Richard Harrell, PE, BCEE

"Contingency Planning & Emergency Procedures"

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Everyone Should be Familiar with Secondary Containment

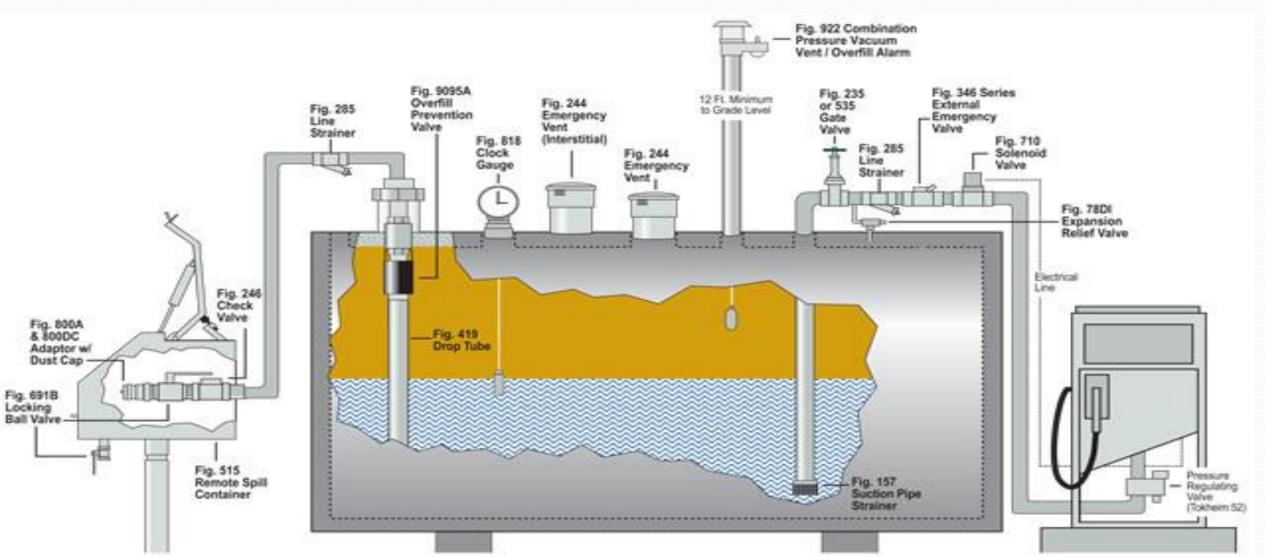


Concrete Wall and Slab

(Roof optional but nice to have)

Secondary Containment Examples

Double Walled Tank



Secondary Containment Examples

Spill Pallets





Why do we have secondary containment? Why PERIODIC inspections?

Visual Inspections, Nondestructive Testing such as thickness readings, Preventative Measures such as painting and maintenance

