

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of )  
)  
**Euclid of Virginia, Inc.** )  
4225 Connecticut Ave. NW ) **RCRA (3008) Appeal No. 06-05**  
Washington, DC 20008 )  
)  
Docket No. RCRA-3-2002-0303 )

**MOTION TO REOPEN THE PROCEEDINGS BELOW  
FOR THE PURPOSE OF RECEIVING  
NEWLY-DISCOVERED EVIDENCE**

Comes now the Respondent, through undersigned legal counsel moves this Tribunal to reopen the proceedings below for the limited purpose of evaluating newly discovered evidence as follows:

1. By way of an article in the *Washington Post* in the Metro Section of August 31, 2007 (copy attached), Respondent for the first time discovered evidence which is highly relevant to further proceedings in this matter.
2. This evidence consists of a Statement of Basis promulgated by Complainant in a really an unrelated case. This statement was promulgated on August 30, 2007. A copy is attached to this motion.
3. In this Statement of Basis, the Complainant, Environmental Protection Agency, evaluates a situation involving a service station not owned or operated by the Respondent in this case. That evaluation involves a situation where there was a leaking underground storage tank in Maryland at the corner of Chillum Rd. and Eastern Avenue just over the District of Columbia line. This underground storage tank leak was discovered in 1989, and has been leaking or under remediation for more than 18 years.

4. As a result of this leak, a plume of gasoline and other related chemicals such as benzene and MTBE migrated under a neighborhood in the District of Columbia consisting of approximately 500 homes.

5. Remediation at this site has been ongoing through the 1990s to the present.

6. The relevance of this evidence to the existing matter is as follows. After an extensive analysis, as detailed in the Statement of Basis, Complainant EPA ascertained that this significant release of gasoline into the environment in Maryland and the District of Columbia had a "major impact" on only five houses out of approximately 500 houses in the neighborhood where the underground plume of gasoline had migrated.

7. In the instant case under appeal the Complainant has asserted, for purposes of computing the relative levels of penalty applicable, that the alleged violations by the Respondent had a significant impact on the environment; specifically, "major major" and "major moderate" and other enhanced levels of environmental impact<sup>1</sup>.

8. The classification of these impacts was based solely on expert reports, admitted into evidence by consent, which detail only hypothetical impacts that a release of gasoline into the environment by Respondent stations might cause in the unlikely event of an undetected leak. In the proceedings below, there is absolutely no data in the record as to what would be the impact of any actual release by any Respondent stations or any similar gasoline service stations in the same geographical area. One reason for this lack of data is that there is no available comprehensive evaluation of any leaking

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<sup>1</sup> Without exception, the enhanced alleged levels of hypothetical environmental impact were accepted by the Tribunal below, and the penalty imposed below was based on the tables developed by the EPA to evaluate major impacts on the environment.

gasoline service station tanks in the geographic area in which the Respondent operates.

9. Moreover, with the exception of a 1 gallon release caused by a customer overfilling his tank at one of Respondents gasoline stations, which was immediately cleaned up, there is no evidence whatsoever of any release of any controlled substance into the environment occurring at any Respondent's facilities<sup>2</sup>.

10. Prior to the issuance by Complainant of the August 30, 2007 Statement of Basis, there was no data available anywhere on the effect of actual releases of gasoline from a gasoline service station into the environment in the Maryland and District of Columbia geographic area.

11. Contrary to the assertions by the Complainant in the tribunal below, the actual release of tens of thousands of gallons of gasoline<sup>3</sup> into the environment over a period of decades has an environmental impact which requires remediation of only five residences even though there are hundreds of residences located directly above the plume of gasoline from the Chillum leak.

12. In the tribunal below, the Respondent argued that there was no evidence tending to show any particular environmental impact which was directly related to the alleged violations. All the relevant violations consisted of the alleged failure of the Respondent to properly monitor tanks and lines in a manner which is now acceptable to

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<sup>2</sup> There was a release of a controlled substance by Complainant's expert, who, during Complainant's investigation leading up to this case, pumped water out of a containment sump which was part of the gasoline dispenser piping at one of the sites, but this release was ignored by the tribunal below. Water in a containment sump must be removed by a licensed contractor because of the possibility that may be contaminated with gasoline or other controlled substances.

<sup>3</sup> To-date, there has been almost 5,000 of free product (gasoline) pumped out of the ground related to the leak.

the Complainant. The Statement of Basis, and the investigatory methodology and documentation which supports the Statement of Basis, should be made a part of the record in this case to bring actual controlled substance release data sufficient to permit the Tribunal to differentiate between major impacts and minor impacts of leaks of gasoline from service stations. This Statement of Basis report is highly relevant because the penalty imposed upon the Respondent was excessive exclusively due to the rating of the alleged violations as having a "major impact" or some kind of an enhanced impact, even though there was no release of controlled substance proven in the case below.

13. If a release of gasoline of the magnitude involved described in the Statement of Basis impacts only five homes in the actual relevant geographical area where the Respondent's facilities are located, there is no justification for classifying the Respondent's alleged violations as having a "major impact" on the environment, even if these violations are ultimately upheld, which is disputed as set forth in the brief<sup>4</sup>.

