Site Investigation Report Review

SIRR Report for Unassigned Uncontrolled Sites

CON 12-15
Doc #12274

SIRR ID P77-0110

Site Name WALMART SUPERCENTER(AKA EAST GATE)

Screening Activity Initial Site Screening

City Location Des Moines

Site Type Property Audit

County Polk

SITE INFORMATION

Property Owner Eastgate Property Development

Mailing Address 75 NE 6th Ave. Suite 103
Delray Beach Florida 33483

Location/Legal Description Northeast corner of east 14th Street and East Euclid Ave.

Size Of Property 20.5 acres

Report Prepared By SCI Engineering

Date Report Submitted 12/07/2004

Report Submitted By Pauly Environmental

Current Usage vacant

REPORT INFORMATION SUMMARY

I. Summarize the data submitted (no., type, depth of soil borings, surface samples, ground water samples, other sampling conducted, analyses performed, contamination identified, etc.)

Forty-nine soil borings were completed to depths ranging from 20 to 40 feet in the vicinity of five recognized environmental areas of concern (RECs) that were identified from the Phase I site survey. These areas include, an historic landfill, former dry cleaner, former printing, former gas station, and current automotive repair facility. Ten of the soil borings were completed as monitoring wells in order to characterize ground water conditions related to the listed RECs. The soil and ground water samples were tested for the following contaminants utilizing appropriate USEPA approved method, RCRA metals by method 1060/7470, Volatile Organic Compounds (VOCs) by EPA method 8260B, PCBs by EPA method 8082 and base neutral compounds by EPA method 8270.

Results of soil analysis detected six VOCs including Cis-1,2, DCE, PCE, TCE, 1,2,4 trimethylbenzene, 1,3,5 trimethylbenzene, and benzene. One base neutral compound (Bis(2-ethylhexyl) phthalate was detected. All RCRA metals were detected in one or more soil samples all but one (arsenic) did not exceed the ILRP standards.

Results for groundwater analysis detected five VOCs in only one soil boring (B-11) that exceeded the statewide standards for Cis 1,2 DCE, PCE, and vinyl chloride. Also, in ground water multiple exceedances occur for mercury, arsenic, barium, cadmium, chromium and lead in unfiltered samples. Unfiltered ground water samples have an historic tendency for elevated (metals) detection that would otherwise not be available through the (drinking) water pathway.

Site Investigation Report Review

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II. Summarize the site history (past usages, known or suspected contamination pathways such as tanks, S.W. burial, septic tank/tile field, lagoon, land application, etc.)

The subject property has a long history of varied commercial use including three LUST sites (all of which have received certificates of no further action (NFA). Also, a municipal landfill operated on the subject property until 1965. No records of material disposed at the landfill are available. The Phase II boring logs indicate five to ten feet of fill material in several locations.

III. Summarize the other relevant information (include what may have been learned or known from sources other than the report itself, such as DNR files)

For further information consult LUST files: 9LTG53 (former Pester Station), 9LTH19 and 9LTJ37 (former Taco Bell/ Gas station).

REVIEW SUMMARY

Contaminant Type Other

I. Summarize your findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values known criteria such as water quality standards, MCLs, established cleanup levels, background or any other relevant or useful benchmarks used to determine the site's priority.

The (VOCs and BNAs) soil contamination at this site is generally localized and at levels below the established LRP standards. One metal (arsenic) was detected at several locations above the statewide standard of 1.4 PPM. The range of arsenic concentration ranges from 2.5 PPM to 17 PPM, with most of the detections falling in a range that is typical for Iowa soils.

In ground water, three VOCs are detected in only three borings out of 10 and at concentrations that are less than one order of magnitude above standards. Although several RCRA metals are detected at two orders of magnitude above LRP standards, this is likely because the samples are from unfiltered ground water and it is doubtful that these concentrations would be detected in filtered samples.

II. Summarize the potential or actual impacts of the contamination. What is known about the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there wells in the area that could be potentially impacted? Are there identified contaminant pathways such as water or sewer lines, drain tiles, or fissures? Identify any other use/location issues that deserve consideration in any priority assignment.

The actual impact from metals in soil at this site is generally scattered, with contaminant concentrations at or just above established LRP standards for most metals with the exception of arsenic which was detected above the state standards in 10 of 49 sample locations indicating a general site wide presence of the metal. The potential impact to public health or the environment through the soil pathway to contaminants detected in soil is low. The actual impact to ground water from VOCs is isolated (three out of 10 locations) but somewhat wider for the metals including arsenic, cadmium, chromium barium and lead with detections above state standards at 10 of 49 sample locations. The potential for impacts to ground water or the environment through the ground water pathway, however, is also low as there are no wells in the area or other pathways of exposure to ground water in the area.

III. Summarize any other information, knowledge, or reasoning used in determining your recommendation regarding the priority assigned to this site.

Recommend priority three (3) based on limited extent of contamination with relatively low concentrations of VOCs and metals that do not pose a threat via the soil, ground water or air pathways.

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This site is related to the East Gate shopping Mall site and was investigated by EPA in the 1980's and NFRAPed. No ISS is to be completed for this site since it was investigated previously.

PRIORITY LEVEL

Priority Level No Priority

PROGRAM AUTHORITY REFERRAL

Program Authority Referral No Further Action

Other Referral

ISS/Form Completed By

Date ISS Completed

ESS Completed B

Date ESS Completed

Date Completed

Form Reviewed

Date Reviewed