

## Spotlight on Curtis Bay Terminal

### Message from Operations

Having recently participated in Control of Work Lite Training, I now have a better appreciation of the RM Defined Practices and the **HSSE planning that must be involved in even the earliest stages** of an RM project. As an LCM Strategy Manager, my role is to work with the BWT to **select the right remedial strategies** to implement on the RM project, as well as look for potential feedback opportunities for performance improvement. This does **not mean just the best remedial strategies**, but the ones that will also provide the **greatest level of protection for health, safety, security and the environment**. During the development and evaluation of various strategic alternatives, the HSSE considerations and level of effort are carefully considered and weighed against the other decision criteria to calculate risk. Of course, **a sure way to control a risk is to completely avoid it when possible**. Whether planning the remedial strategy or implementing it out in the field, our goal is to do it with **“no accidents, no harm to people, no damage to the environment.”** – Cord Harris, BP RM Strategy Manager



UST pad &amp; old remediation compound



New concrete pad in place of old compound

### Contractor's

Broadbent & Associates, Inc., recently decommissioned a historical pump and treat system at a BP retail station in Grass Valley, California. An evaluation performed by Broadbent found that the pump and treat system was **not only remedially ineffective, but also impractical to upgrade to IM standards**, and was **generally unsafe** due in part to the collection of rainwater, snow, and ice within secondary containment.

Broadbent worked with Operations Project Manager Sergio Morescalchi and Cornerstone Environmental Contractors, Inc., to **facilitate system and compound removal**. An early identified complicating factor was the **proximity**

**to the station's USTs**. As can be seen in the photo, the compound and secondary containment structure were immediately adjacent to the UST pad.

An initial plan to remove the 1,000 pound carbon vessels via crane as a non-critical **lift was modified**

**during a Work Risk Assessment Tool (WRAT)** development meeting. In order to minimize the hazard of lifting a load over active UST system components, it was determined that partial demolition of the containment structure could initially occur and the carbon vessels then be removed by use of a Gradall® Telehandler forklift. While removal by the Gradall® was still considered a lift via heavy equipment, the **lift plan elements were reduced and many hazards were eliminated**. This was a clear example of how pre-planning and risk evaluation and mitigation using the WRAT increases safety of workers and reduces the potential of property damage.

Several Stop Work orders were called due to changed site conditions observed by the Broadbent Field Team. The identification of hazards beforehand and throughout completion of the work led to the **safe and successful removal of outdated, unsafe, ineffective equipment** incapable of meeting today's IM standards. – Rob Miller, Broadbent Principal Hydrogeologist/PM

## FROM THE FIELD . . .

Spotlight on Curtis Bay Terminal . . . Read about the Curtis Bay Terminal prep for Hurricane Irene on page 2!

### Consider This . . .

As we near the traditional gift-giving holidays, here are a few fun safety-related gift ideas:

- First Aid Kit
- Emergency auto kit
- **Anti-scald valve** for sink/shower
- **“Think and Be Safe” playing cards** (each playing card includes a unique safety message; [www.thinkandbesafe.com](http://www.thinkandbesafe.com))
- Battery operated flare
- Bicycle head lamp & tail light
- **Key chain alarm/flashlight**
- Identimed System (organize & identify medications; [www.beindependent.com](http://www.beindependent.com))
- **Keychain breathalyzer** ([www.findgift.com](http://www.findgift.com))
- Emergency **battery operated weather radio**
- **Ultrasonic dog repeller**

Visit these sites for more ideas: [www.ifirstaidkits.com](http://www.ifirstaidkits.com), [www.findgift.com/categories/household/home-safety](http://www.findgift.com/categories/household/home-safety) and [www.hudsonsafetyproducts.com](http://www.hudsonsafetyproducts.com).

### Additional Resources

**BP RM HSSE Site** <https://wss2.BP.com/remediationmanagement/HSSE/default.aspx>

**SOCs Minute Resource Site** <http://socs.dataaccel.com/> (user ID: socs, Password: safety)

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## @Traction

RM closes out the fall season with **7 injuries** (3 first aid, 1 recordable), and **no DAFWCs**. Sept – Nov reports also show that as-builts and utility locates are not able to locate all underground utilities. Continue to be **vigilant during air knifing** activities. Several near misses were also related to **third party drivers**: in **parking lots**, on highways with **unsecured loads**, and near work areas. Continue to “leave yourself an out” and “get the big picture,” especially as more drivers may be on the road and distracted by holiday concerns. Finally, **site awareness has led to several near misses being caught** before they became incidents, as people take note of coworker health and safety, trip hazards, and the site.

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Image from GOES-13 satellite on August 27 about half an hour before Hurricane Irene's landfall in New York City (Credit: NASA/NOAA GOES Project)

This past August, a potential Category 5 Hurricane threatened the U.S. Eastern Seaboard. As meteorologists pinpointed the hurricane in late August, it became apparent the BP RM Curtis Bay (MD) Terminal would likely be directly in its path.

Image from the GOES-13 satellite on August 24, 2011, over the Bahamas, shortly after Irene became a major hurricane (Credit: NASA/NOAA GOES Project)



**With just two days notice** to prepare for high winds, electrical outages and a potential 13 foot storm surge covering their waterfront site, the BP Curtis Bay RM team took urgent action to secure the site against potential flood, electrical and release hazards. They did so in an organized manner to **prevent damage and loss of equipment** in the pre- and post-process, adjusting schedules and pulling personnel from other projects to help. **Taking the highest level of precaution**, the team shut down all remediation systems, removed and secured all skimmer pumps and covered all wells with air- and water-tight lids. **To mitigate release and buoyancy hazards** due to flooding, tanks were vacuumed out, moved to higher ground, filled with water to weight them, and secured. Portable electrical boxes and solar panels were also **moved to higher ground and ratcheted down** with straps and concrete "deadmen."



Well, tank, well equipment box & solar panel strapped down

On Sunday, August 21, the site took a direct hit from Hurricane Irene, and while decreased to Category 1, the high winds and extensive flooding put the preventive measures they had taken to the test! **No damage was sustained – and no one was hurt.** While hurricanes are an unusual occurrence for many of our North American sites, the **ability to devise and implement a thorough contingency plan** for this extreme weather helped protect the site from property, legal/regulatory and environmental damage, as well as liability. As URS PM Eleanor Jennings says, **"It was a team effort – everyone pulled together to make this happen, from covering shifts to free up our staff, to actually securing the remediation systems. I am so proud of our team!"** Please consider and share with your teams!



Well boxes moved & stowed on higher ground

*Special thanks to BP OPM Greg Miller, URS PM Eleanor Jennings, URS Senior Tech Jeff Chiskowski, and all Curtis Bay personnel involved in the hurricane preparations!*