14. In the record below, in the Post-Hearing Briefs, Respondent recomputed the penalties assuming that Respondent was responsible for all of the alleged violations. Upon recomputing those penalties, it appears that the total penalty in this case would be approximately \$100,000 if the alleged violations are properly characterized as low to moderate impact.

**WHEREFORE**, Respondent requests that the proceedings below be re-opened to permit Respondent to review the actual impact on the environment of releases of

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<sup>4</sup> Complainant's position in the Statement of Basis is that the remaining gasoline in the soil from this leak will dissipate due to oxidation and other chemical reactions which will render the gasoline inert. While a plume of gasoline from a leak obviously has a significant impact on the environment, this does not compare with the impact attributed to Respondent's alleged violations.

significant amounts of gasoline leaking from a gasoline service station in the relevant area, compared to the violations charged by the Complainant.

Respectfully submitted,  
DeCaro & Howell, PC



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Thomas F. DeCaro, Jr.  
Attorneys for Respondent  
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Upper Marlboro, MD 20772  
301-464-1400

### **CERTIFICATE OF SERVICE**

I, Thomas F. DeCaro, Jr. do hereby certify that on September 7, 2007, I did mail, via first-class mail, postage prepaid, a copy of the foregoing Motion to Reopen to:

Benjamin D. Fields  
Senior Assistant Regional Counsel  
Mail Code 3RC30  
US EPA - Region III  
1650 Arch St.  
Philadelphia, PA 19103-2029



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Thomas F. DeCaro, Jr.

# Md. Gasoline That Leaked Into D.C. Set For Cleanup

By DAVID A. FAHRENTHOLD  
*Washington Post Staff Writer*

The Environmental Protection Agency announced plans yesterday to clean up gasoline that leaked from an underground storage tank and accumulated under a Northeast Washington neighborhood, causing strange smells and concerns about health problems.

The leak came from a tank at a gas station along Eastern Avenue in Chillum and lasted for years. In 2001, it was discovered that the spilled gas extended into the Riggs Park neighborhood in the District, creating a "plume" of gasoline underground that the EPA estimates is 1,400 feet long.

Yesterday, that agency said up to five homes in the neighborhood showed signs that gasoline va-

por might have seeped into living spaces. But a mid-Atlantic EPA official said tests indicate no danger.

"There are no houses that present an immediate health threat," said Bob Greaves, an official who oversees remediation efforts.

The cleanup plan proposed by the EPA will include new systems in some homes' basements to block gasoline vapors.

Greaves said the agency also proposed sinking at least one well near the gas station to pump out contaminated groundwater before it reaches the District.

He said it was not necessary to pump out gasoline that had seeped into the neighborhood because it would eventually decompose.

The cleanup would be paid for by Chevron, which owned the gas station for many years, Greaves said.

The plan was derided yesterday by Cleo Holmes, a resident of the neighborhood who has been outspoken about the gasoline leak. Neighbors had complained of a gasoline smell in their homes for years before the leak was officially acknowledged.

"It's not a plan. It's a failure," Holmes said. "It does nothing to remediate the gasoline that's already on the D.C. side of the street."

Meetings about the plan will be held Thursday, Holmes said. EPA officials will be available to answer questions from 4 to 6 p.m. at LaSalle Elementary School, 501 Riggs Rd. NE, that day. A public hearing at the school will follow from 6:30 to 9 p.m.

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**STATEMENT OF BASIS**

**Chevron Gasoline Release**

**At Chillum, Maryland**

**August 30, 2007**

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## I. INTRODUCTION

This Statement of Basis (SB) explains the United States Environmental Protection Agency's (EPA's) proposed remedy for the gasoline release originating from the gas station formerly owned by Chevron U.S.A. Inc. (Chevron) and located at 5801 Riggs Road in Chillum, Prince George's County, Maryland (the Facility) under the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6901 to 6939(e) (RCRA). After reviewing extensive groundwater, soil vapor, and indoor air sampling data generated by EPA, Chevron and the District of Columbia (District), EPA is proposing as the remedy for the Facility the expansion of the existing groundwater remediation system, the installation of vapor mitigation systems in homes impacted by subsurface vapor intrusion, and the implementation of institutional controls.

The purpose of this document is to solicit public comment on EPA's proposed remedy prior to making its final remedy selection for the Facility. The information presented in this SB can be found in greater detail in the work plans and reports submitted by the Facility to EPA, the District Department of Health (DOH), and the Maryland Department of Environment (MDE). To gain a more comprehensive understanding of the RCRA activities that have been conducted at the Facility, EPA encourages the public to review these documents which are found in the Administrative Record. The Administrative Record and index are available for public review at the EPA Region III Office in Philadelphia and the Lamond Riggs Branch Library located on 5401 South Dakota Avenue, N.E., Washington, D.C.

The public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record and submitting written comments to EPA during the public comment period. Public participation is discussed in further detail in Section X, below. EPA will address all significant comments submitted in response to the proposed remedy described in this SB. EPA will make a final remedy decision and issue a Final Decision and Response to Comments after it considers information submitted during the public comment period. If EPA determines that new information or public comments warrant a modification to the proposed remedy, EPA may modify the proposed remedy or select other alternatives based on such new information and/or public comments.