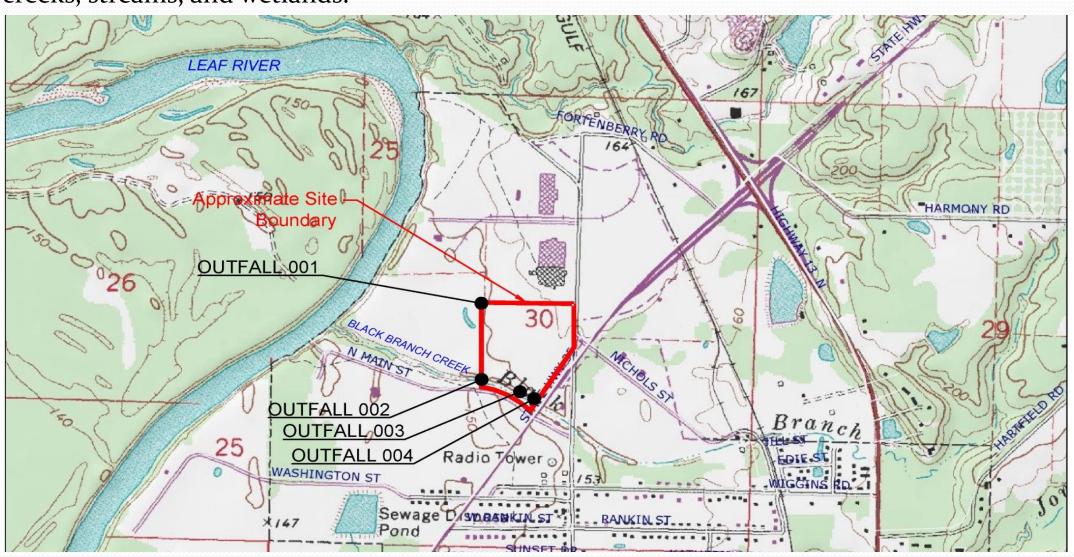


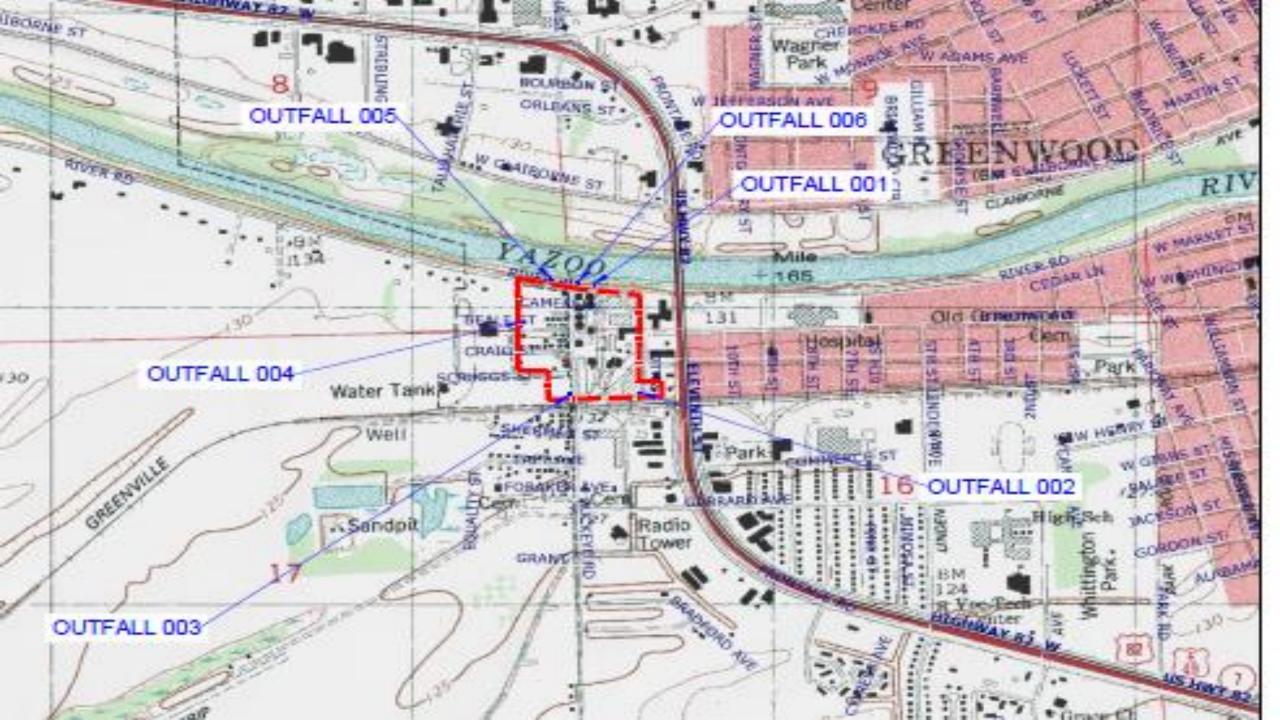
Tanks and Equipment in Relation to Storm Drains



Navigable Waters

Navigable Waters – Is a complex definition, but simply understood to be rivers, lakes, creeks, streams, and wetlands.





Spill Countermeasures



Underflow Dams



Don't Let This Be the First Time You Talk to your spill response contractor!

If based on contingency evaluation, a potential spill could **exceed** facility cleanup capabilities, contact and establish relationship with a Response Contractor.



