



Prevention Technologies

PTi

- *Prevention Technologies, Inc. (PTi)*



Prevention Technologies Outline

PTi

- Background
- Prevention Technology Options



Prevention Technologies Background

PTi

- Gasoline does result in water contamination.
- Many spills and leaks go unnoticed for long periods of time.
- Spills occur in many forms:
 - faulty nozzles
 - flex connectors
 - fittings and gaskets
 - filters corroding
- Preventing accidental releases is a key factor in reducing Total Cost of Ownership.
- Effective, low cost containment is good for the environment & business.
- Several factors influence the use of containment systems:
 - Cost
 - Down Time
 - Effectiveness



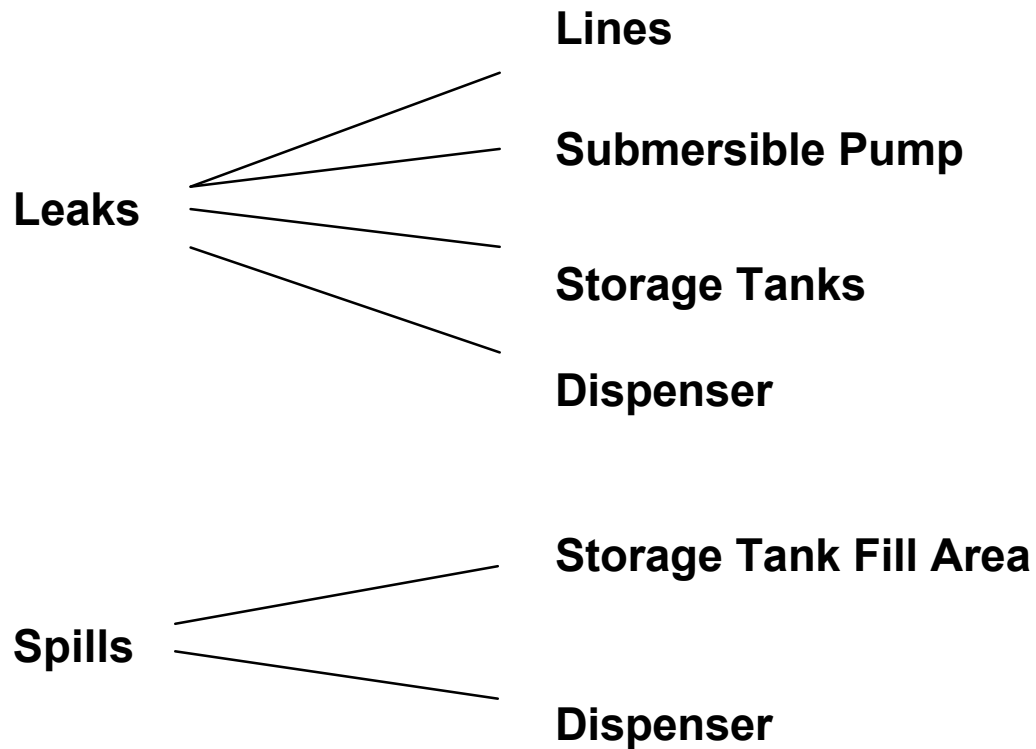
Prevention Technologies Background

PTi

Root Cause of Contamination

Release Type

Location

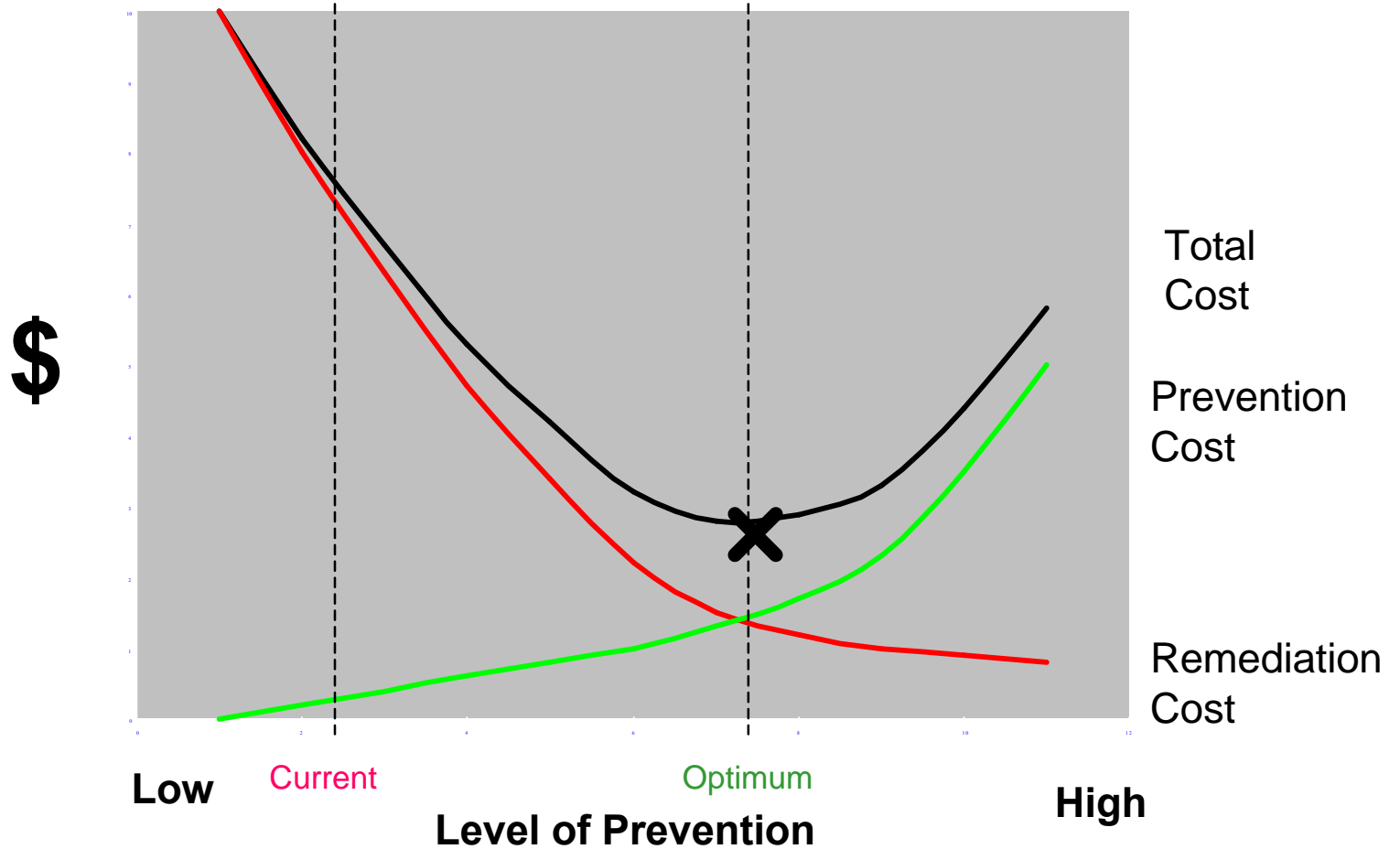




