we have run a gender-based violence course for Police Officers. And In Somalia we are training peacekeepers.

In total, we have deployed a UK team of experts over 90 times to build the capacity of governments, the UN and NGOs.

Our Women, Peace and Security programmes work hand-in-glove with our experts in conflict and conflict-threatened areas.

Our ultimate aim is of course to prevent these atrocities from happening in the first place. On the heels of our successful research programme, we are launching a new report today on what works to prevent violence, providing compelling evidence that sexual violence is not inevitable in conflict.

What we need now is greater ambition and stronger resolve from all countries. The work that many of you do is tough, and I'm in awe, genuine awe, of your fortitude, your perseverance. But we need more ambition from governments, to do more, do it better, and do it together.

States have been signing up to a political declaration, to launch here at the Conference, setting out that ambition, and our collective abhorrence of sexual violence in conflict.

We agree to strengthen the data behind what works; address the underlying cause of gender inequality; remove the stigma; strengthen laws to prosecute perpetrators; and ensure sexual survivor-centred support.

The UK is using all the levers at our disposal to prevent Conflict Related Sexual Violence and to ensure that perpetrators are held to account.

Throughout 2022 the UK has actively used sanctions to tackle serious human rights violations and abuses around the world. Most recently, following Russia's illegal invasion of Ukraine, our sanctioning of over 1,200 individuals including members of the Russian military responsible for atrocities, and in Iran we have used our sanctions to target the officials responsible for heinous human rights violations.

I can announce that in December we will be using sanctions to specifically address the abhorrent crimes of sexual violence.

We have to face this as an international united community, led by the survivors.

Because the scale of suffering is unacceptable. Sexual violence is not inevitable. It will not be tolerated.

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## Vehicle salvage merger reduces choice and may limit access to salvage vehicles for green parts

Copart and Hills Motors both supply vehicle salvage services. This involves collecting damaged vehicles from customers, including the insurance industry, finance companies and rental car companies, and then managing the onward sale, dismantling or scrapping of the vehicle.

Copart is currently the largest supplier of salvage vehicles in the UK, including those that can be used to recover green parts. Hills Motors has an in-house dismantling service and is an important supplier of green parts.

The Competition and Markets Authority's (CMA) Phase 1 investigation has found that Copart and Hills Motors were among a few in the business with national contracts for salvage services and they competed for the same contracts. The CMA therefore found that Copart and Hills Motors are close competitors, and the transaction could lead to a loss of competition in the supply of salvage services and salvage vehicles.

The CMA also considered the effect of the transaction on the supply of green parts. Copart previously had no dismantling capability but was one of the largest suppliers of cars to dismantling businesses. Since acquiring Hills Motors, Copart could decide to restrict the number of salvage vehicles with reusable parts available on its auction platform and instead have Hills Motors dismantle them. This could restrict rival dismantling businesses' access to salvage vehicles.

The CMA is therefore concerned that the loss of rivalry between the companies could lead to higher prices and reduced choice for customers of salvage services and reduce competition in the supply of green parts in the UK.

Sorcha O'Carroll, Senior Director of Mergers at the CMA, said:

It is important that salvage and green parts services remain competitive so that the many businesses in the UK that rely on them benefit from lower prices and higher quality services.

Our investigation showed that Copart's purchase of Hills Motors takes out an important player in the vehicle salvage services industry and that few competitors would be left in the market. The transaction could also make it more difficult for green parts suppliers to purchase the vehicles they need, which would reduce competition in that market.

We will move to an in-depth investigation unless the companies can address our concerns.

Copart has 5 working days to submit proposals to address the CMA's competition concerns. The CMA would then have a further 5 working days to consider whether to accept these in principle instead of referring the case to a Phase 2 investigation.

For more information, visit the [Copart / Hills Motors case page](#).

1. All media enquiries should be directed to the CMA press office by email on [press@cma.gov.uk](mailto:press@cma.gov.uk), or by phone on 020 3738 6460.
2. 'Copart' refers to Copart, Inc. and 'Hills Motors' refers to Green Parts Specialist Holdings Ltd.

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## New measures to improve access to dental care

- All NHS dentists to receive fairer payments for providing more complex dental care to those who need it most
- Dentists will be required to update NHS website regularly to make it clear which practices are taking on new patients and the services available, improving access
- This will ensure the system better supports all dentists and their teams while also providing better value for money dental care for patients.

A new package of measures to improve patient access to dental care has been introduced by the government.

From today, NHS dentists will receive fairer payments for delivering complex dental care to incentivise practices to take on high needs patients who require treatment the most.

