



Overview Report On Encapsulation Within Hazardous Plant Areas

EnviroWrap™ sheeting has been used since 1997 throughout Europe, but extensively in Holland where it is used to encapsulate Vessels, Pipebridges, Jack-Up and Semi-Submersible drilling rigs.

EnviroWrap™ sheeting is installed using LPG open flame heat applicators, therefore when working within a controlled hazardous environment a detailed risk assessment shall be carried out to identify the hot works permit limitations both local to the work face and surrounding areas.

From our experience working on refineries for clients such as Esso, Shell, Total, Q8, Dow Chemicals, Fina, Eastman and Dupont, providing adequate control measures are put in place, hot works can be carried out safely and efficiently.

Case Studies

Esso Tank Farm Rotterdam – EnviroWrap™ has been used to encapsulate refined product storage tanks for re-insulation and re-painting works.

Esso Product Loading quay Rotterdam – There were two sea tanker loading arms that required refurbishment, only one loading arm was encapsulated at a time as the second loading arm had to remain in operation. EnviroWrap™ encapsulation was achieved using LPG heat applicators under hot work permits and permanent fire watch.

Shell Pernis Rotterdam – Over the last 5 years, various encapsulation works have been successfully carried out using EnviroWrap™ and LPG heat applicators. These included vessels, bunded areas for special coatings, pipe bridges etc. Hot works permits and fire watch is a standard practice for this site.

DuPont Dordrecht Holland – Encapsulation of live pipe bridges carrying flammable products. Encapsulation was carried out with hot works permits and fire watch and pipebridge extending to around 1 Km in length. This was to facilitate the removal of old Asbestos Insulation and replacement of new insulation.

Q8 Europort Rotterdam – Encapsulation to plant areas during isolation of plant areas for maintenance.

Continued on Page 1 of 3

ISO9001 2000 Certified Company BRE/LPCB Certificate No.691

Po Box 11, Tenterden, Kent TN30 6AQ. Tel; +44 1233 860080 Fax; +44 1233 860090
Email; enquiries@envirowrap.info Web; www.envirowrap.info
Euro Project Office;
Damstraat 4, 9180 Moerbeke-Waas, Belgium, Tel: +32 9346 7484 Fax: +32 9346 9053
Email; enquiries@envirowrap-europe.com

Total Refinery Vlissingen, Holland – EnviroWrap™ encapsulation to pipebridge carrying pipelines to the sea tanker loading bay.



Dow Chemical, Styrene Plant, Ternuezen, Holland

The column shown below contained Asbestos Insulation which was to be removed and replaced with a new non-hazardous insulation. The scaffold was constructed with Layher All-round. The Encapsulation was to seal from the underside of the column at approximately the 6m elevation to the top lift and roof of the scaffold, a further inner tent was constructed at each 2m lift so as to ensure the minimal risk of asbestos contamination escaping into the main plant areas. On this project our 400µ FR product was used for the outer tent and a thinner 250µ Fr product used for the inner tent.



Page 2 of 3



The most challenging area of the Dow encapsulation was sealing through the buttress area of the scaffold. To achieve this we installed 1m wide strips of EnviroWrap™ sheeting vertically through the scaffold at each ledger intersection, by removing the ledger, placing the EnviroWrap™ over the rosette, then pushing the ledger back into position clamping the EnviroWrap™ between the rosette and the ledger and then driving the ledger wedge through the EnviroWrap™ and rosette. This then enabled a 2.5m wide sheet to be dropped between each standard and welded to the 1m strip installed at the ledger intersection.

ISO9001 2000 Certified Company BRE/LPCB Certificate No.691

Po Box 11, Tenterden, Kent TN30 6AQ. Tel; +44 1233 860080 Fax; +44 1233 860090

Email; enquiries@envirowrap.info Web; www.envirowrap.info

Euro Project Office;

Damstraat 4, 9180 Moerbeke-Waas, Belgium, Tel: +32 9346 7484 Fax: +32 9346 9053

Email; enquiries@envirowrap-europe.com