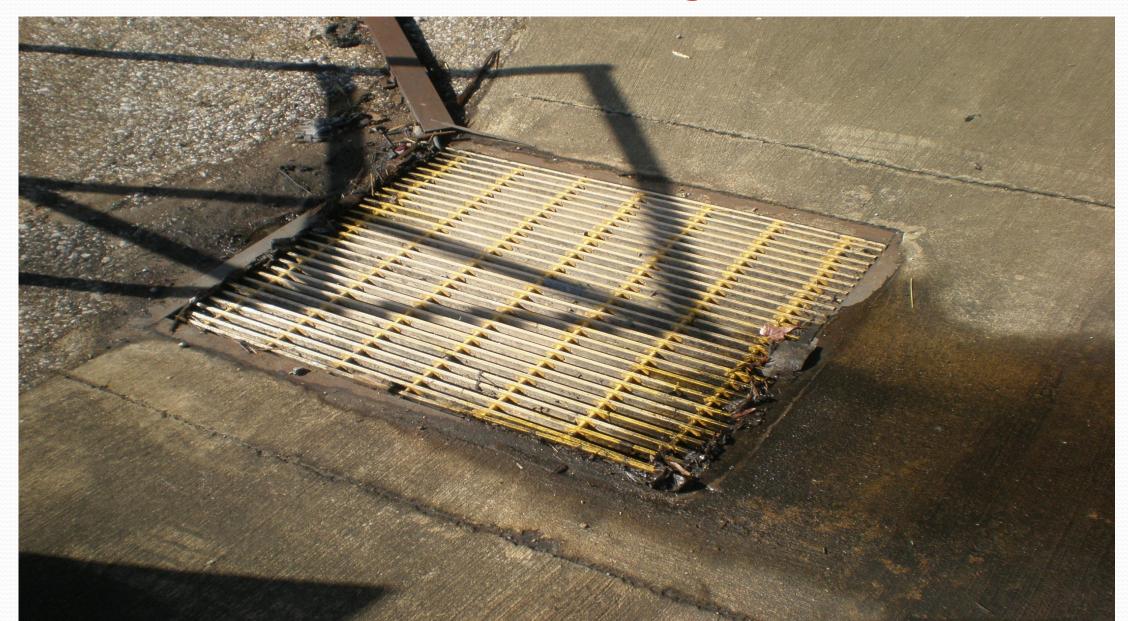
Response Assistance
Contractor:
Enhanced
Environmental &
Emergency Services (E₃)

Clinton, Memphis, Mobile

Containment for Tanker Unloading and Onsite Vehicle Fueling

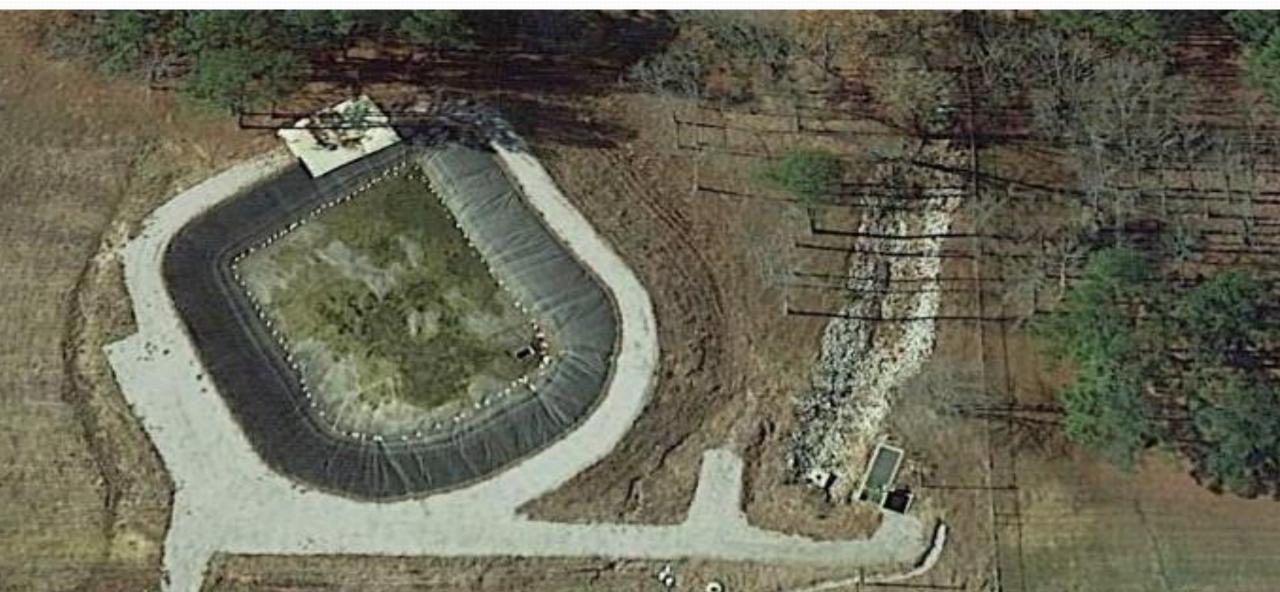


Surface Drainage





Surface Drainage



Contingency Planning Example

Good Intentions





Contingency Planning Example

Good Intentions







Other Examples



Concrete Basins

Overflow/ Underflow Weirs



Emergencies Happen



Petroleum Storage

Contingency Plan & Emergency Procedures

Contingency Plan & Emergency Procedures

Do you have the following:

- ✓ Emergency Response Plans response actions facility personnel must take to minimize threat to human health and the environment
- Emergency Responder Arrangements
- ✓ Emergency Coordinators names, addresses, phone #s(work & home), in order they will assume responsibility
- ✓ Emergency Equipment list of emergency equipment with location and brief description and capabilities for each item on list.
- ✓ Evacuation Plan where evac may be necessary, describes signals to initiate, as well as primary and alternate routes.

