

WELL DRILLER REGISTRATION PROGRAM TECHNICAL ADVISORY COMMITTEE

MEETING MINUTES

TUESDAY, MAY 12, 2009 9:30-12:30

John Augustus Hall-West Boylston, MA.

I. Attendees List:

Committee Chairs: Laurene Poland (DCR)/Paul Blain (MassDEP)

- *Glen Ayers, FRCOG Regional Health Agent*
- *Richard Bonetti, Soil Exploration Corporation*
- *David Bragg, MassDEP*
- *Andrew Chapman, RE Chapman Company*
- *Tom Desmond, Desmond Well Drilling, Inc.*
- *Joe Dilk, CT Valley Artesian Well Company*
- *Steve Mabee, MA State Geologist*
- *Kevin Maher, Thermonexus*
- *Ted Morain, Boart Longyear Company*
- *Tom Ogden, T.J. Ogden Company, Inc.*
- *Brent Reagor, Concord Board of Health*
- *Marcia Sherman, MassDEP*
- *Roger Skillings, Skillings & Sons, Inc.*

II. Welcome and Introduction

- (Laurene) introduced transfer of program and proposed timeline for new report forms, IT online submittal, and regulation updates.
- (Laurene) reviewed the proposed conversion from one general report form to five well-specific forms to reduce redundancy and improve online process; discussed suggested changes.
- (Paul) explained eDEP environment: logging in, nicknames, proof of ID, my eDEP, submitted vs. in-progress reports, Search Well.
- (Paul) explained new well driller's website with access to meeting agendas, meeting minutes, general online comment opportunity, future meetings, and timeline for regulation updates.

III. IT/eDEP

- (Steve) suggested converting GPS lat/long to provide z-value elevation data on Search Well application for accurate water level data.
- (Tom O.) suggested allowing users to change data e.g. within 30 days or to resubmit.

- (Paul) stated water quality and well report will be linked by transmittal number.
 - (Brent) asked when transmittal number is generated. Which needs to be transmitted first (lab water quality first or WCR first, or both simultaneously?); does it matter if they “share.”
 - (Steve) asked how to get the transmittal number if WCR submitted on paper/offline.
- (Brent) requested electronic notification to Boards of Health when a new WCR and water quality report has been entered into eDEP.
- (Glen) asked that water quality be added to historical data. He wanted to be able to submit periodical water quality results to eDEP (e.g. annual water quality requirements) and add to existing WCRs and water quality reports. He wanted information/water quality available in PDF form.
- (Roger) suggested implementation of a 2D model that would allow the user to point and click to select water bearing zones and to select geologic formation by clicking and dropping from list of codes.
- (Paul after the meeting) suggested map and well location logic be moved over to eDEP for the drillers to be able to confirm and move the location of well.

IV. Legal/Regulations

- (Laurene) asked committee for their opinions on requiring continuing education; committee indicated they had no problem with continuing education requirements.
- (Laurene) suggested creating a definition for what constitutes a “group” of wells when submitting one completion report for a group of monitoring wells.
 - (Rich) suggested an acre as the boundary for a group, (Roger) suggested a specific square footage (e.g. 10,000sq. ft.), and (Kevin) suggested a radius around reported well. The committee agreed to look further into using square footage as criteria for what constitutes a group; if wells extend onto another property, new WCR must be completed.
- (Laurene) asked committee if hoisting license should be a requirement or prerequisite to well driller registration. Committee agreed, though (Joe) asked for postponement of requirements in order for drillers to get licensed. (Tom O.), (Tom D.), and (Roger) indicated that DPL test was not focused on or relevant to drilling but more general and perhaps it could be discussed with DPL for a more focused/relevant test. (Marcia) suggested safety courses could be part of continuing education requirements.

Action Item: look into further discussion with Dept of Public Safety to discuss hoisting requirements for well drillers

- (Kevin) suggested two-tier licensing, similar to the licensing structures in Maine, New Hampshire and Conn.; i.e. both the company and the individual should be registered for dual accountability.

Action Item: (Marcia and David) will research other states' requirements , including Maine, Conn. and New Hampshire to see how their registrations are structured.

- (Laurene) asked should we no longer require well drillers to submit a WCR to board of health if submitted to eDEP, as eDEP will be accessible to board of health. (Glen) mentioned that not all Boards of Health are online. In addition, should well drillers still be required to submit water quality data to eDEP?

