

CLARECASTLE SITE DECOMMISSIONING

Project Update No. 3 / Spring 2022

Welcome

Thank you for taking the time to read the latest edition of our 'Project Update' newsletter which provides an update on the progress of the decommissioning project.

It is hard to imagine that we are now a full two years into the decommissioning of the site and I am happy to report that we are right on target with regard to our overall plan. It is clear to see the progress that has been made in relation to the demolition of buildings on-site with all the identified structures demolished and all the foundations removed.

This newsletter provides some pictures to show the current status of the site but I would encourage you to visit our website www.rocheclarecastle.ie where there are many more pictures, as well as time lapse videos of the demolition activities.

I am particularly proud of the fact that we have successfully crushed the majority of the concrete from the demolition activities. This has been undertaken on-site and will ultimately be reused as infill, subject to Environmental Protection Agency (EPA) approval. The decision to crush the concrete has delivered an additional benefit – it has significantly reduced the number of truck movements to and from the site during this phase of the project.

We are now starting the 'Remediation' phase of the project where all those areas identified for remediation will be removed from the site. The main contractor for this phase of the project has been selected and detailed engineering planning is underway to ensure that this phase is executed with the same effectiveness as the first two phases of the decommissioning project. This newsletter provides some detail on what you can expect to see happening over the next few months.

Work is continuing on developing the overall masterplan for the Roche site so that it can have a sustainable future for the locality once the remediation has been completed.

We continue to work with our valued Community Liaison Group (CLG) as well as other interested community groups to ensure that people are fully informed about the progress of the project and the long-term plans for the site.



Joe Murphy
Project Owner



The site being prepared for the 'Remediation' phase.



30,000 tonnes of concrete emanating from the 'Demolition' phase have been crushed on-site.

Preparing for Site Remediation – Selecting the Main Contractor

Roche's objectives in decommissioning the 88-acre site are twofold: to deliver a site suitable for the creation of sustainable jobs into the future and to leave a positive legacy in the local community, Clare, and Ireland.

To achieve these objectives, it was deemed necessary to demolish buildings on-site that have no future use, and excavate and remove any contaminated soil and material on-site.

The completion of the 'Demolition' phase now paves the way for the commencement of the 'Remediation' phase, albeit preparatory work for this phase has been ongoing since confirmation of planning was received from Clare County Council in March 2021.

Firstly, an internal team of experts in diverse disciplines – project management, environmental and safety management, civil engineering – drew up a scope of works for the 'Remediation' phase, which subsequently went out to competitive tender. This in-depth process has resulted in the selection of the main contractor for the project – **Indaver** – who will now work closely with the Roche team



and a range of specialised sub-contractors to undertake site remediation in a timely and safe manner.

Key criteria used in the selection of the main contractor were the ability to undertake the works to Roche's exacting quality, environmental and safety standards, and to be respectful of the need to minimise disruption to the Clarecastle community at all stages of the 'Remediation' phase.

In undertaking this critical phase of the project, Roche Ireland will be guided by its policies and practices, namely:

- the protection of residents and the environment is of the highest priority to Roche;
- workplace safety is key to protect workers, residents, and the environment; and
- Roche strives for proactive and open stakeholder information sharing and engagement with the public.

All aspects of the 'Remediation' phase will be controlled and governed by the conditions set out in the planning approval received from Clare County Council and a new Industrial Emissions Licence (IEL) from the EPA, which is pending.

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18501 REMEDIATION PROJECT



Site Remediation – The Detail

Three areas of environmental concern on the site require remediation:



AEC1 (main processing area)



- ✓ Bulk excavations to depth of 3m below ground level (m bgl).



- ✓ Deeper excavations where necessary to max 5m bgl.



- ✓ Circa 10,000 tonnes of contaminated soil will be excavated from AEC1 and sent in sealed containers to a licensed thermal treatment facility in mainland Europe.



