October 27, 2006

Subject: Coal Regulatory Program – Responses to 2006 Water Database Survey

Dear SALUTATION:

Thank you for your recent response to the Water Database Survey. A summary of the ten responses to the 2006 survey is attached. As a result of your response, the Division is looking at ways to improve the database to include:

- Adding the coal monitoring locations map to the database;
- Discussing the “too much info” comment with the Huntington Cleveland Irrigation Company (HCIC) and determine their need. A potential link to “interested” parameter could be added;
- Adding a screen on each input page with a Tips and Hints for the user; and
- Adding water quality internal memos from the Division hydrologists for active mines for 2005 and 2006 to the webpage. Every quarter, the hydrologists assigned to each mine evaluate the water data submitted.

If you have additional comments or suggestions, please feel free to call me at (801) 538-5268 or email me at pamgrubaughlittig@utah.gov.

Thank you again for your input.

Sincerely,

Pamela Grubaugh-Littig
Permit Supervisor
Twenty-two (22) surveys were sent by e-mail on July 18, 2006. Ten (10) responses were received between July 19 and September 18, 2006. A summary of the responses follows:

1. a) How easy is it for you to access the Water Quality Database?
   - 30% Very Easy
   - 60% Easy
   - 10% Difficult

   b) How do you usually access the Water Quality Database?
   - 50% Link on OGM homepage (http://www.ogm.utah.gov/)
   - 50% Bookmark

2. Did you find the data you went online seeking?
   - 90% Yes
   - 10% No

   Comments:
   - Inputting data for mine.
   - I don’t access data often enough to remember how to do it, seems confusing, takes several tries to get where I need to be.

3. a) How long does it usually take you to complete your database activities? / What type of connection do you have?

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<thead>
<tr>
<th>Hours/Quarter</th>
<th>Minutes</th>
<th>Entering</th>
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4. Are the instructions for the choices on the database home page (Mines and Sites, Query the Database, etc.) clear and comprehensive?
   - 100% Yes
   - 0% No

   Suggestions/comments:
   - The choices I use consistently are a habit.
   - Instructions on the data entry page would be helpful. Icons to move back and forth need to show up on the screen, no matter where you are on the screen.
   - The tab "EDIT SAMPLE PRIOR TO SUBMISSION" does not do anything.
5. What additional information would you like to see in the database?

- None
- There is too much information. Too many choices that cause one to get lost in the set up of information.
- Run our own reports showing that the data is in the system and uploaded.
- Make the EDI pipeline list sequential like water monitoring plan (i.e. CS-21 is at the bottom of the list.)
- When adding or editing a sample and returning to the pipeline list, you come back to the sample you were editing; not the top of the list (with over 100 sample sites, scrolling through the list is time-consuming)
- Be able to submit multiple dates/samples of Flows, No Flows or No Access, for one (1) site rather than having to return to the site menu each time
- When working in only one (1) mine, eliminate the need to select the Mine each time
- For a warning (standard deviation), make it easier to check history (easier link). When viewing history, make window so the date is always visible.
- Ideally, when checking the history of a site for a warning, a graph of the history would be great.
- Be able to run a group of sites with field parameters only.
- On "No Flow / NOA", an "Operational" timeframe is not choice that is available.
- Operator cannot delete parameters (i.e. some sites have analysis done at multiple labs. When trying to input an analysis with only a few parameters, multiple errors will come up that are already provided in a different sample.) An option to add an individual sample with individual parameters would help.

6. Additional concerns or suggestions?

- When downloading or looking at data, it doesn’t seem that the units are included. For flow rate, depth, and others, if you are looking at data that isn’t “yours” and you are not familiar with the site, it is hard to tell whether measurements are in cfs or gpm, feet or meters, etc.
- Change this system. The present system is archaic, difficult to use, and useless to make sense out of any data.
- Why when you download files which may not contain all required parameters (such as field data), does the program list those parameters, put a check mark for removal of the parameter, and then give you a message questioning your desire to remove a required parameter? If the parameter is required, why put the check in the box for removal. Furthermore, if you enter data for that parameter, and forget to remove the check it deletes the parameter completely. This frustrates me.
- Make it simpler.
- Intermittently a sample site will ask for parameters that are not required, and then registers the omission as an error. As an example, this quarter
the database was asking for Total Iron on UPDES sites that did not require it when requested.

- Have the database indicate if a site or sample is missing, not just missing parameters.
- Get rid of extraneous windows. As an example, when selecting to add a No Access or No Flow, it goes to another window that asks "Do No Access and No Flow Samples".
- If a sample is incorrectly input, and the Database doesn't know what to do with the sample, it apparently disappears. Samples should stay in the pipeline until the Database assigns it to a location or gives an error.
- It is hard to remember the steps to move from one screen to another, from one company to another, from one sample to another, etc. The software is not very user-friendly.

7. Would you like more training in how to use the database?
   17% Yes
   83% No

Comments:
- Doesn't really seem to be necessary for general data-entering use.
- I believe I have a reasonable understanding of the database capabilities. I don't believe additional training is necessary.

8. Coal Mine Operators (and their consultants) Only:
   a) What do you consider the skill level required to enter data to be?
      - Average
      - Must be fairly computer literate (i.e. knowledge of transferring files).
      - Average
      - 5
      - The level depends on your knowledge of the database: how to correct errors, what may be causing the errors, knowledge of data in order to address the error messages, knowledge of when to be concerned with a value for a parameter. What parameters are required by your permit, how often you need to sample, data entry deadlines, how to submit completed files to the Division, who to contact at the Division with questions, who to send notification of completion of data entry. Knowledge of lab personnel in order to ask questions, understanding how to read a lab analysis, etc. I would say a lot of knowledge is required, how does that apply to a skill level you will need to determine.
      - Not very high - it is just primarily time-consuming, and when there is a problem or question, it takes time to find the answer. At that point, a person familiar with the Mine's monitoring program is necessary.
b) How easy is it, on average, to enter your data?

17% Very Easy
67% Easy
17% Difficult

Suggestions/comments:

- When occasional entering glitches occur, UDOGM is always very prompt/helpful/accommodating.
- Too many places where human error can influence what data are input. Within the database data is lost, changed, or moved without any logical explanation. For all the work we do to input data, how many users do you get interested in looking at, or analyzing the data? Is it worth our time?
- I have been doing it for years, and still make errors. Would I give a novice the data to enter, not likely. I would not let the files be sent to the Division without having to check and recheck the data entered. If I am going to have to do that, I just as well do it myself.
- There should be an answer between easy and difficult; maybe somewhat difficult. If the system was more user-friendly it would help. The problem is when you only get on the system once a quarter you have to relearn how to move from company to company, screen to screen, sample to sample. There are other issues such as indicating that the sample is Baseline, Operational, or Reclamation but without getting on the system to enter data I can't remember exactly what the issue is.
- It is very time consuming because there are numerous sites that require individual data entry due to multiple labs, etc.
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<td>ENERGY WEST MINING COMPANY</td>
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<td>VICKY MILLER</td>
<td>CANYON FUEL COMPANY LLC</td>
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<td>RHETT CRANE</td>
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<td>CHERYL BOTT</td>
<td>HCIC</td>
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