



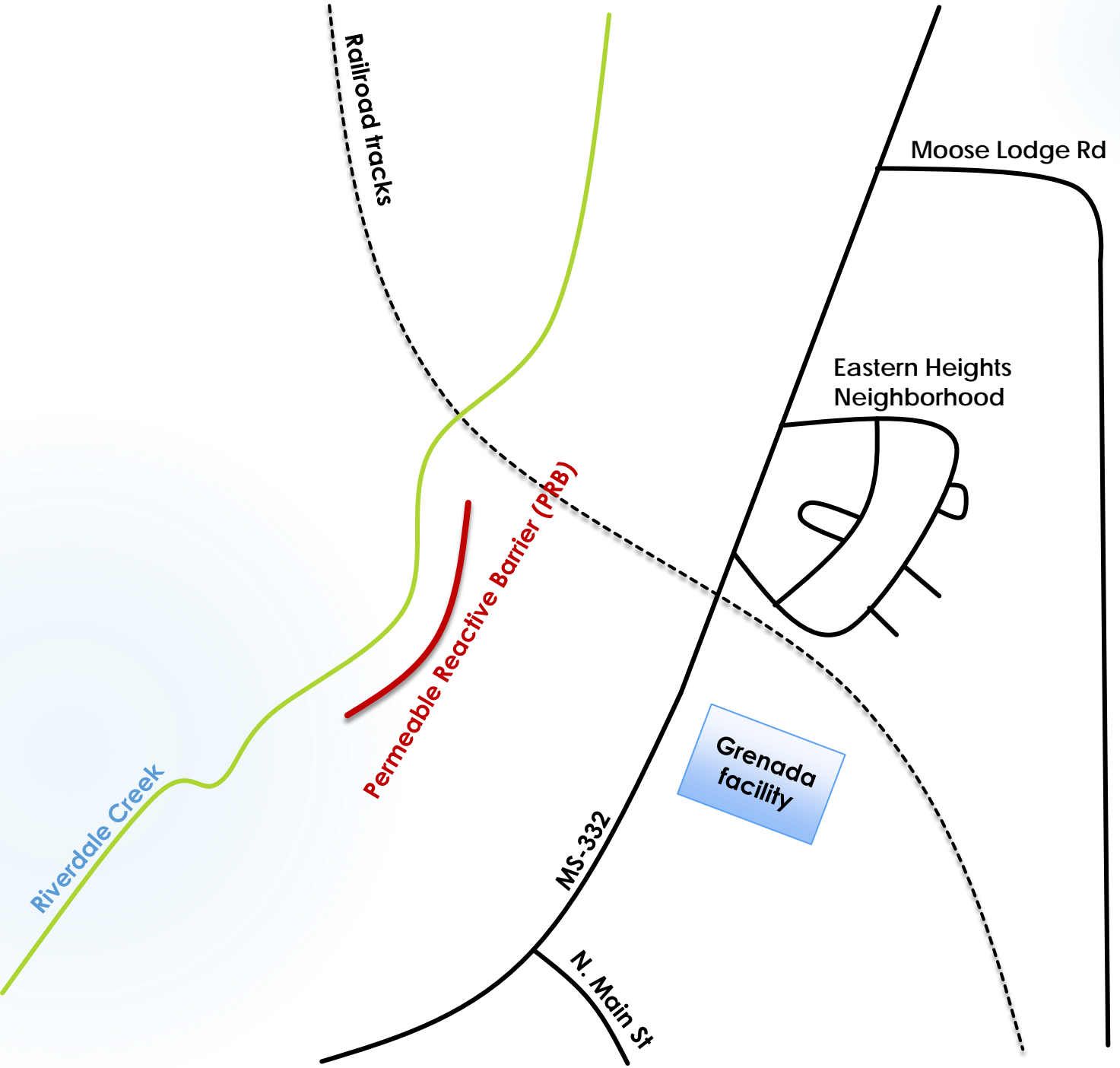
Grenada Manufacturing, LLC Grenada, Mississippi

PUBLIC MEETING

REGION 4 ENVIRONMENTAL PROTECTION AGENCY

RESOURCE CONSERVATION AND RESTORATION DIVISION

JANUARY 26TH, 2016



Background

Initial vapor intrusion (VI) sampling conducted during September/October 2015

Sampling included soil gas, sub-slab air, indoor air, ambient air, and groundwater

Samples were collected from six homes in the Eastern Heights subdivision and at 10 groundwater locations

