

## Lubricant Tanker Loading Rack Design/Permit

**Location: Atlanta, Georgia**  
**Client: Major Petroleum Company**  
**Contract Cost: \$80,000**

### PROBLEM

A lubricant formulating plant engaged Remtech to obtain permits, design secondary containment, move underground transfer lines, provide construction management, and install a new unground oil/water separator for loading finished product tankers. Remtech also prepared SPCC and FRP plans and trained plant personnel.

### SOLUTION

A lubricant facility purchased a pre-fabricated loading rack and new oil/water separator that were too large for the small plant site. Remtech had to obtain building offset variances from the City and Architectural Review Boards. Remtech attended public hearings to gain local acceptance of the proposed design and variances.

Three dimensional modeling was performed to provide adequate tanker turning radiuses, clearances for tanker undercarriages with rollover spill containment/clean stormwater diversion transitions, and level tankers to align with two hydraulically operated gantries. Rollover spill containment transitions also diverted clean stormwater around loading rack operation contact areas.

An above ground stormwater detention basin (placed under the backside of the rack canopy) was designed to satisfy permitting requirements and fit within the limited space. Remtech also designed safety and fire prevention systems that were required to obtain permits from local fire authorities.

Remtech designed a concrete trench with metal H20 load grates crossing the plant entrance road to move existing underground transfer lines into a secondary containment structure draining to the canopy sump. An existing AST tank farm oil water separator (OWS) was modified to accept tank farm and loading rack contact water that was discharged to the sanitary sewer under an existing wastewater pretreatment permit. This replaced an \$80,000 in ground oil/water separator that was originally planned by the client.

A SPCC plan was prepared and FRP plan updated and plant personnel were trained by Remtech

### COST/BENEFITS

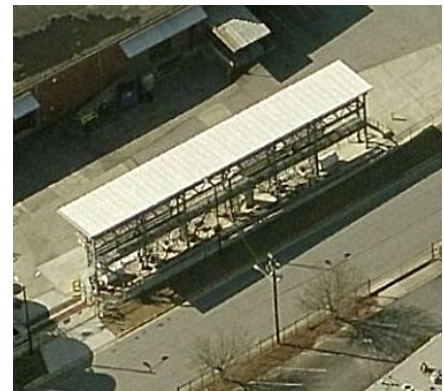
This structure could not have been built without variances obtained by Remtech through the public hearing and City review and permitting process. Remtech saved the client the cost of a new underground \$80,000 OWS that would have required a larger stormwater detention facility due to additional land disturbance areas. Due to limited space on this site, a permit most likely could not have obtained with additional space requirements of an in ground OWS.



Lubricant Tanker Loading Rack



Construction of Secondary Containment Rollover Spill Containment and Clean Stormwater Pavement Diversion Transitions



Aerial of Tanker Loading Rack with Rectangular Detention Box Under Canopy and Secondary Containment Pipe Trench in Entrance Road,