



November 6, 2003

Xcel Energy  
550 15<sup>th</sup> Street, Suite 700  
Denver, CO 80202

**Re: Leyden Facility Soil Gas Database Proposal REVISED**

Dear Mr.           :

Here is the Leyden Soil Gas Database proposal with the revisions that you suggested in our telephone conversation yesterday. These additions are highlighted with an asterisk (\*).

I enjoyed meeting you earlier this month and hope that the database work described in this proposal can provide Xcel Energy a simple, scalable solution to managing and viewing soil gas data for the Leyden Facility. In listening to your description of future soil gas monitoring activities, EnviroGroup would like to propose a simple, cost-effective method for storing and accessing historic and future soil gas monitoring data collected at the facility.

**Proposed Database Solution**

EnviroGroup proposes to construct a Microsoft Access database holding soil vapor data for the Leyden Facility, with customized data input and viewing capabilities. We will build on the example database shown to you earlier this month, which will provide excellent capability for future expansion of the database to house other types of environmental data. The MS Access data format is readily compatible with most of Geographic Information System (GIS) applications and enterprise database structures.

We will customize the standard, current version of MS Access (v. 2002) using imbedded Visual Basic for Applications (VBA) code, macros, forms, and reports to make specific functions available to the software user. The resulting Xcel Leyden Soil Vapor (XLSV) database file will run on a Windows-based personal computer, from within the user's copy of MS Access as a software add-on. Although EnviroGroup will provide installation support and user training for several users, the application will be simple to install and intuitive to operate for users familiar with environmental soil vapor data sets. The XLSV database will include a data access form, including a simple map of the site, sub-forms to view data charts, programmatically generated data reports, and a data import function that will simplify future data importing of soil vapor data in Excel spreadsheet format. Specifically, the customized components will include:

1. Data Access Form

This single database window will provide the user with access to all of the customized features in the XLSV database. This window will open upon startup and will include

a map of the Leyden Facility and identify the locations of all of the sampling points corresponding to records in the database. ~~A close-up of the southeast corner of the facility will be available by clicking a button.~~ \*Three close-up views will be available to the user of T28 R70W Sections 22, 26, and 35. Although the map (and zoom-in views) will be an image and not an interactive, zoom-able GIS, the user will be able to view tabular summaries of soil vapor data by clicking the mouse over sampling location points on the image. User controls on the form will query and display simple data sets by sample date, sample location, or analytical compound. All other customized functions will be available through via buttons or menus located in this window. \*Additionally, the user will have access to well information for a specific well by right-clicking on the well in the map. The well information, supplied by Xcel Energy, will be displayed in tabular format on the Data Access Form.

2. Charts

Two charts will be available to the user via a simple dialog. The first will be a bar graph of all compound concentrations for a single sample event at a specified location. The second will be a line graph of concentrations over time for a single compound, for one or more sample locations. The charts will be displayed on the computer screen, and the user will have the ability to use Access' native functionality to print them.

3. Reports

Two data reports will be designed and saved in the database, and the user will have the ability to view and print the reports via menu items or control buttons on the main Data Access Form (window). The reports will be designed to facilitate generating quarterly and annual data sets that can be printed and attached to Xcel Energy's normal regulatory submissions. EnviroGroup will work with Mr. Uding to determine formatting and content of these reports.

4. Data Import Function

EnviroGroup will work with \_\_\_\_\_ of ESN Rocky Mountain to develop a consistent electronic data file format for the delivery and subsequent import of soil gas testing results. Mr. Fontana has indicated that future results will be of a different format than he has received to date, but that he is attempting to make the delivery of these data in a consistent electronic format. As this format is determined, we will develop a database function that will automate future data import to the XLSV database via an "Open > File" type user interface.

**Limitations**

Although the database structure and software proposed here are quite compatible with other types of environmental data and other data management tools (such as GIS), this proposal and the costs outlined below are for work with the Leyden Facility soil gas monitoring data only and in tabular format. The GIS-style data location displays will not be able to provide this database with spatial analysis capabilities, nor export data in spatial format.

The proposal does not include the delivery of any commercial software, such as Microsoft Access, which will be required to operate the database. The XLSV database will be delivered

Thomas Liebert

June 27, 2003

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as a database file, in MS Access 2002 format, and will not necessarily be compatible with other versions of MS Access. EnviroGroup will provide software documentation, installation and reasonable user training; however software 'help desk' style support will be limited after Xcel Energy has accepted delivery of the final product.

**Cost**

Our total project cost is \_\_\_\_\_, summarized below by task. EnviroGroup's billing rate for our GIS/Database Programmer, Tom Liebert, is \$ \_\_\_\_/hr. Administrative support is billed at \$ \_\_\_\_/hr. EnviroGroup charges expenses at the following rates:

<u>Item</u>	<u>Rate</u>
Mileage	\$0.365/mi.
Copying	\$0.15/copy
Computer	\$10/hr.
FAX	\$0.50/page
Other Costs	Cost + 15%

**XLSV Database Project Cost:**

<u>Task</u>	<u>Description</u>	<u>Hours</u>	<u>Cost</u>
1	Data import dialog		\$
2	Design & code 2 standard data reports		\$
3	Add 2 graph 'views' of the data		\$
*4	Map (spatial) functionality, including zoom-view of Sec. 22, 26, 35		\$
5	Program documentation, delivery & training for 3 users		\$
	TOTAL		\$

Invoices will be submitted monthly. Terms are net 30 days.

I look forward to discussing this proposal with you. Please call either \_\_\_\_\_ or myself \_\_\_\_\_ at your convenience to determine the next step in this project.

Sincerely,  
EnviroGroup Limited

Tom Liebert  
Senior Project Manager