## II. FACILITY BACKGROUND

The Facility is located at the eastern corner of the intersection of Eastern Avenue and Riggs Road in Chillum, Maryland. The north side of the right-of-way of Eastern Avenue delineates the boundary between Prince George's County, Maryland and the District. The southern extent of the Facility property abuts the District.

Gulf Oil Corporation (Gulf) constructed a service station on the Facility property on or about 1954. Standard Oil Company of California merged with Gulf in 1984, and after restructuring, changed its name to Chevron. Chevron owned and operated the Facility until it was sold to an independent owner in 1993.

an independent indoor air sampling effort, based on voluntary participation by the Riggs Park residents. During that investigation, DOH collected indoor air data from 97 homes in Riggs Park bounded geographically by four streets: Kennedy Street, Madison Street, Eastern Avenue, and Riggs Road. While EPA's proposed remedy does not address the DOH or PERC investigation, EPA has relied on data collected by both investigations to support its proposed remedy for the Facility.

Based on soil, soil vapor, indoor air and groundwater data collected through September 2005, EPA has delineated a shallow benzene plume and a shallow methyl tertiary-butyl ether (MTBE) plume as shown in Figures 2 and 3. The shallow benzene plume extends approximately 700 feet from the Facility into the District, and the shallow MTBE plume is about twice as long, extending about 1400 feet from the Facility into the District. For the purposes of this SB, the combined maximum boundary of both plumes will be referred to as the gasoline plume.

The primary direction of groundwater movement from the Facility is towards the southeast as evidenced by the southeasterly orientation of the plume that crosses the Maryland State line into the District. A clay body in the middle of Riggs Park has divided the plume into two lobes. Since the Riggs Park is serviced by public water and there are no known private groundwater wells in Riggs Park, there is no human health threat associated with consumptive uses of the contaminated groundwater. The primary health concern is that vapor can volatilize from the plume and migrate vertically through soil into basements through cracks, joints and utilities openings. This effect is referred to as subsurface vapor intrusion.

Subsurface vapor intrusion can impact only those homes located above the gasoline plume. Homes located outside the extent of the gasoline plume cannot be impacted by vapor intrusion from the plume. Therefore, EPA required Chevron to use the gasoline plume boundaries as a selection criterion for identifying homes to be sampled for subsurface vapor intrusion. DOH's indoor air sampling differs from Chevron's approach because DOH relied upon voluntary participation from residents within designated geographic boundaries which did not correlate with the plume boundaries.

EPA has statistically characterized the indoor air data collected from 97 homes by DOH in Figure 4. The data in Figure 4 indicate that there is elevation in benzene and MTBE vapor concentrations in homes above the gasoline plume as compared to homes situated outside the plume boundaries, suggesting that there is likelihood of subsurface vapor intrusion associated with the gasoline plume. Based on EPA's review of 151 indoor air samples collected by EPA, Chevron, and DOH, EPA has identified up to 5 homes above the gasoline plume where measured vapor concentrations have exceeded EPA's remediation standards as presented in Section VI, below. EPA has also statistically characterized the outdoor ambient air data collected by Chevron, DOH, and ACE in Figure 5. On average, outdoor benzene and MTBE concentrations are at levels of about one-third to equal that of indoor air concentrations.

self-cleaning due to rapid biodegradation of dissolved phase hydrocarbons (benzene, toluene, ethylbenzene, xylenes and MTBE).

#### B. Vapor Mitigation Strategy

Homes located above the gasoline plume are vulnerable to subsurface vapor intrusion coming from the plume and entering basements through cracks, joints and utilities openings. Extensive soil vapor and indoor air samples have been collected to evaluate the health impact from this pathway. Based on data collected to date, up to 5 homes above the plume have measured vapor concentrations exceeding EPA's remediation standards as identified in Section VI.B below. EPA proposes to have Chevron install a subslab depressurization system, commonly used in radon mitigation, to prevent vapor entry into residential basements impacted by the gasoline plume. The depressurization system operates by creating a slight vacuum beneath the subslab by drawing a slow stream of air through subslab venting pipes, thereby reversing the vapor movement gradient and direction.

### VI. REMEDIATION STANDARDS

The contaminants of concern (COC) relating to the Facility are benzene, toluene, ethylbenzene, xylenes (BTEX) and MTBE. These COCs are present in groundwater and soil vapor within the gasoline plume boundaries.

#### A. Groundwater Remediation Standards

EPA proposes to cleanup groundwater to meet drinking water standards established by the Maximum Contaminant Levels (MCLs) promulgated at 40 C.F.R. Part 141 pursuant to Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1, except for MTBE. MTBE does not have a MCL. EPA's proposed remediation standard for MTBE is based on taste and odor thresholds adopted by the District and Maryland. EPA's proposed groundwater remediation standards are as follows:

|              |                               |
|--------------|-------------------------------|
| Benzene      | 5 micrograms per liter (ug/l) |
| Toluene      | 1,000 ug/l                    |
| Ethylbenzene | 700 ug/l                      |
| Xylenes      | 10,000 ug/l                   |
| MTBE         | 20 ug/l                       |

#### B. Vapor Remediation Standards

EPA proposes to mitigate subsurface soil vapor intrusion into homes to meet the following remediation standards:

concentrations of these compounds are far lower than the risk-based concentrations and will have no impact on the overall risk or attainment of the remediation goal. Therefore, the selected remediation standards for these compounds are purely risk-based without factoring in the background concentrations.

