



## SECTION 6.0

# ENGINEERING SPECIFICATIONS



## **Bulk Tank Farm Secondary Containment System**

Dimensions – 40' wide x 65' long x 3'-2" high

Materials of Construction – Precast Concrete forms complete with a synthetic liner.

Total liquid capacity – 234,000 liters

Drawing – See attached for details

Work to be performed on the containment system exists of the following,

1. Prepare area for new berm, grade level, and install granular material. Compact in place.
2. Install precast concrete berm complete with synthetic liner material.
3. Place 6" of crushed stone material inside berm area and compact.

Products to be stored in this containment system include the following products and estimated volumes,

- i. Triethylene Glycol – 90,000 liters maximum
- ii. Monoethylene Glycol – 90,000 liters maximum
- iii. Methanol – 90,000 liters maximum
- iv. Printing Ink Solvent – 90,000 liters maximum
- v. Methyl Diethanolamine (MDEA) – 90,000 liters maximum
- vi. Future – 90,000 liters maximum

The bulk containment system will be designed for the total capacity of six (6) 90,000-liter upright tanks.



## **Re-packaging and Blending Secondary Containment Pad**

Dimensions – 20' wide x 84' long x 10" high

Materials of Construction – 8" thick steel reinforced 5,000 psi concrete

Total liquid capacity – 39,648 liters

Drawing – See attached details

Work to be performed on the loading and offloading system exist of the following,

1. Excavation and Grading of work area.
2. Construction of forms for pad and containment sides.
3. Placement of steel throughout forms.
4. Placement and finishing of 5000 psi concrete.

The loading and offloading secondary containment pad will be designed to contain the accidental release of hazardous products during bulk transfers, repackaging and blending operations.

## **Rail Car Offloading Secondary Containment Pad**

Dimensions – 12' wide x 40' long x 8" high curb

Materials of Construction – 8" thick steel reinforced 5,000 psi concrete

Total liquid capacity – 9,000 liters

Work to be performed on the loading and offloading system exist of the following,

1. Excavation and Grading of work area.
2. Construction of forms for pad and containment sides.
3. Placement of steel throughout forms.
4. Placement and finishing of 5000 psi concrete.

The rail car offloading secondary containment pad will be designed to contain any accidental release of hazardous product during bulk transfers from rail car to the tanker truck.