

Proposed Co-op Petroleum Installation Specifications

All works to be carried out in accordance with the local licensing authority and all current APEA/IP Blue book documentation and subsequent revisions

New tank farm

2nr new 60,000 litre 2.5m dia below ground double skin storage tanks supplied by Wefco Limited with interstitial space monitoring. Tanks to be manufactured in accordance with current BS/EU regulation complete with external finish of solvent free polyurethane base paint. Tanks to be secured with 'Tanklash' webbing straps at a minimum of 1/10,000 litre of tank in accordance with the manufacturers details.

Excavation to be lined with 'terram' or similar geotextile fabric to prevent encasement. Tank base to be 225mm thickness vibrated sulphate resisting concrete with single layers of A252 mesh to be laid top and bottom of base, strap to be threaded under the top mesh. Tanks to be surrounded in rounded shingle to meet the petroleum officer's approval.

Ducting to be provided for pneumatic tube from tank chambers to building entry (for extension to the gauge position). 2nr monitoring wells to be installed in opposite diagonal corners of the tank farm complete with 300mm x 300mm EMCO Wheaton (or similar) bolted lid and frame cast into concrete slab connected to standard 150mm drainage pipe to a depth of 1200mm. Perforated pipe, polydrain or similar located into slab with pre-formed drainage slots.

Wet stock monitoring/tank content gauge, driver control delivery, overfill prevention monitoring and alarm, tank probes to be installed and commissioned by the co-op's nominated specialist contractor.

Tank Chambers

Tanks to be fitted with integral ATLAS Gen 2 Mono Chamber System as supplied by Berrys Technologies Limited. All tank internals, lid fittings and entry seals to be factory fitted prior to tank delivery to site. Vacuum testing and certification of the Chambers to be provided.

All tank compartments to be fitted with EMCO Wheaton (or similar) overfill prevention system supplied and fitted by the Pipework Contractor. Grade labels to be fitted to all tank/fill pipes/suctions/vents etc.

Leak Detection

Overpressure vacuum leak detection system with integrated dry filter control and monitor box to be provided to be installation and commissioning, plus link to the gauge system if required by the specialist contractor.

Pipework (OSF, Vents, Suction Lines)

All below ground pipework to be Durapipe (or similar) single skin fill and suction lines, straight pipework system fully supplied, installed, tested and certified by the Pipework Contractor. All pipes

to be sized as required on the specific pipework drawing as detailed and encased in 150mm shingle wrapped in 'terram' to prevent migration.

Offset Fill Lines

All tanks to be Off Set Filled via 110/125mm dia Durapipe (or similar) double pipework in straight lengths connected to Berrys Technologies Limited Fillmaster below ground fill unit.

Vent Lines

All tank compartments to be vented via 63mm dia Durapipe (or similar) single skin pipework in straight lengths to vent stack position shown on the specific site drawing and manifolded above ground with all steel galvanised including Berrys Technologies Limited vent and easy riser system and framework support. Vapour Recovery (VR) below ground manifold in galvanised steel 90mm dia back to offset fill VR connection. Supply of all signage and fittings as necessary to the vents, labelling of all lines.

Suction Lines

All pumps to be supplied with 63mm dia Durapipe (or similar) single skin pipework suction lines terminated within pump cradle set out as detailed on specific drawings. Lines to be laid with a backfall to terminate in tank chambers laid at minimum of 1:100.

Stage 2 Vapour Recovery (VR2)

Install 63mm dia Durapipe (or similar) stage II vapour recovery line from each pump base, VR2 line to be laid with a backfall to terminate in tank chamber no. 2. Risebridger G2 1 inch BSP Shear valve to be supplied and installed to each dispenser base.

Pump Equipment

Installation of suitable pump cradles onto in-situ formed raised concrete pump islands. Supply of 4nr Gilbarco SK700 for grade eight hose pumps and placement on pump islands, including all branding /livery to pumps, Electrical connections and wiring, testing, commissioning, weights and measures.

Testing and Certification

Issue of 'Water Free' certificate for the tanks, and necessary installation testing in accordance with local licensing authority requirements. Provide and install all labelling and tags.