The Agency for Toxic Substances and Disease Registry (ATSDR), a division of the Center of Disease Control, has reviewed EPA's remediation standards. In a letter to EPA, dated May 10, 2007, ASTDR supports EPA's proposed remediation standards as appropriate and protective of human health.

## VII. PROPOSED REMEDY

### A. Expansion of Existing Groundwater Remediation System

EPA proposes to have Chevron continue to operate the existing groundwater remediation system in Area A, and expand the system into Area B by installing angle recovery wells. Groundwater and vapor extraction wells will be installed at an angle in the parking lot on the Maryland side for completion on the District side across Eastern Avenue up to the boundaries of private properties. EPA will determine the exact locations and number of angle recovery wells to be installed in the design phase subject to boring exploration. All new recovery wells will be connected to the existing groundwater treatment unit.

Although gasoline product has been detected only once in a monitoring well in Area B, non-mobile product is believed to be present in Area B soil within the water table fluctuation zone known as the "smear zone." It is also possible that mobile product is present beneath Eastern Avenue where traffic condition has restricted exploration in the past. Angle drilling can overcome that restriction. Although non-mobile product will not migrate with groundwater or enter wells in measurable or recoverable quantities, the residual product in the smear zone will continue to contaminate groundwater and soil vapor. The proposed angle recovery wells will enlarge the capture zone, accelerate groundwater movement, extract contaminated soil vapor, and enhance product degradation in Area B even if the product may not be recoverable.

Chevron will be required to operate the expanded system and provide adjustment or upgrades as appropriate in the future with the goal to restore groundwater to drinking water standards. If the goal of restoring drinking water standards is not attainable within a reasonable time frame from an engineering perspective, EPA may grant a technical impracticability (TI) waiver in accordance with EPA's Guidance for Evaluating TI for Groundwater Restoration (October 1993).

### B. Installation of Vapor Mitigation System

EPA proposes to require Chevron to install a subslab vapor mitigation system, similar to a radon system, in all homes located above the gasoline plume where the measured indoor petroleum vapor concentrations have exceeded EPA's remediation

In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria to determine which proposed remedy alternative provides the best relative combination of attributes.

#### A. Threshold Criteria

EPA's evaluation of the threshold criteria is as follows:

##### 1. Protect human health and the environment

There are no human health threats associated with domestic uses of the contaminated groundwater originating from the Facility because groundwater is not used for drinking water purposes. Riggs Park is serviced by public water from a source not affected by Facility related contamination and there are no private wells located in the area. Several tap water samples were collected by EPA and the ACE for volatile organic compounds (VOCs) analyses and the results show that the community tap water is safe for consumption.

According to DOH, the public water supply for the District comes from the Potomac River or reservoirs and the District does not rely on groundwater for its water supply. There are no known private water supply wells in Riggs Park. The nearest water supply source for Riggs Park is the McMillan Reservoir, which is located approximately 5 miles southwest of Riggs Park. Even though there are no current consumptive uses of Facility-contaminated groundwater, the goal of EPA's proposed groundwater remediation is to restore groundwater to drinking water standards to be protective of potential future use. Until groundwater is restored to drinking water standards, EPA is proposing to require institutional controls, as necessary, to prevent consumptive use of the groundwater. EPA's proposed remedy also requires the implementation of institutional controls to prevent any activities which would interfere with or adversely affect the integrity or effectiveness of the remedial actions performed at the Facility.

The primary health concern of the contaminated groundwater under current conditions is vapor intrusion into basements. The proposed remedy will require Chevron to install a vapor mitigation system in each home where the measured vapor concentrations have exceeded EPA's vapor remediation standards. Based on extensive sampling, up to five homes above the gasoline plume have measured indoor air vapor concentrations above EPA's vapor remediation standards. The proposed groundwater remediation objective which is to restore groundwater to drinking water standards will also achieve the long-term goal to eliminate all subsurface vapor intrusion sources.

##### 2. Achieve media cleanup objectives

The proposed groundwater remediation will achieve the media cleanup objectives by restoring groundwater to drinking water standards and by eliminating all subsurface vapor intrusion sources linking to Chevron's gasoline release.

monitoring plan, and to propose a testing protocol to evaluate the effectiveness of the individual home vapor mitigation systems.

## 2. Reduction of Waste Toxicity, Mobility or Volume

The volume and mobility of the sources (liquid phase hydrocarbons) and the contaminated groundwater (dissolved phase hydrocarbons) have reached equilibrium and will begin to shrink as the remediation progresses. The sources are confined in Areas A and B, and the saturation level is so low that much of the product is non-mobile. Non-mobile product will not enter wells in measurable or recoverable quantities, and will not migrate with groundwater. Currently, only 4 monitoring wells and 7 recovery wells located in Area A contain measurable product, and none of the wells in Area B contains measurable product.

