Dave Patten
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6111 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 543-1740
Fax (925) 543-2324
drpatten@chevron.com

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station No. 9-1851
451 Hegenberger Drive
Oakland, CA

I have reviewed the attached report dated July 1, 2011.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Dave Patten
Project Manager

Attachment: Report

CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
http://www.craworld.com

July 1, 2011 Reference No. 311976

Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Work Plan for Soil Borings Addendum
Chevron Service Station 9-1851
451 Hegenberger Road
Oakland, California
Fuel Leak Case RO0000464

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) prepared this *Soil Boring Work Plan Addendum* on behalf of Chevron Environmental Management Company (Chevron) for the referenced site (Figure 1). This work plan addendum was prepared in response to the May 18, 2011, Alameda County Environmental Health (ACEH) letter (Attachment A) requesting additional assessment based on CRA's *Work Plan for Soil Borings* dated January 30, 2009. The proposed subsurface investigation will further delineate light non-aqueous phase liquid (LNAPL) in the area of monitoring well MW-2 and dissolved hydrocarbons downgradient of the fueling facilities. The site description, a response to regulatory comments and proposed scope of work are presented below.

SITE DESCRIPTION

Site Background

The site is currently an active service station, operating as a Super Stop at the northwest corner of Hegenberger and Edgewater Roads in Oakland, California (Figure 1). Facilities consists of one building, two fuel dispenser islands, three 10,000-gallon underground gasoline storage tanks (USTs) in one tank complex and one 10,000-gallon diesel UST in a separate tank complex (Figure 2). Chevron operated the site from 1961 to 1999. In 1982 the used-oil UST was replaced with a 1,000-gallon single wall fiberglass tank. This used-oil tank was removed in 1998. In 1984, the steel USTs were removed and replaced with three 10,000-gallon single wall fiberglass USTs. Land use near the site is commercial and industrial.

Previous Environmental Work
A total of one soil boring and seven groundwater monitoring wells have been installed since 1995.

Site Geology
Sediments in the vicinity consist of Holocene-age estuarine deposits comprised of organic clay and silty clay (Bay Mud); overlying Holocene-age alluvial sand and silt; and Pleistocene-age interbedded clay, silt, sand, and gravel.[1] Soils encountered beneath the site mainly consist of silt and clay with some layers of sand to 16.5 feet below grade (fbg), the total depth explored.

Site Hydrology
Topography in the area is relatively flat at an elevation of approximately three feet above mean sea level, with the surrounding topography sloping towards the southwest. Groundwater flow direction in the basin typically flows towards San Francisco Bay. The nearest surface water is San Leandro Creek, which is located approximately a ¼-mile west of the site. Depth to groundwater has historically ranged from approximately 2 to 7 fbg. Groundwater flow direction fluctuates, but is predominately to the southwest at a gradient of 0.003 to 0.074.

PROPOSED SUBSURFACE ASSESSMENT AND RESPONSE TO AGENCY COMMENTS

Proposed Soil Borings
CRA proposes to advance a total of five borings. Four borings are proposed in the vicinity of well MW-2 to further delineate LNAPL (Figure 2). No dissolved total petroleum hydrocarbon as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX) have been detected since September 2009. Dissolved methyl tertiary-butyl ether (MTBE) concentrations are decreasing from historical maximum concentrations in all wells, and only well MW-4 exceeds the secondary drinking water maximum contaminant level of 5 micrograms per liter (µg/L). Therefore, the previously proposed scope of work in CRA's *Work Plan for Soil Borings* is no longer warranted. CRA feels that the existing monitoring well network adequately delineates dissolved hydrocarbons, except downgradient of MW-4. Therefore, one boring will be advanced southwest of MW-4 to further delineate dissolved hydrocarbons (Figure 2).

1 *California's Groundwater Bulletin 118*; The State of California Department of Water Resources Agency February 27, 2004.

These soil borings shall be installed with methods described in CRA's June 30, 2009 *Work Plan for Soil Borings*. With the following alteration, soil and groundwater samples will be analyzed for:

- TPHg, total petroleum hydrocarbons as diesel (TPHd) with silica gel clean up, and total petroleum hydrocarbons as motor oil (TPHmo) with silica gel clean up by EPA Method 8015 modified, and
- BTEX, MTBE, di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME) and tertiary butyl alcohol (TBA) by EPA Method 8260B

Interim Remediation
To address the LNAPL in well MW-2, CRA proposes to install an absorbent LNAPL sock that will be replaced quarterly during scheduled sampling events. The used LNAPL socks will be stored in a 55-gallon Department of Transportation approved drum, profiled, and properly disposed of offsite. The amount of LNAPL removed will be reported in the groundwater monitoring reports.

Groundwater Monitoring
As ACEH requested, a full scan of volatile organic compounds (VOCs) will be analyzed once from the groundwater samples collected from wells MW-1, MW-2, MW-4 and MW-6. In future events all wells with be analyzed for TPHmo with silica gel clean up and TPHd with silica gel clean up.