Prevention Technologies Background

PTi

Prevention vs. Remediation





Prevention Technologies – Overview

PTi

- *PTi patented applications available through PTi only:*
 - *Below Grade Fill Upgrade*
 - *Form-in-Place Dispenser Pans*
 - *Form-in-Place Submersible Sumps*



Prevention Technologies – Below Grade Fill Upgrade

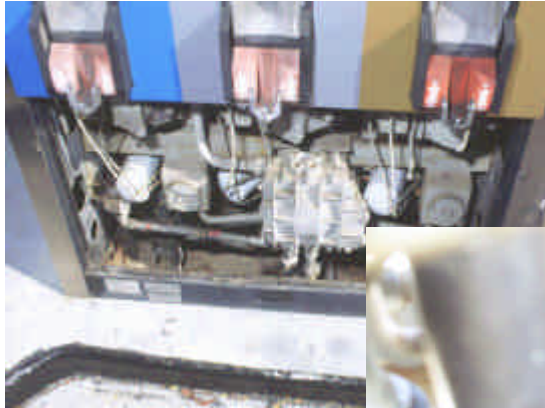
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Prevention Technologies – Form-In-Place Dispenser Pans

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Prevention Technologies – Form-In-Place Submersible Sump

PTi





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *PTi offers materials for use in these non-patented areas:*
 - *PTi Paste for repair and sealing, e.g. penetration boots and tank adapters*
 - *PTi Self-Leveling for repairs requiring a self-leveling material, e.g., sealing cracks.*