The volume and mobility of the contaminated groundwater have reached equilibrium as the shallow plumes have reached the maximum extent at the intersection of Eighth Street and Nicholson Avenue. Nicholson Avenue is a natural groundwater divide where an ancient creek, which is now replaced by a storm interceptor, existed. Eighth Street is also a groundwater divide for unknown reasons as evidenced by the fact that the plumes terminate on Eighth Street.

The objective of the groundwater remediation system is to aggressively deplete all product sources. EPA anticipates that once the sources are depleted from further contaminating the groundwater, the plume will be self-cleaning because dissolved phase hydrocarbons are known to biodegrade rapidly. However, the shrinking of the plume will not be apparent until the sources are further depleted in the next 5 to 10 years by the expanded groundwater remediation system.

## 3. Short-Term Effectiveness

The short-term effectiveness criterion is intended to address hazards posed during construction of the remedy. Short-term effectiveness is designed to take into consideration the impact on site workers and nearby residents such as potential for volatilization of contaminants, the spread of contamination through dust generation, and disposal and/or transportation of the wastes. Workers are required to comply with the Occupational, Safety and Health Administration rules and to follow the Health and Safety Plans submitted to EPA. No short-term hazards to the residents have been identified for the proposed remedy.

## 4. Implementability

The implementability criterion addresses various constraints such as regulatory constraints, ability to obtain access agreements, technological and practicability limitations, and intrusiveness to residents due to noise, traffic and aesthetic disruptions.

EPA does not recommend this alternative because of safety concerns and excessive disruption to the community. Although precautionary safety measures would be implemented to protect the homes above the remediation zone, the short-term risks outweigh the long-term benefit. It is unknown how the high temperature would affect existing foundations and utility materials as application of this technology has been known to melt PVC pipes. The operation of the electrodes is highly disruptive because the electrodes must be placed at close spacing on private properties and a trailer must be placed on one property to house the high voltage equipment for up to a year.

#### B. In-situ Chemical Oxidation

This technology involves the injection of an oxidizing agent through temporary wells into the subsurface to oxidize hydrocarbons on contact. The complete oxidation or mineralization of the BTEX would result in water and carbon dioxide as final end products.

EPA does not recommend this technology due to uncertainty of its effectiveness and disruption to residents. According to the Corrective Action Plan submitted by Chevron, pilot tests must be conducted on this technology prior to its full implementation. EPA does not recommend selection of an experimental technology for this phase of the clean up. Another obstacle of this technology is that it is highly intrusive as temporary Geoprobe wells must be installed at close spacing on private properties several times a year to inject the oxidizing agent.

An alternative and less intrusive application of this technology would be to inject the oxidizing agent through new horizontal or angle wells. However, the spacing of horizontal or angle wells would not be close enough for this technology to be effective.

#### C. Expansion of Existing System by Horizontal Wells

This alternative involves expansion of the existing groundwater remediation system by installing horizontal wells beneath Area B. The horizontal wells would be installed by directional drilling from the parking lot on the Maryland side for completion across Eastern Avenue in Area B on the District side.

EPA does not recommend this alternative due to difficulty in long-term maintenance of horizontal wells and the intrusiveness of the construction. A horizontal well is not a straight well, but has a mild curvature in the entrance and exit transition, and the bore hole tends to wriggle along a straight line. Maintaining a horizontal well can be challenging due to the difficulty in retrieving and reinstalling pump and sensors, and the redevelopment of aging wells. Another obstacle is that the construction is disruptive to properties downhill of Area B because the bore holes would need to exit at that location and enough horizontal space must be available to pull several hundred feet of well casing and screen through the bore holes.

EPA is requesting comments from the public on the remedy proposed in this SB. The public comment period will last sixty (60) calendar days beginning August 30, 2007 and ending October 29, 2007. Comments on, or questions regarding, EPA's identification of a proposed remedy may be submitted to:

Mr. Andrew Fan (3WC23)  
U.S. EPA, Region III  
1650 Arch Street  
Philadelphia, PA 19103  
Phone: (215) 814-3426  
FAX: (215) 814-3113  
Email: fan.andrew@epa.gov

During the sixty-day public comment period, EPA will hold a public meeting on EPA's proposed remedy if sufficient public interest indicates that a meeting would be valuable for distributing information and communicating ideas. Requests for a public hearing must be received by EPA by close of business on October 29, 2007. EPA will determine by October 29, 2007, if a public hearing is warranted. After October 29, 2007, any interested parties may contact Mr. Andrew Fan at the EPA address or telephone number above to find out whether or not a public hearing will be held. Handicapped persons with a need for special services should contact Mr. Fan far enough in advance of any hearing to enable the services to be secured.

