



PRODUCT TRANSFER AREA:

THIS DESIGN HAS BEEN DEVELOPED TO MEET THE INTENT OF THE REQUIREMENTS FOR A PRODUCT TRANSFER AREA THROUGH A "PTA METHOD" APPROACH IN ACCORDANCE WITH THE ENVIRONMENT CANADA COMPLIANCE PROMOTION "PRODUCT TRANSFER AREA WORKSHOP - INFO SHEET AND SAMPLE WRITE-UPS FOR PRODUCT TRANSFER AREAS", DATED FEBRUARY 3, 2012. A PTA METHOD IDENTIFIES POTENTIAL ENVIRONMENTAL RISK AND SPILL SCENARIOS AS WELL AS RISK MITIGATION ACTIONS AND SYSTEM SAFETY COMPONENTS ASSOCIATED WITH SPILLS RESULTING FROM PRODUCT TRANSFER INTO A STORAGE TANK SYSTEM. A PTA METHOD MUST ALSO INCLUDE PHYSICAL CONTAINMENT BEYOND CONTAINMENT PROVIDED BY A FILL PIPE SPILL CONTAINMENT BOX.

THE SIGNIFICANT ENVIRONMENTAL RISK ASSOCIATED WITH THIS STORAGE SYSTEM IS THE LOCAL SOIL AND GROUNDWATER. THE MOST LIKELY SPILL SCENARIO WOULD BE AN OVERFILL OCCURRENCE DURING A FUEL DELIVERY. BASED ON A TYPICAL TRUCK FILLING RATE OF 280 L/MIN AND A CONSERVATIVE REACTION TIME TO STOP THE FLOW OF 3 MINUTES, THE ANTICIPATED SPILL SCENARIO (CALCULATED SPILL VOLUME) FOR THIS DESIGN IS 840L.

THE SYSTEM IS DESIGNED WITH THE FOLLOWING MITIGATION COMPONENTS:

- POSITIVE CLOSING OVERFILL PREVENTION DEVICE SET AT 95% TANK CAPACITY
- AUDIBLE OVERFILL ALARM (VENT WHISTLE) SET TO ALERT DRIVER AT 90% TANK CAPACITY
- ENVIRONMENTAL CONCRETE TANK PAD WITH PERIMETER CURB (SIZED TO CONTAIN 4000L) WITH OIL STOP VALVE AND SHUT-OFF VALVE ON DRAIN
- TANK MANUFACTURER SUPPLIED SPILL CONTAINMENT BOX AT FILL PIPE CONNECTION
- PRODUCT TRANSFER AREA INSTRUCTIONAL SIGNAGE POSTED AT FILL PIPE AREA
- EMERGENCY CONTACT SIGNAGE WILL BE POSTED
- A FULLY STOCKED SPILL KIT WILL BE LOCATED AT THE TANK AREA
- AN EMERGENCY RESPONSE PLAN, SPECIFIC TO THE STORAGE SYSTEM, WILL BE POSTED

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WHARF CONSTRUCTION PORT BICKERTON (EAST) GUYSBOROUGH COUNTY NOVA SCOTIA

MARINE FUEL-DISPENSING SYSTEM CIVIL ARRANGEMENT & DETAILS

designed	J. SURETTE	comp
date	MAR 01, 2017	
drawn	W. DEMPSEY	design
date	MAR 03, 2017	
approved	D. THOMPSON	approval
date		
Tender		Submission
PHRSC Project Manager		Administrative - de projets PHRSC
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