

Active Manufacturing Site, Near Orléans, France

Chlorinated Solvents Beneath Factory Buildings Treated with 3DMe



Summary

- Active manufacturing site impacted with chlorinated solvents in groundwater.
- Solvent contamination extended under buildings and plume migrating off-site.
- Application of 3-D Microemulsion (3DMe) to treat onsite source, onsite plume and barrier treatment to prevent off-site migration.
- RegenesiS Remediation Services (RRS) completed the injection works whilst the factory was fully operational, with no disruption to site activities.
- Injection works completed by RRS on programme and on budget
- RegenesiS provided the complete service of remediation design, undertaking the site remediation works and continued technical support for the life of the project.

Treatment

3DMe was used on the site as its ability to self-distribute in the subsurface allowed contamination to be targeted in obstructed areas. The wide radius of influence provided by 3DMe from each injection point also allowed the number of injection points to be minimised to reduce cost and disturbance to the site owner's activities. 3DMe will provide enhanced reductive dechlorination of the contaminants present for a period of up to five years.

What's Special?

RRS delivered a full design, injection and site management service to complete the remediation works on a fixed price basis in order to provide the Client with cost and programme surety. The works were completed in difficult working conditions; in a busy delivery yard, in active factory & warehousing areas and pedestrian corridors without disruption to existing site activities. Our full package service is further enhanced as RegenesiS continues to provide technical support to the Client during the post-remediation groundwater monitoring campaign.

Remediation Details

Site Type:

Active Factory

Remediation Approach:

Enhanced reductive dechlorination

Remediation Technologies:

3-D Microemulsion® (3DMe)

Geology

	Bedrock
X	Gravel
X	Sand
	Silt
	Clay

Medium

X	Groundwater
	Saturated Soil
	Vadose Zone

COC

	Petro HCs
	Petro LNAPL
X	Chlorinated VOCs

COC Concentration Levels:

30,000µg/L

Treatment Depth: 2m - 16m

Treatment Area: 3,500m²

Remediation Cost: €430,000

Injection points: 85