Clarification of UST Storage Use
The UST north of the station building was originally installed to store methanol. The station offered methanol until approximately 2005. By 2008, the UST was designated as a diesel tank, but it is uncertain exactly when the switch to diesel occurred. CRA recommends a one-time methanol analysis of groundwater from well MW-3.

SCHEDULE

CRA will proceed with the proposed scope of work upon receipt of written approval from ACEH. After approval, CRA will obtain the necessary drilling permits, access agreements, and schedule the subcontractors at their earliest availability. We will submit our investigation report approximately eight weeks after completion of field activities and receipt of analytical results.

CONESTOGA-ROVERS
& ASSOCIATES

July 1, 2011 Reference No. 311976

We appreciate the opportunity to work with you on this project. Please contact Mr. Nathan Lee at (510) 420-3333 or Mr. Dave Patten, of Chevron, at (925) 790-6491 if you have any questions or comments regarding this report.

Regards,

CONESTOGA-ROVERS & ASSOCIATES

Sequoia Patterson

Nathan Lee, P.G.8486

SP/cm/11

Encl.

Figure 1	Site Vicinity Map
Figure 2	Site Plan with Proposed Soil Boring Locations
Attachment A	Regulatory Letter

cc: Mr. Dave Patten, Chevron
SimGas, LLC, Property Owner

FIGURES

Figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2008(PRES001)GN-EM001

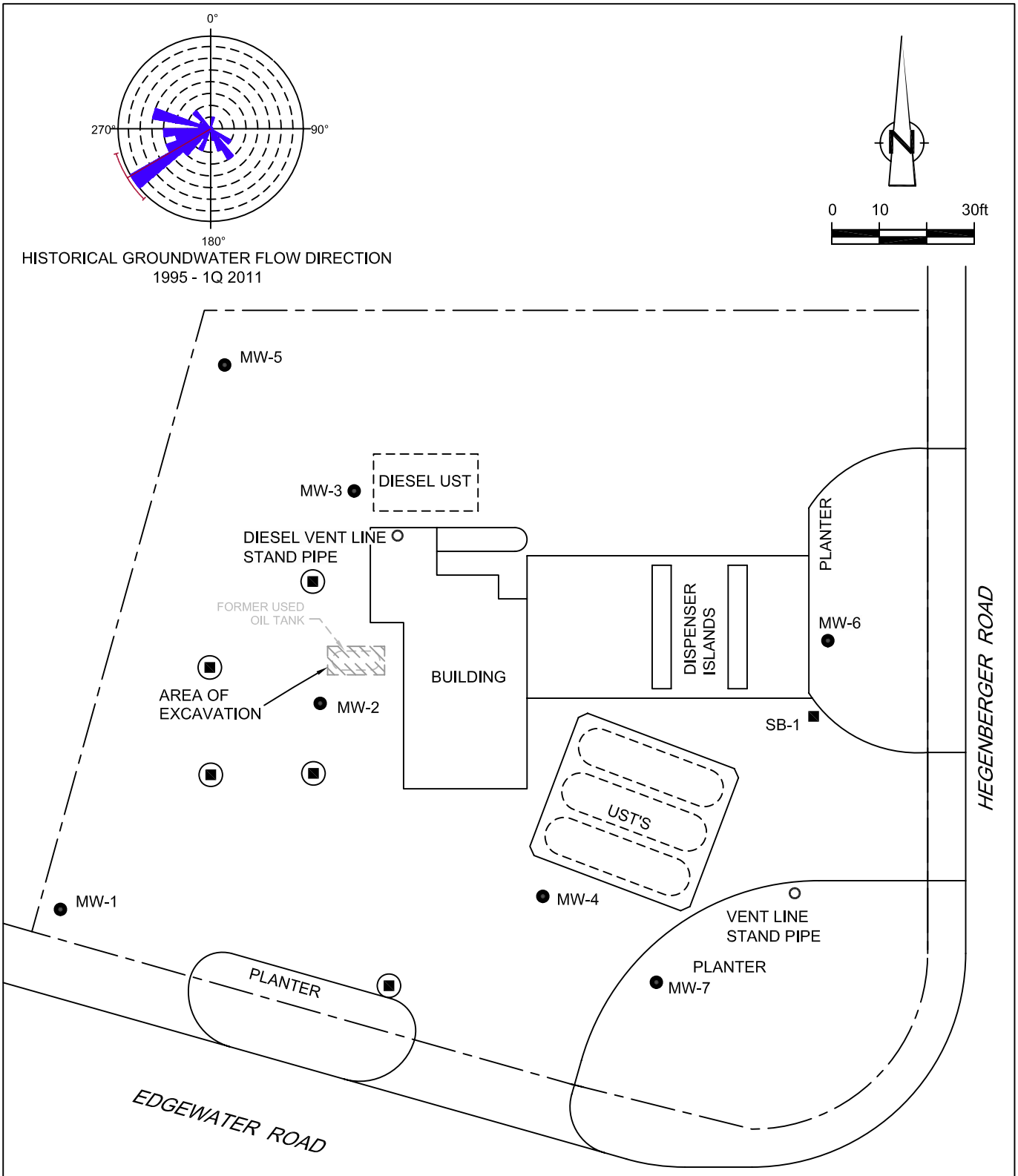

Figure 2

PROPOSED BORING LOCATIONS
CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2011(011)GN-EM001 JUNE 21/2011

