

CASE STUDY

Engineering a Cross-Border Solution Where No UK Disposal Route Existed

£450K PROJECT DELIVERED THROUGH INTERNATIONAL ROUTING OF HIGH-RISK HAZARDOUS WASTE



Integrated approach combining TFS management, international infrastructure, and engineered offloading

~200–250 tanker movements eliminated through direct marine offloading solution

THE PROJECT

Tradebe delivered a **fully engineered international waste solution** to manage a high-risk, flammable waste stream with no viable UK disposal route. The programme combined **technical routing, regulatory management, and coordinated marine logistics**.

Tradebe identified a **Danish facility** able to receive material directly from the vessel into bulk tankage, with vapour return and tank design suitable for **H₂S-containing waste**, converting a no-route UK scenario into a **controlled marine transfer** and treatment programme.

THE CHALLENGE

The waste contained **hydrogen sulphide and required rapid removal** within a fixed vessel window, with no UK infrastructure capable of safe handling. Tanker-based alternatives introduced **unacceptable safety, environmental, and logistical risk**.

The UK route was constrained by **lack of suitable quayside tankage**, H₂S-compatible tank design, vapour return and interim storage options. A tanker alternative **required 200–250 road movements and around 400 transfer operations**, significantly increasing safety, environmental and programme risk.

THE SOLUTION

A **specialist treatment route in Denmark** was secured, supported by full Transfrontier Shipment (TFS) application and regulatory approval. **Waste was offloaded directly from vessel to facility**, eliminating multiple transfer points and reducing risk exposure.

The engineered offload used **one controlled vessel-to-facility connection**, avoiding 200 tanker connections and 400 handling operations. H₂S risk was managed through **rates, vapour return, hose integrity and spill containment**, coordinated with facility and port authorities.

BENEFITS

Engineered international solution eliminating risk and enabling safe, compliant waste removal

- **£450,000 project** successfully delivered
- **~200–250 tanker** movements avoided
- **~400 transfer operations** eliminated
- **Offloading completed** in under 48 hours
- **~50% cost saving** vs incineration-only route