

Project: 5468 Honnert, OH Oil Spill Clean-up

HALLWAY WITH OIL TANK AND ENCLOSURE (NOVEMBER 2005)

This picture is taken before we purchased the property. The house is built on a slab foundation. There was a fuel oil furnace located on the left side of this hallway. The oil tank was behind this enclosure on the right side of the hallway. It appears to have originally been *outside* the house, and then it was enclosed when an addition to the original house was made. Note the small 1 foot square opening on the enclosure. This is the window the owner would look through to observe the fuel level of the tank. The oil spill occurred when he did not notify the person filling from the truck that the tank was full. See the EPA report for details on this spill and the so-called clean-up.



AFTER INITIAL RENOVATION OF HALLWAY (MARCH 2006)

This is a photograph from the same end of the hallway after renovations were made before we moved to the house in March 2006. The oil tank was removed. The vapor affected drop ceiling and drywall/insulation in the entire hallway was replaced. A door was installed to the exterior of the house where the oil tank used to be and oil affected wood was removed. The floor of the hallway was skim coated with concrete and a 6 mil plastic vapor barrier was put down under the wood laminate. Note: there was no smell of oil whatsoever for the first month or so. Then the oil vapor began to emerge from the corner of the hallway, underneath the door to the exterior, especially on rainy days. This is the lowest point in the floor, where the oil would have flowed and where the concrete slab of the hallway meets an interior cinder block wall (originally an exterior wall of the house but subsequently enclosed). The house was closed without ventilation for a week at the end of June and when we returned the oil smell was noxious throughout the house.



OUTSIDE DURING DIGGING

Siding was removed at the bottom of the house in the oil spill location and oil saturated wood was removed. Oily dirt was removed. VaporRemed was sprayed in this area and onto the concrete floor inside, but the odor remained. Holes were drilled into the cinder block outside the house and into the concrete slab inside the house. Gallons of VaporRemed were sprayed in both, but the oil smell returned through the floor and from the cinder blocks. This led to taking up the concrete slab of the hallway.



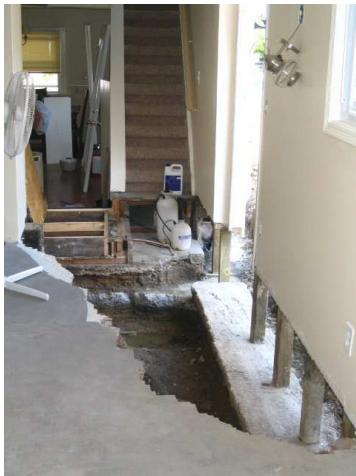
HALLWAY DURING DIGGING

These photos show an early stage of demolition and oil removal. The landing at the bottom of the stairs was removed and concrete/cinders/dirt was taken out by hand. VaporRemed was used during the process to keep the oil vapor from contaminating other areas of the house. Note the hollows of the cinder block at the end of the hallway. This was a low spot that the oil seeped towards. At this point the hope was that dirt could be removed and VaporRemed sprayed into the exterior cinder block foundation wall from both sides to deal with the problem. This proved unsuccessful, and about 12-14 feet of the exterior cinder block foundation wall and 10-12 feet of the interior cinder block foundation wall had to be removed.



CONTAMINATED SOIL AND CINDER BLOCK REMOVED

The oil-saturated dirt was a greenish-gray color, in contrast to the brown that is visible in these photos. It emitted an extremely strong, sweet odor. Here you can see the cinder block foundation wall removed and contaminated soil removed below the level of the footer. The bottom photo shows the hole of about four feet in depth and the interior cinder block wall that still needed removed. This required removing the kitchen floor and one wall of the kitchen. VaporRemed was utilized again when all the contaminated areas were extracted. There was an oil odor, though significantly diminished, even after removal of the dirt and cinder block. Thanks to VaporRemed, though, even this slight odor disappeared and did not return.



NEW FOOTER-DRAIN IRRIGATION SYSTEM INSTALLED

When the EPA treated the problem in March of 2005, then simply dug up some soil at the side of the house and blocked the old clay drain tile to prevent any oil seeping into the storm drain system which led to a creek ½ mile away. This creek is where the oil was first detected by neighbors. This created a new problem—water sitting alongside the house, right where the oil spill occurred, with nowhere to go but under the slab foundation and into the cinder block foundation wall. These photos show the new irrigation. Note in the bottom photo the perforated black pipe that connects the outside system to the inside of the house, in the hole where the oil affected dirt was removed. IF there was any future residual odor that surfaced under the hallway, it would rise through the fill gravel to the plastic vapor barriers and follow the perforated pipe outside.