ATTACHMENT A

REGULATORY LETTER

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 18, 2011

Mr. David Patton
Chevron Corporation
6111 Bollinger Canyon Road
San Ramon, CA 94583
(sent via electronic mail to drpatten@chevron.com)

Mr. Mark Gomez
City of Oakland
250 Frank Ogawa Plaza,
Suite 5301
Oakland, CA, 9461

Simgas LLC
655 Montgomery St #1900
San Francisco, CA 94111

Gurinder Grewal & Singh Navdeep
349 Brianne Ct.
Pleasanton, CA 94566

Subject: Request for Revised Work Plan; Fuel Leak Case No. RO0000464; (Global ID # T0600102238); Chevron #9-1851, 451 Hegenberger Road, Oakland, CA 94612

Ladies and Gentlemen:

Alameda County Environmental Health Department (ACEH) staff has reviewed the case file, including the *Site Conceptual Model* dated January 30, 2009, the *Work Plan for Soil Borings* dated January 30, 2009, *Third Quarter 2010 Groundwater Monitoring and Sampling Report* dated November 15, 2010, and the *Fourth Quarter 2010 Groundwater Monitoring and Sampling Report* dated February 10, 2011. Each of these reports were prepared and submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for submitting the reports.

Based on ACEH staff review of the case file, we request that you address the following technical comments and submit a revised work plan as described below.

TECHNICAL COMMENTS

1. **Request for a Revised Work Plan –** The current work plan is focused on defining the vertical and horizontal extent of hydrocarbons associated with a gasoline release from the eastern dispenser and this is appropriate; however, the work plan ignores the lateral extent of free-phase (FP) waste oil in the vicinity of the former waste oil UST as documented in well MW-2 (with one exception free-phase has been present since March 2008). It also ignored the lateral and vertical extent of impacted soil related to this release. Presuming the source of the oil is associated with the waste oil UST, the date of the appearance in well MW-2 would provide a rate of migration between the excavation and the well, but does demonstrate migration of the FP. Because both areas of investigation can be best managed with a single mobilization, please submit a revised work plan that additionally undertakes these tasks by the date identified below.

2. **Interim Remediation -** Please evaluate more active measures to increase the capture of free product between site visits in well MW-2; free phase recovery appears to be attempted intermittently at present.

3. **Groundwater Monitoring -** The recent inclusion (since September 2010) of TPHmo in the groundwater analytical suite in all wells (except MW-2 due to the FP) at the site is appreciated and appropriate; it would have been requested in this letter. Please continue this analysis. Please also incorporate silica gel clean-up

use for extractable hydrocarbon analyses; this does not appear to have been done previously. A former bay margin environment is an appropriate environment for the use of the silica-gel clean-up technique.

Please additionally include a minimum of one time, the full suite of standard waste oil analytes, at well MW-2. Both 1,1-DCA and cis-1,2-DCE were detected in groundwater collected October 17, 1995 from well MW-2, at concentrations of 1.7 µg/l and 11 µg/l, respectively. This is the only time they have been sampled for at this site, and this is prior to the appearance of waste oil FP in the well which can be argued may include higher concentrations of these or other VOCs. Due to the presence of hydrocarbons characterized as TPHmo in all wells, please additionally submit (potentially on a one time basis) groundwater from wells MW-1, MW-2, MW-4, and MW-6 for a full VOC scan in order to understand the distribution of VOCs beneath the site.

4. **Clarification of UST Usage –** The UST located north of the station building has been referred to as either a methanol or diesel storage tank in multiple documents through the years. Please clarify the (former) use of this UST through time. Please additionally clarify the appropriate analyte (hydrocarbon and / or methanol) for groundwater collected from well MW-3.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Mark Detterman), according to the following schedule:

- **July 1, 2011** – Work Plan Addendum
- **60 Days After Approval of Work Plan** – Subsurface Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Should you have any questions, do not hesitate to call me at (510) 567-6876.

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2011.05.18 14:58:14 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Nathan Lee, Conestoga-Rovers & Assoc., 5900 Hollis Street, Suite A, Emeryville, CA 94608 (sent via electronic mail to NLee@craworld.com)

Donna Drogos (sent via electronic mail to donna.drogos@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** July 20, 2010
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.