Previously dentists would receive the same payments for all treatments delivered within band two, which includes fillings and tooth extractions, regardless of the amount of time taken to deliver the work. For example, they would receive the same payment for one filling as three fillings.

This meant dentists may not have been able to afford to take on patients who had not seen a dentist for an extended period who require more extensive treatment as a result.

The contract changes, which come into force today, will provide fairer payments to dentists by taking into account the time taken to do the work, incentivising practices to provide the care needed for patients with complex and high needs.

Health Minister Neil O'Brien said:

I am determined to make sure everybody seeking NHS dental care can receive it when they need it.

Our new contract rewards dentists more fairly for taking on high needs patients and delivering treatments to those who need it most.

It will not solve all the problems overnight, but it will help improve access and ensure the system supports dentists and their teams.

The new contract will also require dental practices to regularly update information on the 'Find a Dentist' tool on the NHS website, ensuring it accurately reflects available services. This will help patients to locate practices taking on new patients and access the treatments they need quickly.

This government is also introducing legislation which will provide the General Dental Council (GDC) with greater flexibility to amend its international registration processes for overseas qualified dentists. This will pave the way for additional exams places and enable the GDC to recognise and accept more qualifications for dentists and dental care professionals who want to work in the UK and support a reduction in unnecessary delays.

Louise Ansari, national director of Healthwatch England said:

Thousands of people have spoken up about their struggles accessing an NHS dentist over the last few years, telling us about dental practices in many regions either closing down or not accepting new NHS patients. This announcement shows the power of their voices, with government listening and taking action.

The changes should help people find clear and up to date information on dentists taking on new NHS patients. While people with more complex dental problems will find it easier to access care because of the shift in how the NHS pays dentists. Ultimately, we hope these combined measures will help to reduce long waiting times, the extended periods of pain many people suffer and prevent the extreme cases of DIY dentistry we have seen.

These changes are a good start and when put into practice can help ensure dental care that is accessible and affordable to everyone who needs it.

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# Regulatory Article (RA) 4809: Acceptance of Components – what's all the change about?

## **Did you know...**

RA 4809 has changed a lot recently; this article explains why it changed, where it's going and tries to address some common misconceptions.

Historically we've not been good at requiring the right documentation for Aviation components, especially for Standard Parts (nuts, bolts, washers etc). Without the right documentation, non-aviation parts could be, and have been, fitted to aircraft, as found in MAA Audits.

There's an ocean of parts out there with sub-standard documentation and we need to stop adding to it. The changes to RA 4809 are intended to make sure that we can all be confident that only safe and airworthy parts are fitted to aircraft.

## **What are the changes?**

RA 4809 Issue 7 (November 2021) changes have included:

- Certificate of Conformities (CoC) being permitted for new components only – this is moving closer to CAA Regulation
- MOD Form 3910s require the asterisked elements to be completed in the case of Airworthy Certified Items
- MOD Form 640s have been removed from Acceptable Means of Compliance

## **Misconception 1**

MOD Form 640s can't be used as a CoC.

Reality: MOD Form 640s can be used as a CoC, if they contain DEFCON 627 information. MOD Form 640s currently within the system are valid CoCs if they contain the relevant DEFCON 627 information. However, the Regulated Community are discouraged from using MOD Form 640s as new CoCs, due to the disparity of retention periods. If MOD Form 640s are being used as CoCs, they are to be retained for a minimum of 5 years beyond the Out of Service Date. Logistic retention policy requires MOD Form 640s to be retained for only 7 years. This has led to confusion and disposal of MOD Form 640s, used as CoCs.

What's coming next?

RA 4809 Issue 8 will be published in November 2022. Changes will include:



- a complete restructure to simplify the way that components are classified and the appropriate acceptance documentation
- CoCs should be from the Original Equipment Manufacturer (OEM) and for new components only
- introduces the 8 requirements of an Authorised Release Certificate (ARC)
  - ARCs should be used for components following test, maintenance, modification, overhaul or repair

## Misconception 2

ARCs can't be used for new components.

Reality: ARCs can be used for new and used (tested, inspected, repaired or overhauled) components. It is only CoCs that are limited to being used for new components only.

- an annex will be added, that details the list of forms that the MAA recognises that meets these 8 requirements

Why are these changes being made?

Civil Regulation is more straightforward than the MAA's Regulation on the acceptance of components. The Civil Aviation Authority (CAA) allows only the use of Aviation Authority approved forms, e.g. CAA Form 1.

## Misconception 3

Civil aviation permits the use of CoCs for used components.