AEC2 (in the vicinity of the former waste water treatment plant - WWTP)



- ✓ Bulk excavation to depth of 8-9 m bgl.



- ✓ Secant piled wall (or similar) around the excavation perimeter to facilitate deep excavation.



- ✓ Circa 7,000 tonnes of contaminated soil will be excavated from AEC2 and sent in sealed containers to a licensed thermal treatment facility in mainland Europe.



Landfill



- ✓ Bulk excavation on a section by section basis to depth of 4 – 5m below landfill liner.



- ✓ Circa 235,000 tonnes of material will be excavated from the landfill area



- Circa 60,000 tonnes is considered suitable for reuse (landscape material)



- Circa 175,000 tonnes will be sent in sealed containers to a licensed thermal treatment facility in mainland Europe.



- ✓ Circa 30,000 tonnes of clean, uncontaminated soil will be imported on-site for backfill, subject to validation sampling.

Note: Uncontaminated material will be used, where suitable, for backfill to minimise import volumes.



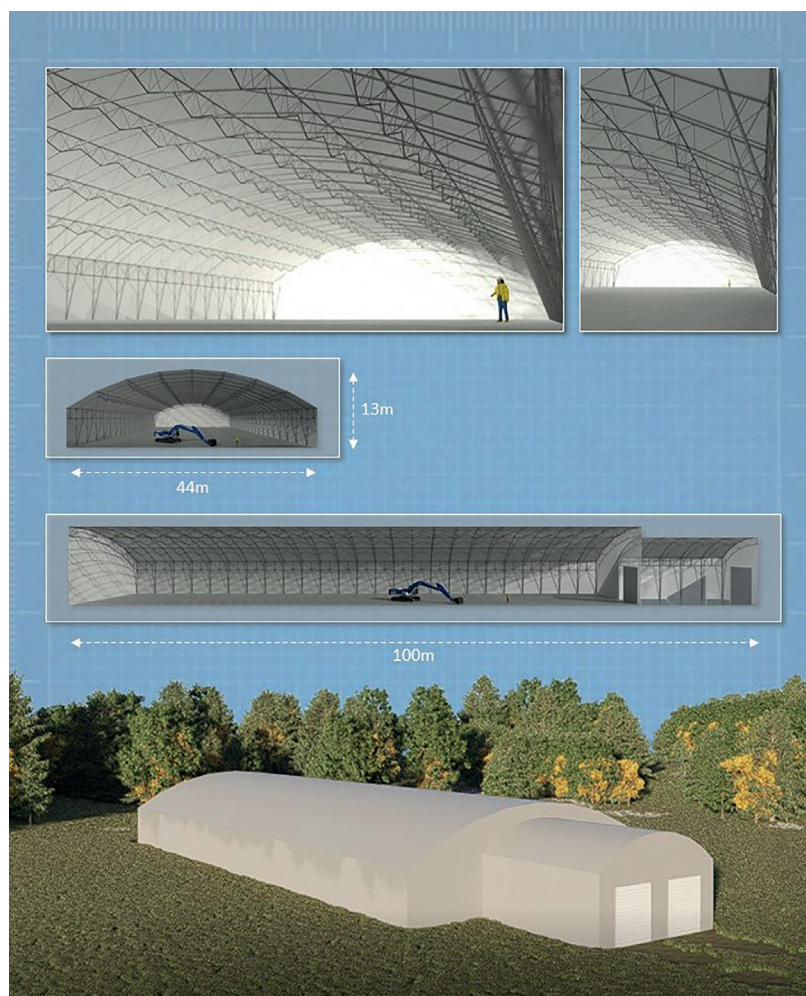
How the work will be undertaken

Minimising the impact on the community was a key consideration in planning for the 'Remediation' phase, hence the decision to undertake excavations in the areas of environmental concern (AECs) within negative pressure enclosures. This will ensure that dust, odour, and vapour emissions will be minimised during excavation.

