



#### 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, AND TANK TIP 13 - SPILL CONTAINMENT AT PRODUCT TRANSFER AREAS DATED 2016. 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 PROXIMITY TO THE ST. CROIX RIVER. 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:

- VENT WHISTLE SET AT 90% CAPACITY TANK
- POSITIVE CLOSING OVERFILL PREVENTION DEVICE SET AT 95% TANK CAPACITY
- ENVIRONMENTAL CONCRETE TANK PAD WITH PERIMETER CURB (SIZED TO CONTAIN 1613L)
- TANK MANUFACTURER SUPPLIED SPILL CONTAINMENT BOX AT FILL PIPE CONNECTION
- PRODUCT TRANSFER AREA INSTRUCTIONAL SIGNAGE WILL BE 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 AND STAFF TRAINING

C	ISSUED FOR TENDER	1/03/2017
B	ISSUED FOR 99% REVIEW	11/16/2016
A	ISSUED FOR 66% REVIEW	10/21/2016
revisions		date

project

**PETROLEUM STORAGE SYSTEM UPGRADES  
ST. ANDREWS  
BIOLOGICAL STATION  
ST. ANDREWS, NB**

drawing

**LAUZIER BUILDING  
NEW FURNACE OIL  
TANK PAD AND PTA CURB  
PLANS, SECTIONS AND  
DETAILS**

designed	ERF	conçu
date		
drawn	JCB	dessiné
date		
approved	ERF	approuvé
date		
Tender	RCM	Submission
PWSC	Project Manager	Administrateur de projet
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