Valero Energy (Ireland) Limited

Dublin Joint Fuels Terminal

April 2019
Dublin Joint Fuels Terminal Overview
Dublin Joint Fuels Terminal Overview

- Marine Terminal – Common Jetty & Import Facility
- Upper Tier COMAH Facility
- 18 Above Ground Fixed Roof Storage Tanks
  - 4 Gasoline
  - 2 Ethanol
  - 5 Jet-A1
  - 6 Diesel
- 2 Sites – North and South of Alexandra Road
- 5 Loading Bays
- No Underground Pipelines
Terminal History

- 1950 - Dublin Terminal was built by Esso Ireland
- 1993 - Joint Agreement signed: Esso and Texaco
- 2015 - Dec 1\textsuperscript{st}: Esso sold 50% share to Topaz Energy
- 2015 - Topaz operated the Facility for 6 days.
- 2015 - Valero became Terminal Operator (Dec 7\textsuperscript{th})
- 2017 - Topaz sold Non Operating 50% to Applegreen

There was no direct divestment/transfer from Esso to Valero

Terminal Timeline

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Valero’s Challenge

• Valero inherited the Terminal assets, but did not inherit:
  – Tank and Pipeline Integrity Data
  – Engineering Resource or Support
  – Engineering Drawings, Calculations or Historical Engineering Data
  – Limited Preventative Maintenance Data

• Valero required the following to ensure Mechanical Integrity and Technical Assurance:
  – Accurate Asset Register
  – Accurate Drawings
  – Accurate Assessment of Legacy Asset Integrity

Challenge was to Manage and Maintain an Operational COMAH Facility, without accurate information about the legacy assets.
Integrity Plan

Initial Position
Operating Terminal with limited Integrity Data

Path Forward
Undergo Process to identify Assets and Asset Integrity

Long Term Goal
Achieve a Steady State of Integrity Management
3D Scanning Process

• ALS (Advanced Laser Scan)
• Scanning perform in October 2016
• Scanning review and drawings developed by Jun 2017
• 3D model complete and implemented in October 2017
Benefits of Scanning & 3D Model

- Accurate Drawings generated to +/- 2mm
- 3D Model can be shared with Design Consultants
  - Proposed modifications can be trialled/reviewed online
- Generating Preventative Maintenance Schedule
- Useful for Remote Engineering Support
- Driver & Contractor Induction Videos
- Integration with SAP Plant Maintenance
  - Maintenance recorded in SAP can be viewed beside assets in 3D Model
3D Scanning Equipment
Round Dots are Scan Locations
Photo Images & 3D Model Overlayed - Dimensions Measured
Remote Dimension Measurement (+/-2mm)
Or Dimensions can be taken from 3D Model

X, Y and Z COORDINATES