

CLARECASTLE SITE DECOMMISSIONING

Project Update No. 4 / Autumn 2022

Welcome

In our last edition in Spring 2022, we outlined the progress that had been made on-site since the commencement of the site decommissioning project. We focused in particular on the successful completion of the first two stages - the Clean to Shell of the buildings on-site, which involved the removal of all internal fixtures and fittings, and the subsequent demolition of buildings and foundations.

These phases of the project have been very successfully executed. All expected timelines were met and there were no safety incidents or environmental events, which was a key objective of the project.

One of the underlying objectives of the entire project is to minimise any disruption to the local community and we believe that we are meeting this objective.

Despite the high level of activity during the 'Clean to Shell' and 'Demolition' phases, the feedback is that there was very little disturbance to the village linked to the movement of vehicles to and from the site.

As you will fully realise, the overall global environment has changed significantly over the past two years since this project commenced. This is creating some challenges for the planning and execution of this project but we remain committed to, and focused on, continuing to execute this project to the highest possible standard.



Joe Murphy
Project Owner



A changed landscape

The landscape of the site has changed dramatically over the past two years. The 'before' and 'after' photos below show the extent of the changes that have occurred as a result of the 'Demolition' phase.

The site – June 2020



The site – Autumn 2022



Re-use of materials saves resources and reduces logistics

As mentioned in our last edition, 30,000 tonnes of concrete from the demolition activities were successfully crushed for re-use on-site. This delivered the twofold benefit of reducing the number of truck movements from the site by an estimated 6,000, and eliminating the need to use stone from quarries, thus benefiting the environment. As shown in the images below, the crushed concrete is being carefully stored on-site and will be used as infill once remediation is complete, subject to EPA approval.



A remediation project – the steps to completion

Converting an 88-acre site from a manufacturing site into a brownfield site involves significant and complex advance planning and teams of experts with the skills to implement the project.

The two aspects of the Clarecastle Site Decommissioning Project – demolition and remediation – are completely different in terms of complexity. The demolition project focused on the removal of above-ground visible fixtures and buildings, whereas the remediation project is dealing mainly with below-ground environmentally sensitive material. A project of this complexity requires considerable site investigation and analysis before the work commences and that is what is currently underway.

These site investigation works, which include physical and geotechnical assessments of the ground conditions at the three areas of environmental concern, are ongoing. The results from these investigations are informing the compilation of the final works' plan, which a dedicated team of project planners and environmental experts are currently working on. Due to the time involved in preparing, evaluating and finalising the works' plan for the 'Remediation' phase, the level of on-site construction type activity has significantly reduced as also the associated heavy goods movement to and from the site. This is set to change in the months ahead as the range of goods and materials required to prepare the site for the remediation works is brought on-site.

This will include:

- piling equipment to prepare the ground for the installation of the enclosures
- sheet piles for installation to support the enclosure structure
- enclosure components
- cabling
- internal lighting for the enclosures
- installation and commissioning of extraction systems
- stone and gravel for the construction of a new on-site roads' network

This will see the recommencement of heavy goods traffic to and from the site. All of this traffic will be managed by the comprehensive traffic management plan, currently being finalised.

Licensing the 'Remediation' works

Preparations for the 'Remediation' phase are well advanced. This phase is more complex than the first two phases of the overall site decommissioning project. From an onlooker's perspective, it might appear that the majority of the works are complete; however, there are a number of regulatory activities that need to be finalised before we can proceed with the remediation activities.

These activities will be governed by an Industrial Emissions Licence, which will be issued by the Environmental Protection Agency (EPA). All of the information required to enable the licence to be processed and approved has been prepared and forwarded to the EPA; this was managed by the on-site environmental team. This information is at the final review stage by the EPA so that the final design will be of the highest standard and ensure that there are minimal impacts on the environment or the community. The licensing process takes a considerable amount of time but this is required to ensure that all the technical details associated with such a complex project are addressed. The new licence is expected to be issued by the EPA by year end or early 2023.



