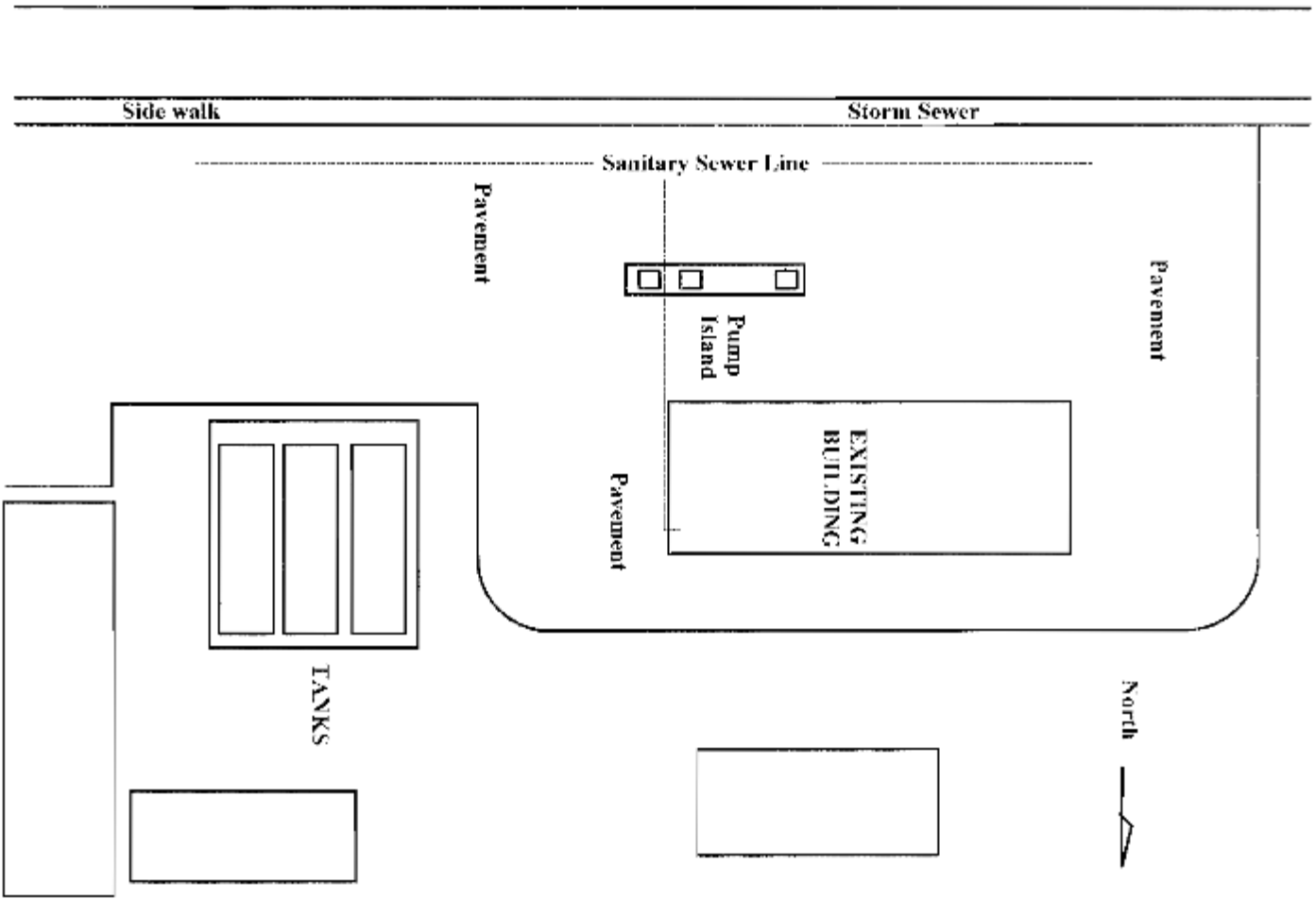


2011 WV Brownfields Conference

LRS Training
Paths to LUST Site Closure:
Hypothetical Service Station Site



- Located in pristine South Charleston, WV
- To the south of the station, above the noted utility lines, is U.S. Route 60
- To the north of the station, just off the map, is a steep bank leading down to the Kanawha River
- Residences are located on either side of the facility