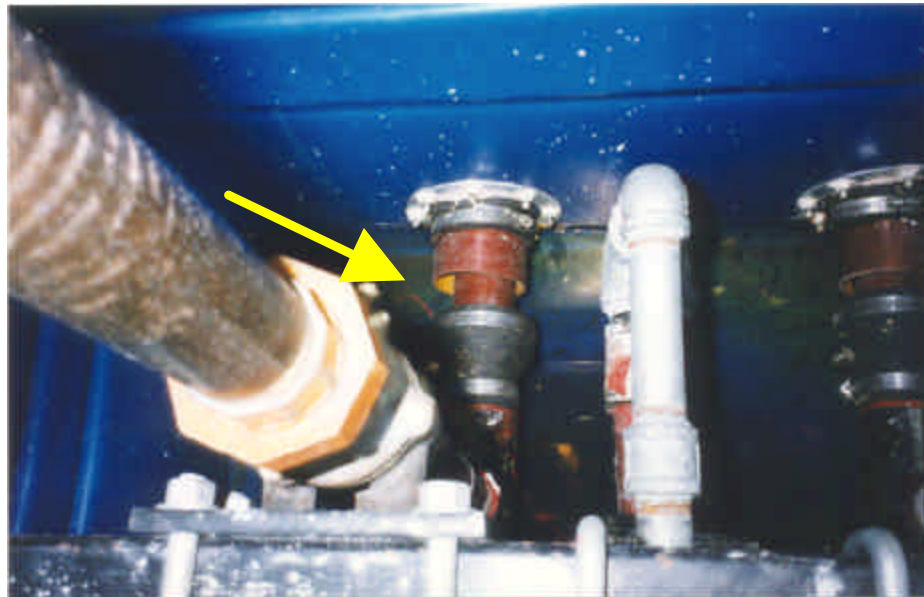




Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Analyze the problem*
 - *Isolate sources of leakage*
 - *Dispensers?*
 - *Turbine sumps?*
 - *Flex connectors?*

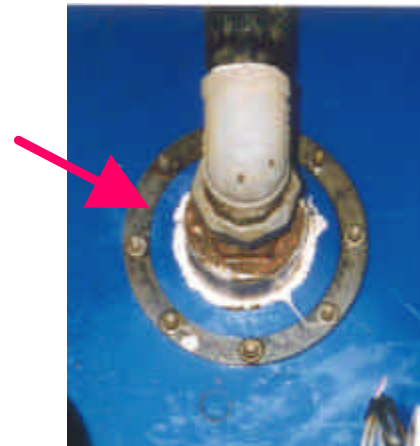
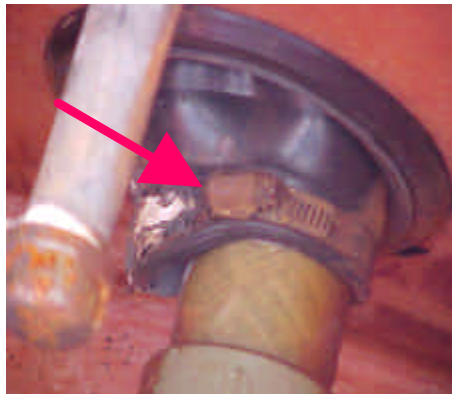




Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Analyze the problem*
 - *Determine failure mode*
 - *Broken boot*
 - *Loose flanges, bolts, etc.*
 - *Loose clamps*
 - *Surface water*
 - *Above grade dispenser leaks*





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Correct the problem*
 - *If appropriate, use PTi Paste*
 - *Failed boots*
 - *Leaking penetrations*
 - *Tank flange adaptors*
 - *Sump seams*
 - *Spill buckets*



Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *PTi Materials – Installation Requirements*
 - *Area secured for safety*
 - *Contractor safety rules are followed (including solvent use)*
 - *Area protected from accidental contact with PTi Materials*
 - *Use drop cloth – not plastic*
 - *Duct or masking tape*
 - *Clean & Dry surfaces*
 - *Properly treated surfaces*
 - *Temperature above 50°F*



Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Thoroughly clean containment before repairs are made*
 - *Vacuum out all debris and loose dirt, etc.*
 - *High pressure washing*
 - *2000 psig washer or more is recommended*
 - *Thoroughly dry containment*

