

Ecologia completed the successful remediation of a former cast iron foundry in Faversham, Kent. The 2 hectare site was to be developed for a mixed residential and commercial end use. Ecologia was appointed to carry out post-demolition remediation operations, including the excavation and treatment of all site won contaminated and non-contaminated materials in accordance with site specific remedial targets derived from a Quantitative Risk Assessment (QRA) for a mixed residential/commercial land end use.

At an early stage in the project it became apparent that part of the foundry sand present on site was a surplus to the development. Therefore prior to undertaking the works Ecologia liaised with the Environment Agency the implementation of a Materials Management Plan (MMP) in accordance with the recently introduced CL:AIRE Approved Code of Practice. The MMP was set up with the former foundry as the 'hub site' and a framework of nearby locations designated as the 'receiver sites'.



Faversham Foundry Before Undertaking Remediation work.



Faversham Foundry Post Remediation work.

The MMP ensured that site won materials were re-used only in areas of the site where it was appropriate to do so (e.g. meeting specifications determined by the QRA). The MMP also provided an audit trail of the movement and quantities of won material re-used both on and off site.

Appropriate segregation of materials on site was achieved by implementing a complex sorting approach which resulted in segregation of material from different sources following selective excavation, concrete crushing, sand screening and selective stockpiling.

Treatment of on site excavated contaminated soils was carried out using ex-situ bio-remediation. The remediation strategy also required a limited pump and treat using an oil water (O/W) separator combined with a granular activated carbon (GAC) filter for treatment of groundwater and run off prior to discharge under license to foul sewer.

A total of 14,090 m³ of site won material was handled and treated on site, with only 120 m³ of site won material being sent for off site disposal.

Material Type	Volume (m3)	Reuse	Location
Site Won Crushed Concrete	1500	Site levelling	Residential Development Faversham Foundry Site
	2000	Piling Columns or Site levelling	Faversham Foundry Site
	200	Temporary access road	Whitstable Development
	700	Piling Mat or Piling Columns	Faversham Foundry Site
Foundry Sand 8000 m3	4000	Site levels and sub base	Faversham Foundry Site
	4000	Building Development, sub-base	Faversham, Kent
Screened Hardcore	900	Piling Mat	Faversham Foundry Site
Bio-treated Soils	670	Residential and commercial Site levelling	Faversham Foundry Site
General waste	120	Off site disposal	Waste Transfer Plant / Landfill