**Rich's Service Station
Site Location**

- Initial 10' of subsurface is fill material
- From ~ 10-20' are silty clays
- From 20-40' are sandy clays grading to sand which coarsens downward
- Groundwater (water table) is located ~ 25' bgs

**Rich's Service Station
Physiographic Setting**

- Pre 1940's the property was vacant
- Beginning in the 1940's, industrial fly ash was slurried and piped into cells formed by earthen dikes by a local chemical manufacturing facility (fill material) to bring the site to current grade. It is rumored process water was used to create the slurry.
- The service station was constructed in the 1950's and has been operational ever since

Rich's Service Station Site History

- According to Rich, the UST's were replaced with fiberglass tanks in 1985; Rich has owned and operated the station since 1990.
- Historical retail petroleum sales have included gasoline, diesel fuel and kerosene. In 1995, Rich began selling only 3 grades of gasoline.
- Historical operations have included auto maintenance and repair. In 1995 Rich converted the maintenance bays to car wash bays and converted the facility to a convenience store.

Rich's Service Station Site History

- As of 2010, the facility was in compliance with all UST regulations.
- In June of this year, the Kanawha Co. UST inspector, during a routine inspection, discovered a release beneath the eastern-most UST dispenser.
- When questioned, Mary (who has worked at the facility since 1998), knew nothing about the release. Mary did confide that sometimes, after a hard rain, she used to smell a “sweet” smell; but she hasn’t smelled it for several years.

Rich’s Service Station Site History

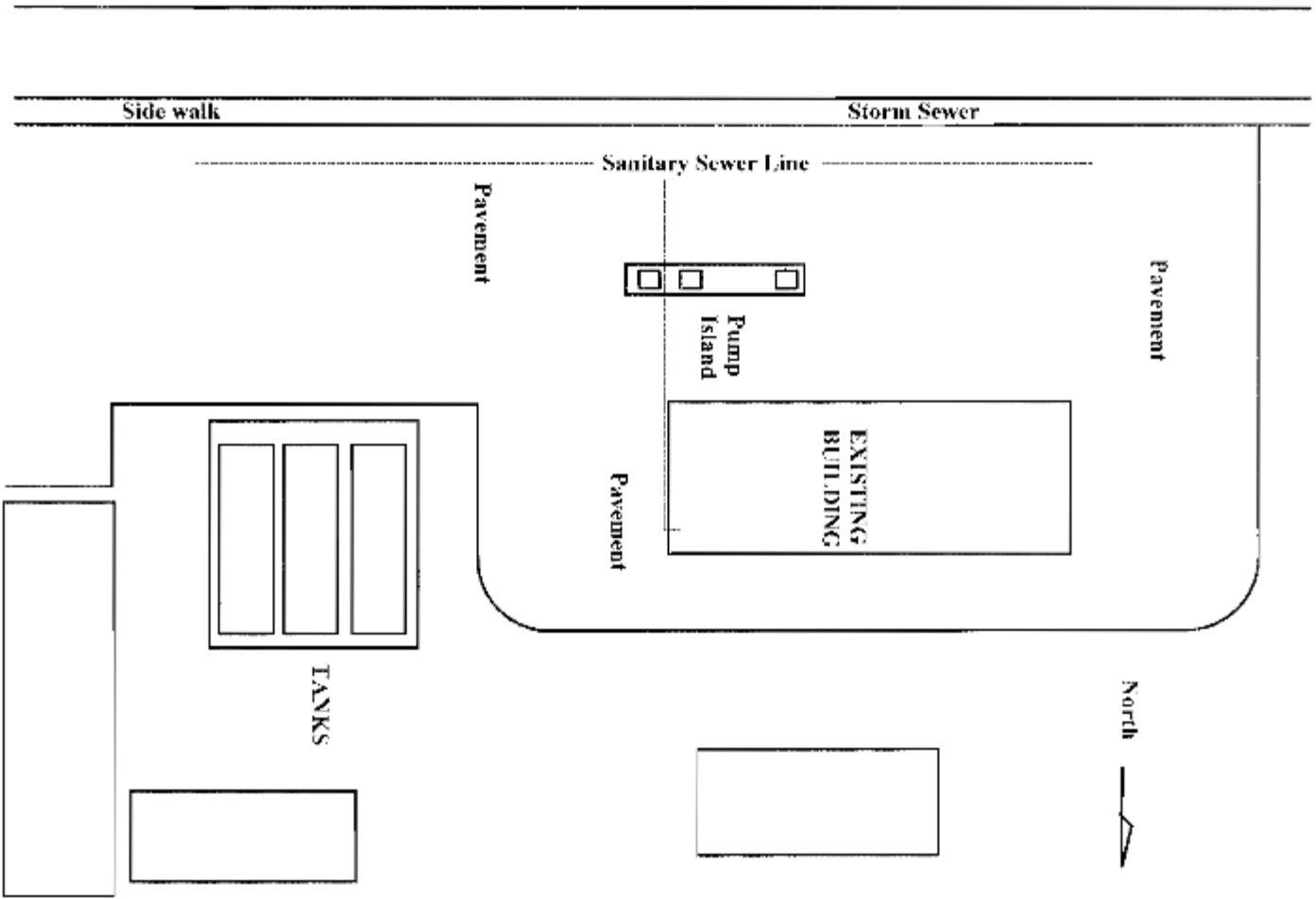
- OER issued Leak #11-2X and required a full site investigation and corrective action plan

