

## PROJECT REPORT

Date: 2016

**PROJECT:** HDPE Geomembranes tank liners' Repairs



### 1. INTRODUCTION

Our client, required to have all damages found on the HDPE Geomembrane liners repaired, by a suitable material. After field testing and providing all required paperwork (Technical Data and MSDS), we were instructed to provide the repairs. The material used was [FLEXICLAD ER](#) by ENECON USA. This report details the works carried out to seal all holes and damages found on the membranes.



## 2. THE PROBLEM

Below we provide some photos taken on site indicating the degree of the problem with the HDPE Geomembrane liners. Due to the sensitivity of the environment, a cold work method was preferred rather than introducing hot works.

We introduced a material that:

- A. Has excellent adhesion to the existing substrate (HDPE membrane) as well as the cement walls.
- B. is a two component 'mix and apply' high performance polymer
- C. has proven resistance ranging from Good to Excellent to Diesel fuel, Crude oil, Aviation Fuel, Gasoline and various chemicals.





### 3. THE PRODUCT

FLEXICLAD ER is a very unique material that requires no primer, bonds to most rubber / flexible materials and cures to ambient temperatures and with no heat required. It is safe to use and has 100% solids with no solvents or any odors.

FLEXICLAD ER was originally formulated to repair damaged flexible component such as conveyor belts, hoses, off-road tire sidewalls, expansion bellows etc. However, due to its excellent chemical resistance to fuels and many chemicals, it is widely found in many industries including the Petrochemical Industry, Oil & Gas, etc.

### 4. REMEDIAL PROCEDURES

Prior to any repairs, it was essential to inspect all areas and mark down on the plans provided by the client all the spots that required repair.

Our works included:

- Pulling back cloth material and loose gravel (where required) to have enough space to properly work.
- Cleaning damaged areas from dust, salt and loose membrane parts.
- Using mainly clean cloths and acetone.
- Using sand paper to roughen areas.
- Mixing and applying FLEXICLAD ER on a surface and building it to the desired thickness.
- Using mesh material where the damage was large in order to bridge over.
- Allowing for cure and inspecting the following day

### 5. CONCLUSION & PHOTOS

Our company successfully sealed all the damages specified by and agreed with the client. We are in a position to guarantee our repairs for at least seven years. We provided the client with a Completion of Works report.