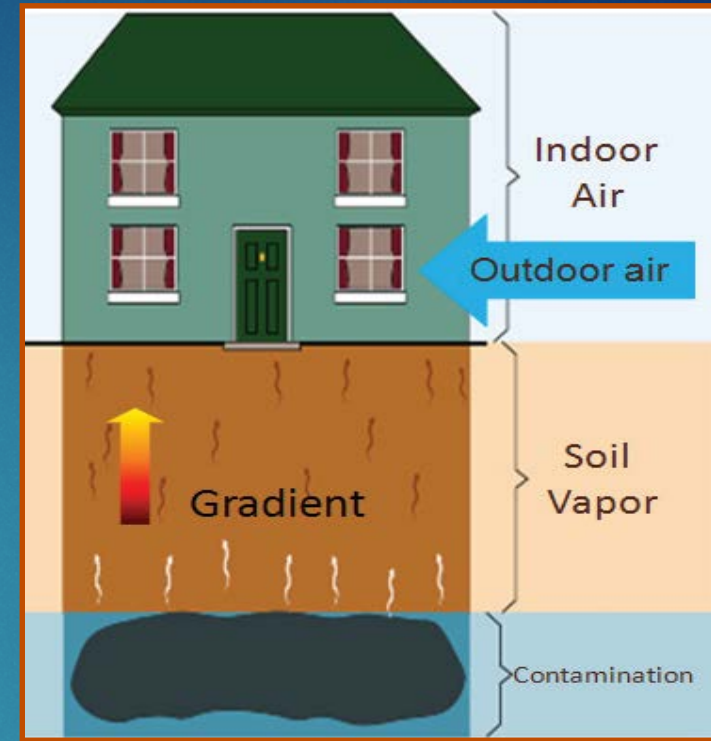
VI sampling in the homes was necessary to evaluate whether TCE may be entering structures in the form of a gas (or vapor) from contamination below ground (referred to as "vapor intrusion")



Vapor Intrusion

“Vapor intrusion” is the movement of chemicals in the soil or groundwater that become a gas easily and can travel into the indoor air of overlying buildings through joints, cracks in the foundation, around pipes, or through a sump or drain system.

These chemicals include those called volatile organic compounds (VOCs), such as trichloroethylene (TCE), which is a contaminant at the Grenada Manufacturing, LLC site.



Results (Indoor Air and Sub-Slab Air)

EPA has determined that there is **no immediate concern** for public health, but that additional investigations are needed.

The results from the sampling inside the homes detected TCE above screening levels but below levels that require a response action.

Results (Ambient Air)

TCE was also detected at similar levels in the outdoor (ambient) air near the six residences.

Results (Groundwater)

Groundwater samples were collected at 10 locations throughout the Eastern Heights neighborhood.

The results showed TCE contamination in the groundwater at 15 to 50 feet below ground surface (generally within the southern part of the neighborhood).



What do the results mean?

Initial air sampling indicates that TCE does not appear to be entering homes in the form of a gas from contaminated groundwater below the homes.

Results suggest that there may be an unknown source that is releasing low levels of TCE into the ambient air, which is being detected within indoor air as well.

However, additional vapor intrusion samples inside the homes will be collected to confirm this observation.

What do the results mean?

Groundwater sampling results show that there is contaminated groundwater in the southern portion of the Eastern Heights neighborhood.

As a precautionary measure, EPA will be seeking access to more homes for inclusion in a second investigation to evaluate whether TCE may be entering those homes in the form of a gas from this contaminated groundwater.

Next Steps:

Additional VI Sampling in Homes:

- Vapor intrusion sampling will be necessary in the neighborhood to ensure groundwater contamination is not migrating to indoor air.
- Multiple rounds of vapor intrusion sampling inside of homes in the Eastern Heights neighborhood may be required over time.
- EPA plans to conduct the next round of vapor intrusion sampling (sub-slab and indoor/ambient air) at the six original homes to confirm previous results.
- EPA plans to seek access to additional homes in the southern part of the neighborhood to also include in the next round of vapor intrusion sampling.

Next Steps:

Ambient Air Investigation:

- Outdoor (ambient) air sampling was conducted in mid-January in the neighborhood, at the nearby facility, and in the surrounding area to identify any sources of the low levels of TCE in the outdoor air.
- Additional ambient air sampling may occur in the next few months.

Next Steps:

Treatment/Cleanup Plan for the Groundwater:

- EPA has directed the responsible parties (RPs) to develop a strategy for controlling and treating the contaminated groundwater under the neighborhood in order to remediate the groundwater.
- EPA may also need access to additional homes to collect groundwater samples in order to complete the delineation of the groundwater contamination in the Eastern Heights neighborhood.
- EPA will continue to work with the RPs to address the on-site groundwater remedy (permeable reactive barrier, PRB) and other issues.

Next Steps:

- EPA will continue to coordinate with the MS Department of Environmental Quality and the MS Department of Health on all environmental issues in the area.
- EPA will continue to coordinate with the Agency for Toxic Substances and Disease Registry (ATSDR) on health-related issues.

Next Steps:



- EPA will continue its enhanced outreach with the community to provide updates and environmental sampling results. EPA will use fact sheets, availability sessions, public meetings, in-person meetings, and telephone communication.
- The next Public Meeting will be planned when EPA has received new results from the ongoing Vapor Intrusion investigation, future ambient air sampling results, and updates regarding the environmental study (which includes both onsite and offsite groundwater).