These enclosures are currently being designed to meet the specific needs of the Clarecastle site in terms of durability and dimensions. The graphic below, which has been designed for illustrative purposes, gives an indication of the size and scale of the enclosures. The frames will be made from structural steel and the roof covering will be made from a flexible and robust membrane capable of withstanding the varying weather conditions in the west of Ireland.

Further detail on the enclosures, where they will be positioned on-site and how they will look when in situ, will be given in future editions of 'Project Update' when the final design is complete and plans for their construction and installation are finalised.

The photo below gives a visual indication of how the enclosure will be positioned at AEC1 on-site.



Preparatory Works Underway

Site investigation works are currently underway to prepare the site for the 'Remediation' phase. These works include physical and geotechnical assessments of the ground conditions at the three areas of environmental concern.

The results from these works will inform the compilation of the final works' plan and the type of foundations required to support the enclosures on-site.

Given current economic conditions worldwide, long-lead items such as excavation equipment, containers and container handling equipment, and the trucks and trailers required to transport waste off-site are currently being ordered.

The machinery to be used within the enclosures is being modified for use in that specific environment. The containers will be purpose-built so that the excavated material can be completely sealed within the enclosure for safe transport off-site. All trucks used to transport the containers to Foynes for shipment to Holland and Germany will be new and have 'Euro 6' engines, which have been developed using sophisticated technologies and meet new European Union emissions standards.

Additional site preparations, including the siting of contractors' compounds, the logistics for managing the flow of traffic to and from the site, the design of material flow on-site, and the preparation of a traffic management plan, are currently underway.



Representatives of all companies involved in the 'Remediation' phase attending the workshop.

Delivering through Partnership

The 'Remediation' phase will require input from a wide range of specialised contracting companies at varying stages of the project.

All parties involved in the supply chain attended a recent workshop in the Inn at Dromoland where they were briefed on and committed to Roche's exacting standards for the project, namely:

- A commitment to continuous improvement;
- Transparency in communications and actions;
- Working relationships based on mutual trust;
- A focus on achieving results; and
- Concern for people, safety and the environment.

Successful Completion of the 'Demolition' phase



Whilst the focus now is on ensuring that all systems are in place to successfully undertake the 'Remediation' phase, it is apt to look back on what has been achieved on-site in the past two years. Project leader for the 'Clean to Shell' and 'Demolition' phases, Philip O'Connell, shares his experience of managing a highly complex project and pays tribute to the dedication and high-quality work undertaken by the entire project team. As Philip explains:

"The measure of success of any project of this nature is that it is completed to schedule and budget and that is what has been achieved here at Roche Clarecastle. We had a detailed planning schedule in place from the outset and despite having to work through a pandemic all timelines were achieved. Most importantly, the work was undertaken accident-free due to the high health and safety standards maintained on-site. The work ethic on-site was exemplary with open lines of communication and a great team spirit.

"Undertaking the work with minimal disruption to the community was an uppermost consideration at all times and it is gratifying to know that the 5,000 truck movements through the village over the past two years did not adversely affect village life.

"The 'Demolition' phase is almost complete. Crushing concrete on-site for use as infill is one of the final jobs being undertaken before we hand over the site, risk-free, to the 'Remediation' project team. A huge thanks to the teams from DPS and Erith and the many sub-contractors that have enabled us to contribute successfully to the overall Clarecastle Site Decommissioning Project."

Check out <https://rocheclarecastle.ie/gallery/#images> to view photos taken during the 'Clean to Shell' and 'Demolition' phases.

All photos by Shannon Images.



Senator Timmy Dooley, Joe Carey TD, and Cathal Crowe TD pictured on-site during the 'Demolition' phase with Sean O'Loughlin (left), project manager, and Joe Murphy (extreme right), site head and project owner.



Councillors Paul Murphy and Pat Daly visited the site during the 'Demolition' phase.

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