After evaluation of all comments, EPA will prepare a Final Decision Document and Response to Comments (FDRTC) that identifies final selected remedy. The FDRTC will address all significant written comments and any significant oral comments generated at the public meeting and will be made available to the public. If, on the basis of such comments or other relevant information, significant changes are proposed to be made to the corrective measures identified by EPA in this SB, EPA may seek additional public comments.

EPA anticipates that the final remedy will be implemented using available legal authorities including, but not necessarily limited to, RCRA Section 7003, 42 U.S.C. 6973.

# Site Map

## Former Chevron Facility

- Dual-Phase Extraction Well
- Abandoned Dual-Phase Extraction Well
- ▲ Soil Vapor Extraction Well
- ▲ Abandoned Soil Vapor Extraction Well
- Soil Vapor Sample Location
- Soil Vapor Well
- Basement Bump
- Property Line
- Prince George's County/ Washington D.C. Boundary
- Former Chevron Facility No. 122208 Property Line
- Benzene 5ug/L (Geoprobe Data)
- MTBE 20 ug/L (Geoprobe Data)
- Clay Body; Limits Dashed Where Inferred
- Sanitary Sewer Manhole
- Sanitary Sewer Pipe
- Storm Drain Manhole
- Storm Drain Pipe
- Topography Contours (2 foot intervals)

Date Prepared: June 21, 2004  
 Scale: 1" = 60'