EMERGENCY PROCEDURES

In Case of Fire

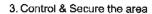
- Press Emergency Stop (e-stop)
- 2. Call 911
- 3. Control & Secure the area
- Cail Manager and UST Compliance
 Manager



In Case of Large Spill

(greater than 5 gallons)

- 1. Press Emergency Stop (e-stop)
- Call Manager and UST
 Compliance Manager
 If product goes offsite, call 911



 Use spill kit to keep the product from spreading



EMERGENC

DIAL 911

In Case of Small Spill

(less than 5 gallons)

- Press Emergency Stop (e-stop) if necessary
- 2. Control & Secure the area
- 3. Use the spill kit to clean up the product
- Call Manager and UST Compliance Manager



Contingency Plan & Emergency Procedures

Contingency Plan & Emergency Procedures

When should you evaluate your emergency procedures?

- ✓ Plan fails in an emergency
- ✓ The facility changes in a way that increases potential hazard or ability to respond
- Emergency Coordinators (Compliance Mgr or UST Operations Clerk) change, or
- Emergency equipment changes
- ✓ Annually, biennially, triennially?

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Hazardous Waste has set training requirements, should gasoline and petroleum products be that much different?

RCRA Generator Requirements – Personnel Training

Facility personnel must complete a program of classroom or on-the-job instruction that includes the following elements (40 CFR 264/265.15):

- > Program must be written program. Job titles, job descriptions, required qualifications, and training to be provided for each job position must be documented.
- > Program must be designed to ensure that personnel are able to effectively respond to emergencies (contingency plan responsibilities).
- > Training must be conducted by person trained in hazardous waste management.
- > Personnel must be trained within 6 months of assuming a job position, and may not work unsupervised until trained.

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Personnel Training (cont)

- During a emergency situation what is the most important thing to remember?
 - > SAFETY FIRST
- > Evacuate if necessary; cut off supply
- > What entity can order a community evacuation?
- ➤ Where is the nearest spill kit?
- ➤ Local Emergency Capabilities and Training



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Preparedness and Prevention

- > Who is authorized to hit emergency cut off?
- ➤ Where do you go during an emergency?
- > Who do you call?
- > Who is authorized in your organization to hire/call emergency contractor?
 - Do they know this?
 - Is there an established hierarchy?

You need to know how to respond



First Emergency Action

The first action for many EMERGENCIES will be to turn off power to the system or pressing the Emergency Stop (e-stop)



Examples of product off-site



Cleanup

- In the event of a major fire, let fire department & other more trained professionals handle it.
- Otherwise, know how to use a spill kit
 - Contain product
 - Use absorbents
 - Dispose of absorbents





Spills/Releases – What is a Reportable Quantity?

- ➤ Oil, Gas, Diesel or Any Petroleum Product Spill
 - RQ = any amount of oil causing a sheen on waters of the US; or sludge in an adjoining shoreline;
- ➤ If 1,000 gallons or more is spilled <u>or</u> if two spills > 42 gals each occur in a 12 month period and result in an RQ, then EPA must be sent a copy of the plan and an explanation.
- Chemical Spills/Releases
 - Based on the RQ for that chemical

If spill/release occurs, then use reasonable means available to stop release and prevent offsite occurrence (See Response Plan)

Reportable?

- ➤ If Reportable, Contact the following:
 - ✓ National Response Center (NRC)
 - ✓ MS Department of Environmental Quality (MDEQ)
 - ✓ MS Emergency Management Agency (MEMA)
 - ✓ Local County Emergency Planning Committee (LEPC)
- If any agency is called, document information such as:
 - ✓ Start time of call
 - ✓ Call duration
 - ✓ Who you spoke to
 - ✓ Information relayed
 - ✓ Be specific
- Use past spill info for training awareness

This is what we want to avoid



Conclusion

- Contingency planning helps prevent spills into navigable waters in three ways:
 - ✓ Prevention Training, Inspections, Testing, & Handling Practices
 - ✓ Controls Secondary Containment, Catchment Basins, & Spill Kits
 - ✓ Countermeasures Response actions; Established Relationship with Response Contractor.
- ➤ If practicle or in high risk area (waterbodies/populations) consider tertiary controls.
- ➤ Keep Good Records Document all inspections performed and records generated.
- > Spills can be harmful to humans, environment, and very costly to cleanup. Any spill that does occur Keep onsite and out of navigable waters!

Any Questions?

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