



**Environmental
Management
Services**

COMAH Bund Survey and Construction Case Study

Summary

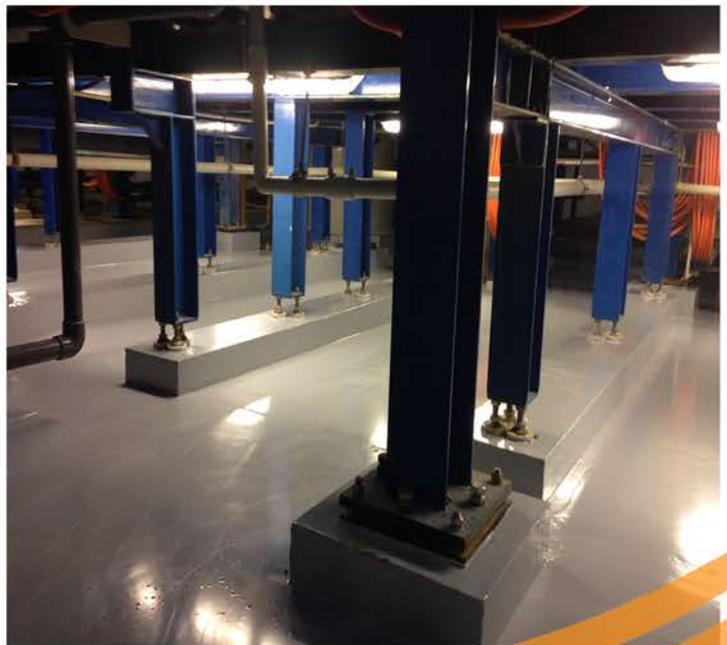
Following a scheduled audit by a COMAH inspector our client was advised that their bunds were in breach of CIRIA C736 standards. Our Environmental Consultants conducted a survey of the bund and found several non-conformities, including impact damage which was beyond economic repair.

We designed a specification to meet all legislation and conducted the construction of a new bund compliant with the relevant standards.

We were asked to repair and reline a 180 m² bund in the COMAH area of one of the largest manufacturing plants in the UK. The bund was housed underneath the production plant to capture any acid leaking from the tanks above. Due to the bund not having a sufficient chemical resistant lining the acid had attacked the concrete structure of the bund. Due to the sump being constantly submerged in acid there was significant corrosion present.



We presented the client with an economical proposal of repairing the damaged areas and relining any areas which were likely to come into direct contact with acids. This meant only relining half of the bund and drastically reducing the timeframe to allow completion within the shutdown period and consequently reducing project costs (whilst still leaving the bund fully compliant).



The job had to be completed during the annual shut-down (when isolation of the tanks was possible), this gave only a 10 day time frame to complete all works.

As the bund was underneath the production plant the job had to be completed by a confined space entry team; these complications meant that precise planning was integral before the project to ensure it did not over run and that health and safety legislation was stringently followed.

In the process of cutting out and removing the acid contaminated concrete a high quantity of Hydrogen Sulphide contaminated dust was released. The job was immediately stopped and the confined space entry team were removed.

A thorough health and safety re-evaluation was carried out taking into account the new respiratory hazards. This led to an updated risk assessment and method statement in which the confined space entry team employed breathing apparatus to work within the noxious atmosphere.

Our team were able to complete the job on time and on budget to a standard that exceeded the clients expectations.