### Figure 1

Gannett Fleming



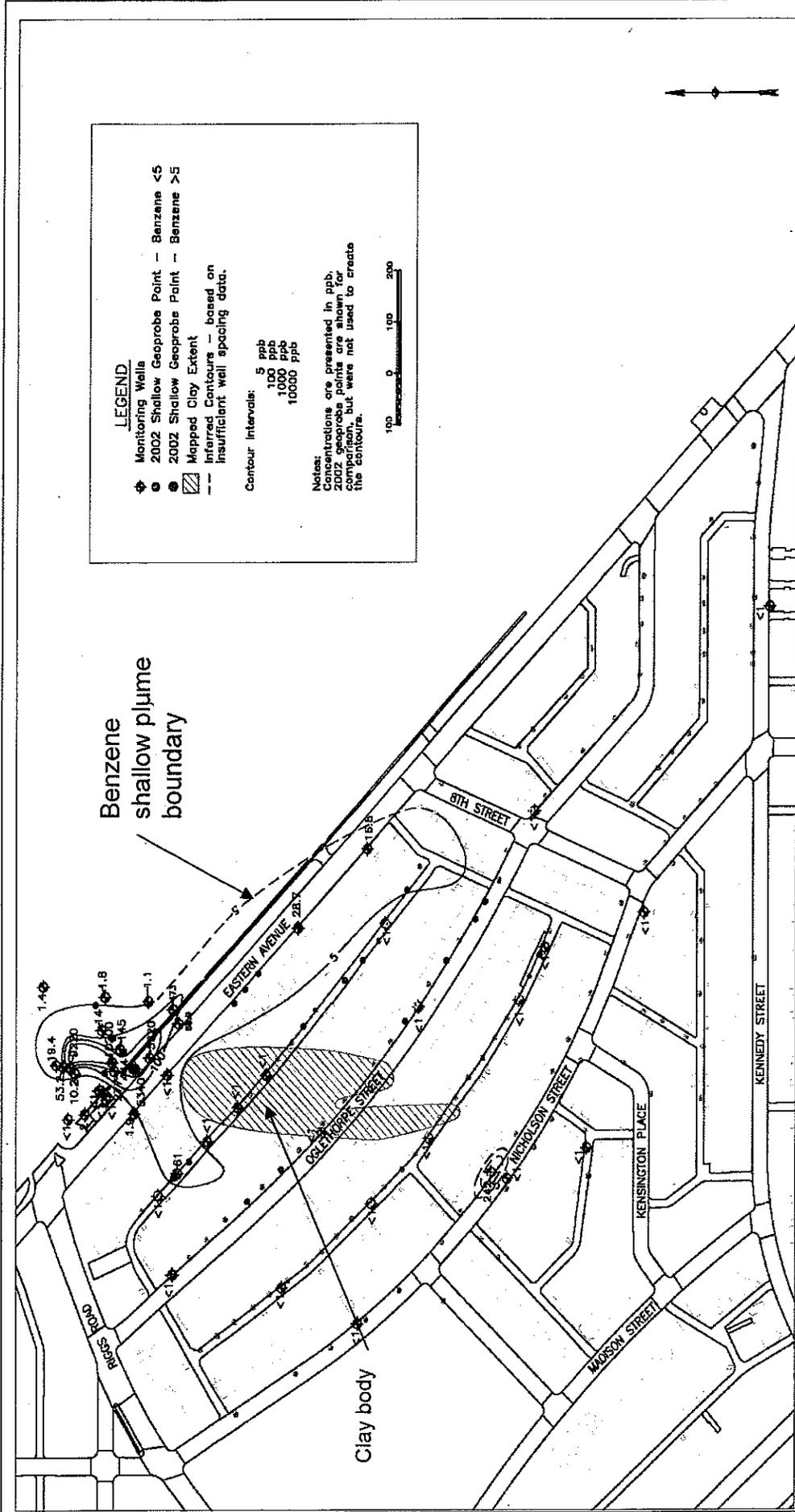


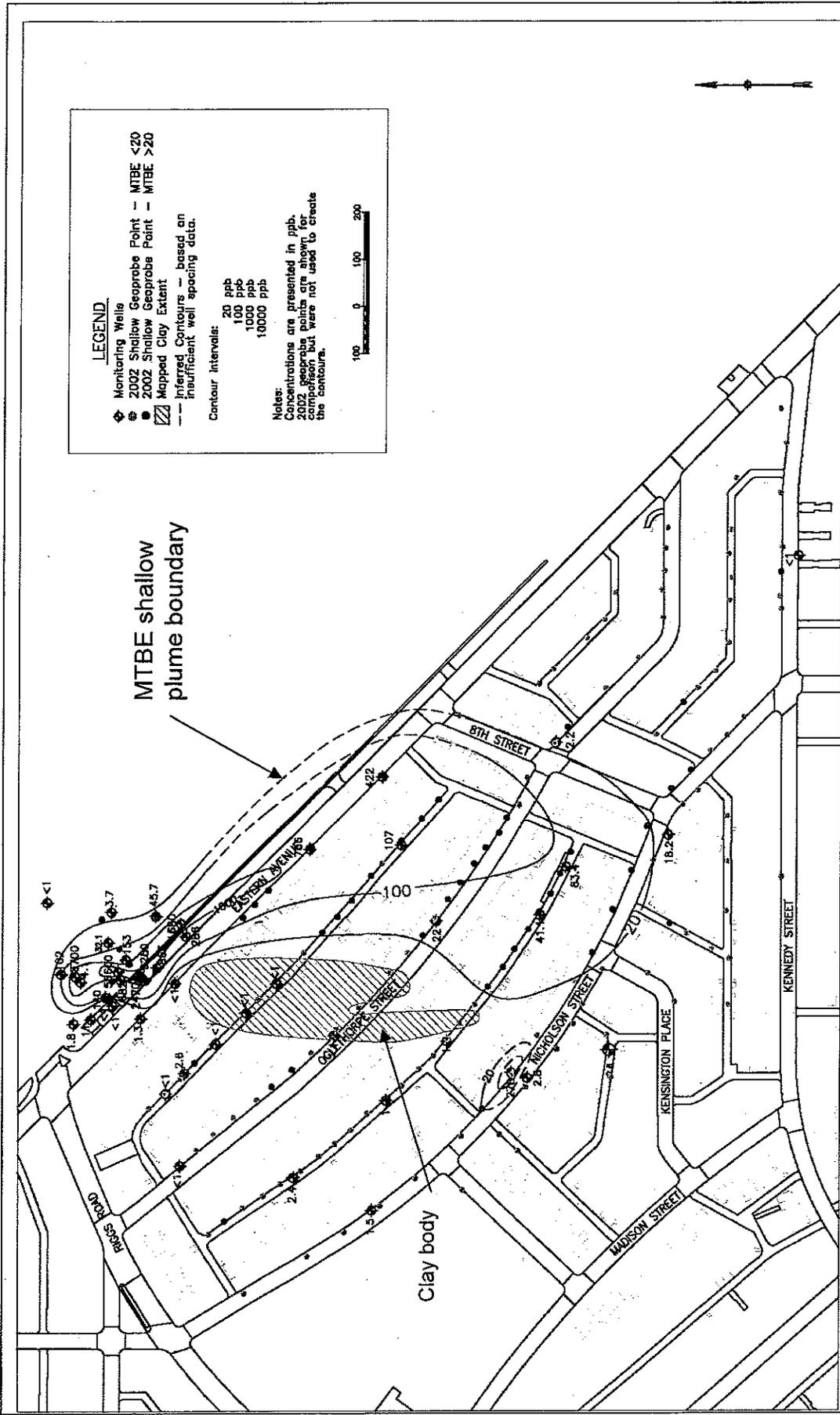
Figure 2

Benzene Shallow Plume  
 May-June 2004 Data from Shallow Wells

U.S. Army Corps of Engineers  
 10 S. Howard Street  
 Baltimore, Maryland 21040



PREPARED BY: PAD DATE: December 2004



**LEGEND**

- ◆ Monitoring Wells
- 2002 Shallow Geoprobe Point -- MTBE <20
- 2002 Shallow Geoprobe Point -- MTBE >20
- ▨ Mapped Clay Extent
- - - Inferred Contours -- based on insufficient well spacing data.

Contour Intervals: 20 ppb  
100 ppb  
1000 ppb  
10000 ppb

Notes:  
Concentrations are presented in ppb.  
2002 Geoprobe points are shown for comparison but were not used to create the contours.

