

SITE REMEDIATION UPDATE OCTOBER 21, 2010

PARCEL 76

7 UHOTS REMOVED AND 5 OF THEM LEAKED



PARCEL 76

SUMMARY OF WORK COMPLETED
SINCE LAST RAB MEETING

PARCEL 76-16/BUILDING 538

1000-Gallon UHOT removed on 12/28/09.



PARCEL 76-16/BUILDING 538

The UHOT leaked and the excavation was remediated on the east, north, and west sides.



PARCEL 76-16/BUILDING 538

The temporary lift station had to be relocated before the south side of the excavation could be remediated.



PARCEL 76-16/BUILDING 538

Used a Geoprobe to collect samples on the south and southeast sides of excavation to delineate contamination.



PARCEL 76-16/BUILDING 538

Soil boring locations on southeast side.



PARCEL 76-16/BUILDING 538

Installed a temporary 2' sewer by-pass on the southeast side of the excavation



PARCEL 76-16/BUILDING 538

Tied 2" by-pass into the existing 6" line using a reducer.



PARCEL 76-16/BUILDING 538

Dismantled the sections of the 6" by-pass on the south side of the excavation.



PARCEL 76-16/BUILDING 538

Excavated over burden soil on the south side of the site.



PARCEL 76-16/BUILDING 538

Exposed terra cotta sewer line and removed adjacent petroleum contaminated soil.



PARCEL 76-16/BUILDING 538

Activated 2" by-pass, removed terra cotta sewer line and petroleum contaminated soil, and collected post excavation samples.



PARCEL 76-16/BUILDING 538

Installing new 18" schedule 40 PVC sewer pipe.



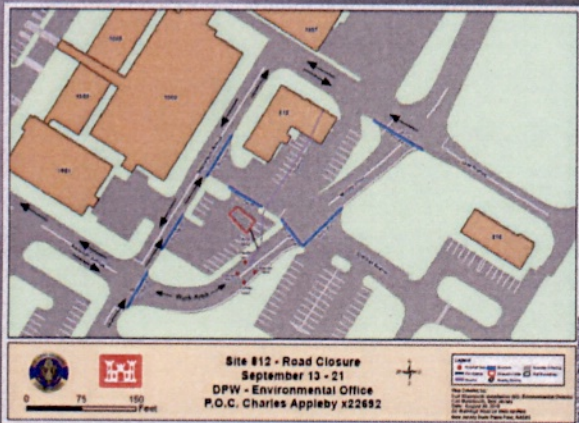
PARCEL 76-16/BUILDING 538

Backfilled excavation with certified clean bank run sand and applied topsoil and seed to the area. The entire site was hydro-seeded at the end of September.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

An historic rail line ran along Razor Avenue, between Bldgs. 1007 and 976. Fuel was delivered from the tanker cars on this line using a remote fill pipe. The pipe and the contamination was remediated up to the north side of Building 812 when the Commissary (Bldg. 1007) was built in 1997. This project addressed the pipe and pump island dispenser on the south side of Bldg. 812.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Exposed dispenser island concrete located in Building 812 parking lot.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Removing concrete dispenser island.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Removing dispenser island piping.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Pipes removed from dispenser island excavation.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Oxygen Release Compound (ORC) was applied to the excavation to help remediate any residual contamination. This product contains magnesium peroxide, that when mixed with water releases oxygen. The oxygen assists naturally occurring microorganisms in degrading hydrocarbons into harmless CO₂ & water.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Applying ORC.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

ORC in excavation.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Proposed remote fill pipe excavation. Pipe was located using a metal detector.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Excavating remote fill pipe. It was a 3" steel pipe with a bituminous coating.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The pipe was removed from the excavation and a sample was collected every 15 linear feet from beneath the pipe.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The remote fill pipe went under the eastern portion of Building 812.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The pipe ended on the north side of Building 812.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The pipe could not be pulled out from beneath the building without causing structural damage. In order to leave it in place we had to prove it did not leak by performing a pressure test. Here you can see one end of the pipe was plugged.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The other end of the pipe was pressurized using an air compressor. A gauge was added to the end of the pipe to read the pressure. The pipe was left pressurized for 72 hours and no leaks were noted.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

After the pressure test, both ends of the pipe were sealed with concrete and the trench was backfilled.



**BUILDING 812 REMOTE FILL PIPE AND PUMP
ISLAND SITE**

Sealed pipe.



**BUILDING 812 REMOTE FILL PIPE AND PUMP
ISLAND SITE**

The remote fill lines continued passed the pump island and into
Murphy Drive.



**BUILDING 812 REMOTE FILL PIPE AND PUMP
ISLAND SITE**

Abandoned fuel lines found in Murphy Drive.



**BUILDING 812 REMOTE FILL PIPE AND PUMP
ISLAND SITE**

Remote fill line in Murphy Drive



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

A hole was observed in the remote fill pipe in Murphy Drive. Petroleum contaminated soil was excavated from the area prior to sampling.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

There was a 90 degree turn and pipe lead back to the Building 812 parking lot. The end of the pipe was cut and pinched off under the curb line.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

After the pipe and contaminated soils were removed the excavation was backfilled with bank run sand and a road base was applied.



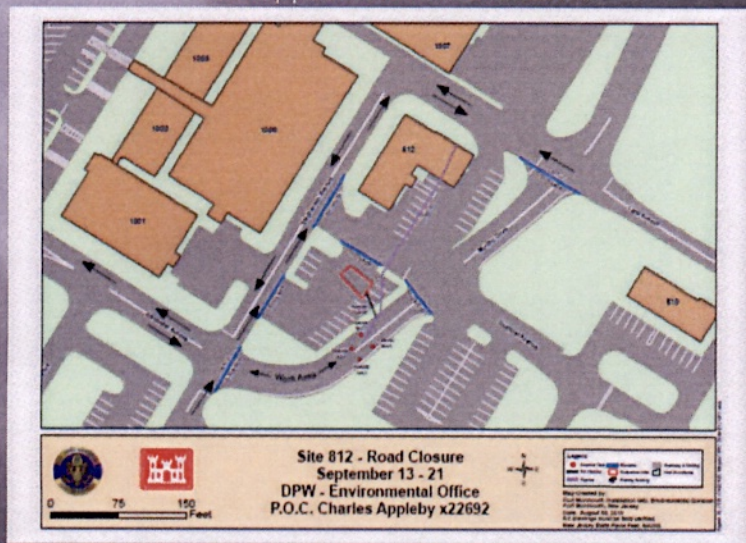
BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

The black top was applied and the road was re-opened.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Test pits were dug on the south side of Murphy Drive to confirm that the pipes did not continue to another site.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Test pit adjacent to Building 1075.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Test pit adjacent to Guardrail Avenue



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Additional debris and contamination was found on the south side of the pump island. This may be where the USTs were located. We are continuing with remediating this section of the site.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Two sets of tank straps and concrete UST cradles were found in the excavation.



BUILDING 812 REMOTE FILL PIPE AND PUMP ISLAND SITE

Approximately 100 cubic yards of petroleum contaminated soil has been excavated from the site to date. Once cleaned up additional ORC will be applied to the area prior to backfilling.



QUESTIONS ???

