



Sustainable Remediation of Hazardous Dredging Spoil



Client: Land and Water Services Ltd

Site: Dunton Waste Treatment Centre
Wheal Jane, Truro
Cornwall

Contract Value: £86,500.00

Technology Used: Bio-accelerator – Rapid bioremediation of hydrocarbons.
Soterion – Rapid decontamination and soils treatment plant for bulk volumes



“Dunton are a good company and delivered what they said. We would use their services again”.

Steve Massey,
Divisional Business Manager,
Land and Water Services Ltd



The Falmouth Cruise Project comprised dredging works to create a deeper and straighter new navigation channel and to deepen the water berth along Queens and Northern Wharves.

Disposal of dredged material at sea was constrained by the local oyster and mussel beds. Dunton Environmental were able to provide treatment and dewatering of 2,500m³ of contaminated dredging spoil at our fixed treatment centre to achieve beneficial land re-use.

Challenges

- Land and Water were undertaking maintenance and capital dredging works to improve navigation and cruise facilities at Falmouth Docks, Cornwall. The main purpose was to facilitate sustained long-term growth of Falmouth’s cruise business.
- CEFAS grab sample analysis indicated the finer fraction was contaminated with petroleum hydrocarbons and **not suitable for disposal at sea** due to local oyster and mussel beds.
- Options available for disposal on land were limited as the dredged material was **classified as hazardous waste** under the Waste Framework Directive. The high moisture content further prohibited landfill disposal.

Our Solution

Dunton Environmental was able to provide a sustainable solution to landfill disposal at our fixed waste treatment centre located at Wheal Jane, Truro, Cornwall. Dunton provided beneficial re-use of treated material in accordance with DEFRA's developing strategy for managing contaminated marine sediments and ensured compliance analysis approved by the environment Agency and Wheal Jane Ltd.

In order to service the UK and Ireland's marine industry, Dunton developed a unique solution that combines:

- Dewatering techniques by applying our **Cementex™** product.
- Separation of size fractions.
- Destruction of contaminants of concern using our in-house **Bio-Accelerator™** and **Regener8-19™** product range.

The treated material was then re-used in the restoration of the former quarry landfill at Wheal Jane.



Results