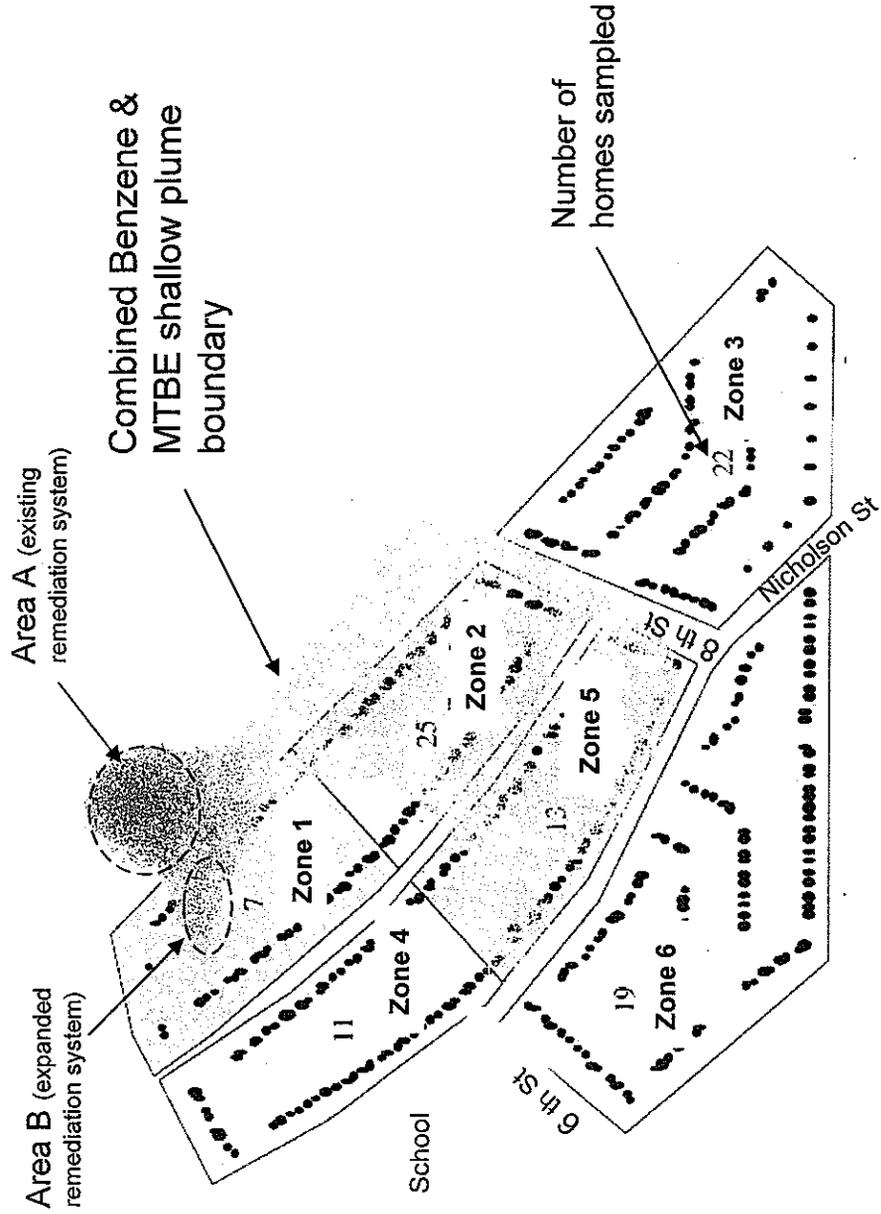
100 0 100 200

**Figure 3**  
**MTBE Shallow Plume**  
**May-June 2004 Data from Shallow Wells**

**U.S. Army Corps of Engineers**  
 10 S. Howard Street  
 Baltimore, Maryland 21040

PREPARED BY: PAD      DATE: December 2004

| <b>Figure 4</b>                          |  |                   | Benzene | (ug/m <sup>3</sup> ) | MTBE    | (ug/m <sup>3</sup> ) |
|--|--|-------------------|---------|----------------------|---------|----------------------|
| <b>DOH indoor air sampling data 2006</b> |  | Number of Samples | Average | 95%                  | Average | 95%                  |
| Outside plume (Zones 3,4,6)              |  | 52                | 2.7     | 8.0                  | 2.8     | 17.2                 |
| Above plume (Zones 1,2,5)                |  | 45                | 3.0     | 10.7                 | 3.5     | 25.8                 |



# Outdoor Ambient Air

Figure 5

|   |                   | Benzene | (ug/m <sup>3</sup> ) | MTBE    | (ug/m <sup>3</sup> ) |
|---|-------------------|---------|----------------------|---------|----------------------|
|   | Number of Samples | Average | 95%                  | Average | 95%                  |
| DOH 2006 outdoor air data (Zones 3,5,6)                                       | 22                | 0.9     | 1.3                  | 0.3     | 0.5                  |
| Chevron 2005 outdoor air data (Zone 5)  | 12                | 0.8     | 1.4                  | 2.9     | 3.5                  |
| ACE 2005 outdoor air data (Zone 5)  | 12                | 0.8     | 1.2                  | 2.7     | 6.1                  |
| McMillan Reservoir Station 1 (2006 DOH data)<br>about 5 miles from Riggs Park | 61                | 4.6     |                      | 2.5     |                      |
| McMillan Reservoir Station 2 (2006 DOH data)<br>about 5 miles from Riggs Park | 30                | 6.2     |                      | 27.1    |                      |