**Rich's Service Station
Site History**

- Site Assessment Considerations:
 1. Work Plan?
 2. Chemicals of Concern
 3. Critical Site Features
 4. Data Deliverable Requirements

- Corrective Action Scenarios
- LUST Cleanup Levels
- Corrective Action Guidance Document (CAGD) - <http://www.dep.wv.gov/dlr/oer/lustmain/Documents/CAGD%20LT.pdf>
- Update?

**Rich's Service Station
Closure Via LUST Enforcement Path**



- Site Assessment Considerations:

1. Work Plan?
2. Chemicals of Concern
3. Critical Site Features
4. Data Deliverable Requirements

- Remedial Action Scenarios

- UECA Cleanup Levels

- UECA -

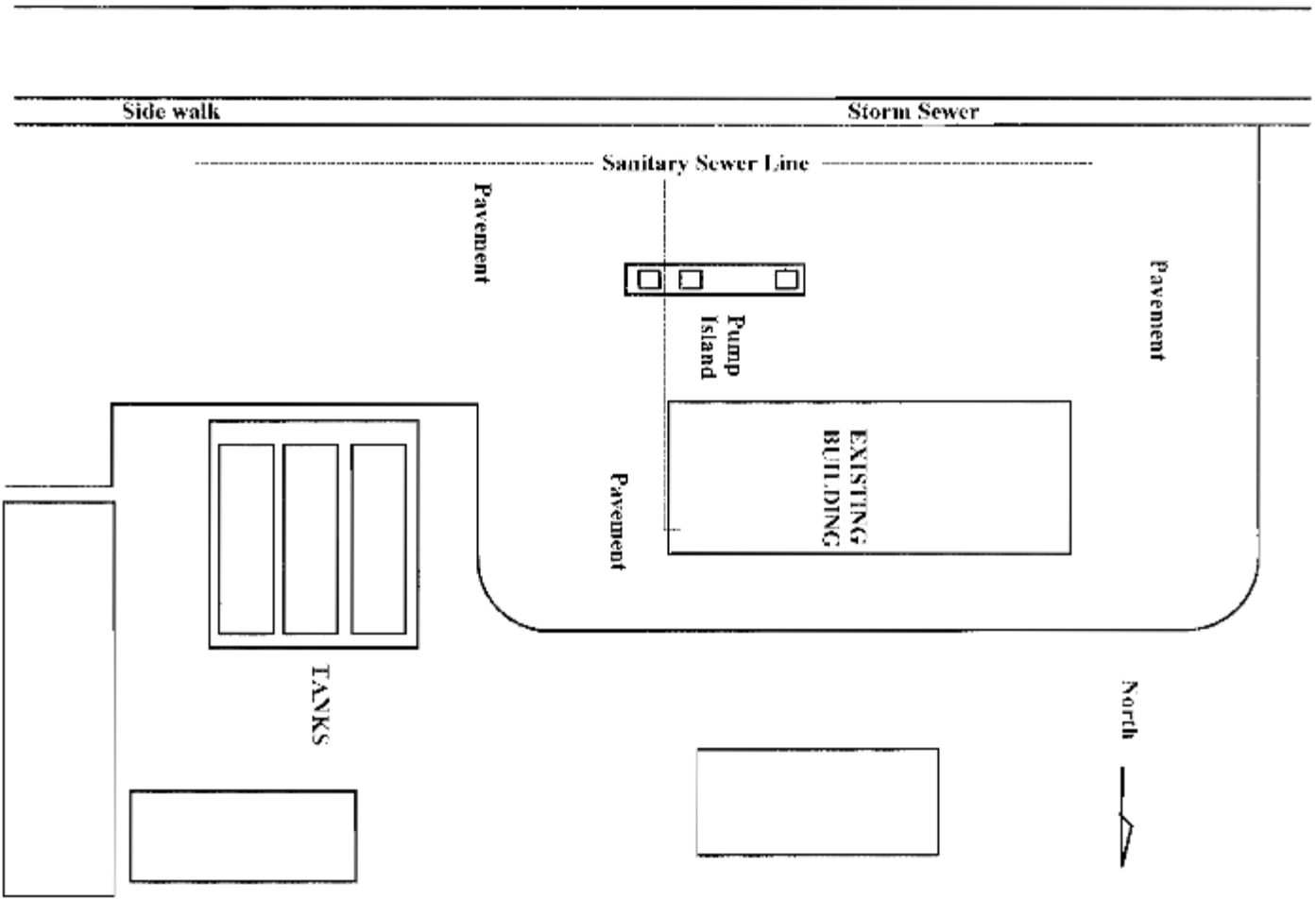
<http://www.dep.wv.gov/dlr/oer/lustmain/Documents/Chapter%2022-22B%20UECA.pdf>

- Petroleum RA User Guide -

<http://www.dep.wv.gov/dlr/oer/lustmain/Documents/Risk%20Assessment%20Guide%20for%20Petroleum.pdf>

Rich's Service Station

Closure Via LUST-Uniform Environmental Covenant Act (UECA) Path



- Site Assessment Considerations:
 1. Work Plan?
 2. Chemicals of Concern
 3. Critical Site Features
 4. Data Deliverable Requirements

- Remedial Action Scenarios
- VRP Cleanup Levels (Table 60-2B) – De Minimis
<http://www.dep.wv.gov/dlr/oer/voluntarymain/Documents/deminimis%20table%20from%2060%20CSR%203%20VRRRA%20rule%206-5-09.pdf>
- a) VRRRA Guidance Manual -
<http://www.dep.wv.gov/dlr/oer/voluntarymain/Documents/VRRRA%20GuidanceVersion2-1.pdf>

Rich's Service Station
Closure Via Voluntary Remediation Program (VRP)