Reality: The CAA and the European Union Aviation Safety Agency (EASA) only allow CoCs for new Standard Parts, as per Regulation 145.A.42(a)(iv)]:

CAA 145.A.42:

- Classification of components. All components shall be classified into the following categories:
  - Components which are in a satisfactory condition, released on a CAA Form 1 or equivalent and marked in accordance with Subpart Q of the Annex I (Part 21) to Regulation (EU) No 748/2012, unless otherwise specified in Annex I (Part 21) to Regulation (EU) No 748/2012 or in this Annex II (Part 145).
  - Unserviceable components which shall be maintained in accordance with this Regulation.
  - Components categorised as unsalvageable because they have reached their mandatory life limitation or contain a non-repairable defect.
  - Standard Parts used on an aircraft, engine, propeller or other aircraft component when specified in the maintenance data and accompanied by evidence of conformity traceable to the applicable standard.
  - Material, both raw and consumable, used in the course of maintenance when the organisation is satisfied that the material meets the required specification and has appropriate traceability.

All material shall be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement as well as the manufacturing and supplier source.

The CAA is able to take this approach as Maintenance Organisations only accept components from Part 21 and Part 145 approved organisations. The military environment isn't as simple. RA 1005 – Contracting with Component Organisations, does not have the same requirement for all Maintenance to be carried out by Maintenance Approved Organization Scheme (MAOS) (or equivalent) approved organisations. This provides Delivery Teams with the flexibility to contract with required organisations. This has previously seen unapproved organisations provide components, both new and repaired, with a CoC. The minimum requirements of a CoC do not include the vital information for repaired components, such as "lifing" information. CoCs do not provide the same detail of airworthiness information as an ARC. This is why the extra requirements for an ARC are being introduced to clarify and standardise this information. It is also why CoCs are not allowed for repaired components.

The reason only OEM CoCs will be allowed, is to minimise the opportunity for human errors to be made if information was to be transferred to new documentation. It also increases the chances of the traceability being maintained.

The RA is being restructured for simplification. Having 8 requirements for an ARC detailed in RA 4809, means that organisations are able to determine if their documentation meets the requirements of an ARC. If it doesn't, it's possible for people to easily identify where the shortfalls are, and the risk associated with the shortfalls. This will aid Alternative Acceptable Means of Compliance, Waiver and Exemption applications.

Two Royal Air Force Engineering Officers inspect a RAF Typhoon as it undergoes essential maintenance. MOD Crown Copyright.

## What does this mean?

The changes to RA 4809 will mean that unapproved organisations (not MAOS or CAA/EASA Part 21/145 approved organisations), releasing repaired components on non-acceptable forms, will have to apply for Alternative Acceptable Means of Compliance, Waivers or Exemptions (AWE). Applications should be made in accordance with [MAA03: MAA regulatory processes](#). They will have to prove to the MAA that their documentation meets the requirements of an ARC. The eighth requirement will be the most difficult for these organisations to meet:

Be issued under Part 21 or 145 authority of the MAA or an Aviation Authority for which the MAA holds an extant Recognition, or for which there exists an extant UK bi-lateral agreement for items that have dual applicability.

It is through the AWE process that the MAA will provide this assurance and will carry out periodic reviews on the AWE throughout its lifespan.

There is an alternative method for organisations to comply with RA 4809. If an organisation has the sufficient knowledge of its subcontractor's components, then under the privileges of the organisation, it may release the component under its own Approval and their own ARC. RA 4812 – Certification of Air System Release and Component Release, provides more detail. Note that this RA is being updated in November 2022 to make the information about Contracting and Sub-contracting clearer.

## **Feedback**

RA 4809 Issue 8 has had 3 Notice of Proposed Amendments (NPA) to allow the Regulatory Community to view the changes. Note that the third NPA finished 26 September 2022, but feedback and discussion are always welcomed.

In November 2023, there will be a Post Implementation Review of RA 4809, so feedback after the changes have been made, will be reviewed.

All enquiries can be sent to [DSA-MAA-MRPenquiries@mod.gov.uk](mailto:DSA-MAA-MRPenquiries@mod.gov.uk).

## **Going Forward**

The MAA recognises that the changes to RA 4809 will require time to amend contracts and may not be economically appropriate for some organisations, given some Air System Out of Service Dates. This will require AWEs applications to cover any non-compliance, whether temporary or permanent.

The overarching aim of the changes is to improve Air Safety by providing greater traceability of parts and evidence that components are airworthy. This has been likened, by some, to attempting to drink the ocean. But for us to get anywhere we first need to turn off all the taps feeding into it; only then, together, we can do it!