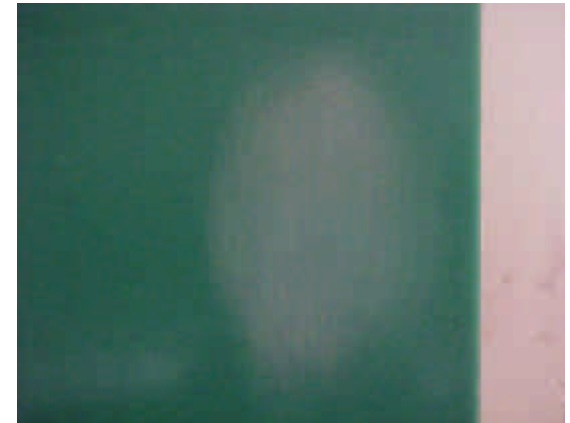
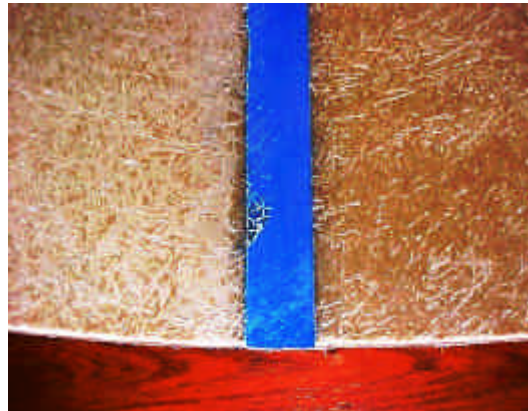




Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Prepare surfaces to be repaired or sealed*
 - *Oxidation removal & surface scuffing*
 - *Remove rust & oxidation from metal surfaces with sparkless brushes until ALL loose oxidation is removed*
 - *Abrade FRP surfaces with sparkless brushes or Emory cloth to remove surface resin and expose glass fibers*
 - *Scuff HDPE surfaces with Scotch Brite® pads to a dull matte finish*





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Prepare surfaces to be repaired or sealed – Cont'd*
 - *Oil & moisture removal*
 - *Clean all surfaces, flanges and boots thoroughly with Acetone*
 - *Clean all surfaces, flanges and boots thoroughly with Xylene or MEK*
 - *Allow to dry completely before applying PTi materials*





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Mix PTi Paste*
 - *Add all of Part B to Part A*
 - *Add all of Part C to Part A*
 - *Mix with single or two-speed heavy duty drill*
 - *Mix until no streaks are visible*
 - *PTi Paste hardens in about 1 hour*

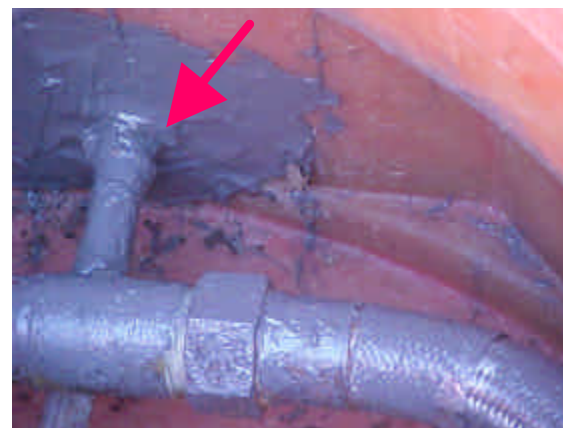




Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Apply PTi Paste*
 - *Hand application is most effective*
 - *Completely encapsulate all areas being repaired or sealed*
 - *Apply a minimum of ½ inch of PTi Paste*
 - *Overlap on to the good areas at least 1 inch, preferably more*





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Applying PTi Materials in Cooler Conditions*
 - *Temperature of the area receiving PTi Materials must be elevated to at least 50°F*
 - *Protect area with an enclosed structure, e.g. a tent*
 - *Use a remote heat source*
 - *Salamander with long duct*





Prevention Technologies – Boot Repair & Sump Sealing

PTi

- *Cleanup & Disposal*
 - *Clean all tools using Xylene.*
 - *DO NOT operate tools when Xylene is present*
 - *Clean skin with a waterless hand cleaner such as Fast Orange®*
 - *Dispose of all PTi materials as instructed in instructions and manuals*