

Industrial Demolition Award (continued)



ERITH CONTRACTORS

Country United Kingdom
Project BMS Site Transformation Demolition Project
Client Bristol-Myers Squibb

This project saw Erith demolish a bulk pharmaceutical manufacturing plant for its client, BMS, to pave the way for one of the largest construction projects in Ireland – the construction of a state-of-the-art facility for manufacturing two brand new and ground-breaking drugs to treat cancer.

The project brought with it the challenge of safely disposing of around 650 t of hazardous chemical and pharmaceutical waste. Further challenges were presented by the fact that a replacement pharmaceutical manufacturing plant was simultaneously being constructed and populated on site, resulting in 2,000 staff on site and a high risk of cross-contamination into the new facility.

Using five decades of experience, it tackled these challenges head-on, implementing solutions including:

- Conducting the largest top-down demolition works ever seen in Ireland
- Utilising innovative remote-controlled Brokk machines to maximise safety and enable access to restrictive areas of site
- Creating Ireland's largest scaffolding project, with 7,500 sq m (80,000 sq ft) of scaffolding used for the 42 m (137 ft) high production building.

Erith maximised Health and Safety Executive standards by investing €25,000 (US\$30,000) in training, creating around 2,000 safety procedures and documents, and investing €150,000 (\$180,000) in PPE, RPE and welfare facilities. Its standards enabled it to pass four audits from the Health and Safety Authority and Environmental Protection Agency with flying colours.

The project was a resounding success, with 131,000 man hours completed without any lost time injuries, hundreds of tonnes of hazardous waste safely removed, and 96% of non-hazardous waste recycled. Erith completed the project on budget and eight weeks early. ■

RAZ-MAX

Country Russia
Project Demolition of "Vostochny Mine's Boiler House and Fuel Oil Facility"
Client FosAgro Group

This project was technically complicated due to site-specific hazards, site density and the need to ensure the facility's continuous operation.

The challenges and risks were :

1. The ambient temperatures varied from -28 °C to 11.3 °C. For 70% of the project time, temperatures dropped to zero necessitating the adaptation of equipment and infrastructure to extreme weather conditions
2. Underground cavities, tunnels and utilities in the main building.
3. Densely built-up areas and ongoing

operations at the site made it difficult to carry out explosion-assisted demolition (primarily stacks).

Additional information:

- The project used Building Information Modelling software: each selected technology was first tested on an in-house 3D model
- Pre-project work took five months, Trimble TX5 laser scanner was used for measurements
- Dust suppression system: WLP 718
- Waste treatment: hydroabrasive and Soilex technology to be specified. ■