Profiling the composition of the landfill

In addition to the licensing activities there is a considerable amount of work being carried out on profiling the composition of the waste at the different areas where remediation is required.

This is necessary in order to finalise the exact steps that will be needed to execute the project. The image above shows one of a number of drilling rigs being used to undertake the profiling of the landfill.

Scheduling the remediation works

Looking ahead to the execution of the 'Remediation' phase of the project, you can expect to see significant quantities of materials linked to the construction of the necessary enclosures and support systems being delivered to the site in the coming months. These structures will ensure that there is appropriate containment around the areas where the remediation is taking place.

As explained in the last issue, three areas of environmental concern require remediation. The scheduling of these works has now been decided on with the area known as AEC 1 – the location of the original manufacturing building – scheduled for remediation first. This will be followed by the remediation of the landfill and AEC 2, which is in the southern section of the site, in the vicinity of the former waste water treatment plant.

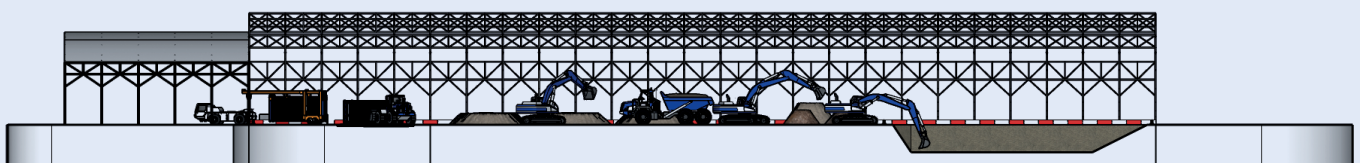
Construction activities related to the remediation of AEC 1 are currently targeted to commence in Q1 2023 with the removal of waste for treatment scheduled by Q2 2023.



Machinery to be used within the enclosures will include excavators and dumpers. (Simulation)



Sheet piling to be used to support the installation of the enclosures. (Simulation)



The enclosure frames will be made from structural steel. (Planning draft)

Continually monitoring the environmental impact of work underway

A key requirement of a project of this nature is that every aspect of the work must comply with strict regulations and be undertaken without any harmful effect on the environment or negative impact on the community.

The Clarecastle site has a full-time environmental team that is dedicated to ensuring that all operations are carried out in line with all the requirements laid down in the Industrial Emissions Licence (IEL).

Monitoring is a key aspect of the environmental oversight. As can be seen below, environmental monitors placed at key locations near and in the village measure real-time data for noise, dust and vibration. This real-time data is continuously sent to a cloud-based system and status reports are received daily for the previous day's data, measured between 7am and 7pm.



On and off-site monitoring locations.

All the data collected by the monitors is inspected and trended and if any peaks are noted, the environmental team will investigate and identify if there is any link with on-site activities. Continual analysis of data shows that all the parameters are within the required limits.

As per the conditions of planning, the results for each of the parameters measured are submitted quarterly to Clare County Council.

The same exacting standards will be maintained during the 'Remediation' phase and all remediation work will be governed by a new IEL, which will be issued by the EPA. The receipt of this licence is pending.

Adherence to high standards pays dividends

We are pleased to report that, as a result of the high standards maintained on-site during the 'Demolition' phase, and the focus on team safety and engagement, the 215,000 hours expended on that phase of the project were accident and incident free. The work was successfully managed during COVID-19 and delivered on schedule with no adverse impact on the village of Clarecastle.

Minimising disruption in village the focus of traffic management plan

The management of vehicles arriving to and going from the site is a key consideration for the project. A dedicated team has been assigned to this critical aspect of the project and this team is finalising the overall traffic management plan. Once this plan is finalised, it will be shared with the community.

Based on current estimates, there won't be any noticeable increase in vehicular movement until early 2023. One of the key objectives of the 'Remediation' phase is to ensure that disruption to the community due to project-related traffic movements will be kept to an absolute minimum. We will maintain an active communication plan with the community on all traffic-related activity during the 'Remediation' phase.



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