

## **PIN- B SUBMITTAL: DESIGN DETAILS WASTEWATER TREATMENT**

**May 1, 2009**

Water found in-situ prior to excavation will be tested in place and removed if below criteria before excavation starts. Once excavation commences and while waiting for excavation boundary confirmatory analytical results, all efforts will be made to reduce water infiltration into the excavation. In the event that water within the excavation either before or during site activities exceeds groundwater criteria as provided in the specifications, the water will be treated using the following methodology.

The water will first be pumped through the primary barrel filtration system used for the removal of gross hydrocarbon contamination and sediment when recirculating water during barrel washing activities. Depending on the quantity of water to be treated, this water could be used as barrel wash water. Following primary treatment the water will be pumped through a granular activated carbon polishing filter to remove trace organic and inorganic constituents. This system includes a primary screen filter, secondary media filter (graded sand) and tertiary carbon polishing filter and required pumps. Treated water will be stored for confirmation of treatment below water criteria listed in the spec. If deemed clean by the DR the water will be released as indicated in the Dewatering Plan. The impounded water can be recirculated through the GAC until criteria is met.

A handwritten signature in dark ink, appearing to read 'R. Newmark', is positioned above the printed name.

**RUSSELL NEWMARK**  
**E. GRUBEN'S TRANSPORT LTD**