V. **Forms**

(Laurene) stated that it was decided to create multiple well report forms to replace the one current all-purpose form, to simplify and reduce superfluous fields for some report submissions. These forms include general production, abandonment, monitoring, geothermal open loop, and geothermal closed loop. Committee seemed supportive of multiple forms. (Tom O.) suggested adding another report for redevelopment.

Action Item: (Tom O.) will provide Laurene with an example of what information should be included on a well redevelopment form.

The following are suggested changes:

A. **Abandonment Form:**

- (Brent) suggested the ability to link abandonment report to original WCR to show the life cycle of the well (optional).
 - (Roger) suggested that if there is a replacement for the abandoned well, when entering the information for the new well the form can pre-populate the "repeated" information (linked). Committee agreed.
- (Joe) requested addition of static water level field. Committee agreed.
- (Kevin) suggested changing material amount to volume/weight, and (Joe) suggested moving this heading to after material description so as not to be confused with total volume of well. Committee agreed.
- (Kevin) suggested that depending on material type, the unit would automatically populate (e.g. bentonite chips, in lbs.). Committee agreed.

B. **Monitoring Well Form:**

- (Laurene) suggested including a return feature fill when additional rows are needed in bedrock and overburden to reduce redundancy and errors (repeat on all forms). Committee agreed.
- (Ted) questioned the requirement to submit WCR for installation of peizometers. He mentioned that in some cases peizometers were removed, while in other cases they were left to rot and pollute.
 - (Laurene) and (Paul) suggested the review of the definition of “monitoring well.”

Action Item: (Paul) will research peizometer installation timelines for new source developments. May suggest removal of peizometer within 30 days after completion of pumping test recovery measurements. Perhaps add this requirement to MassDEP’s New Source development checklist to assure compliance.

- (Rich) suggested the overburden description of Artificial Fill be broken down into urban fill and clean fill. Committee had no objection.
- (Laurene) asked committee if Y/N requirements in bedrock lithology should be left intact. (Steve) and (Kevin) said yes.
- (Laurene) wants to define what constitutes a “group” of wells. See comment under *Legal/Regulations* section of these meeting minutes.
- (Rich) wanted an update feature added to existing WCRs assuming same client and same location and that additional wells fall within original “group” of wells; (Kevin) affirmed the need for an update feature.
- (Laurene) asked whether GPS coordinates should be required for each well in a “group.” (Rich) asked how accurate GPS unit is. Committee agreed that GPS coordinates for monitoring wells would be a good idea.
- (Kevin) and (Tom D.) requested an additional field for engineering firm, separate from owner/client field.

C. Production Form:

- (Laurene) suggested separating bedrock data and water bearing zones on the form to reduce redundancy (repeat on geothermal open loop); committee agreed that was a good idea.
- (Laurene) suggested a question asking if driller installed a screen, the reason being that it would be a way to bypass online logic in the off-chance a screen was not installed; committee had no problem with this.

- (Laurene) suggested a question to indicate that a well was hydrofractured, then child form with well test data will come up.
- (Glen) suggested ability to note whether well is a flowing well, along with rate of flow. Committee agreed.

D. Geothermal Open Loop Form:

- (Laurene) suggested adding UIC#; committee agreed.
- (Laurene) suggested that if there are multiple open loop wells, there should be a place to indicate which well was sampled. A check box, committee agreed.
- (Kevin) suggested a question to indicate whether a porter shroud was installed, with a field for giving the elevation of the pump.
- (Joe) suggested allowing for selection of two options to consider dual-purpose wells combining geothermal and domestic.

E. Geothermal Closed Loop/DX Forms:

- (Kevin) suggested a Y/N question regarding whether a well is a HPGX concentric system was. (Paul and Laurene after the meeting) discussed coming up with a generic term for the Kelix or Thermonexus rather than reference brand names. (Kevin) when reviewing the meeting minutes Kevin suggested *concentric closed loops* as a class of systems.

Action Item: Develop terminology for enhanced “ground heat exchange technology.”

- (Laurene) suggested separating bedrock data and water bearing zones on the form to reduce redundancy; committee agreed that was a good idea.
- (Tom O.) requested optional fields for thermal conductivity, thermal diffusivity, and formation water temperature.

Action Item: (Joe) will provide Laurene with materials list for Kelix system.

F. Suggested Redevelopment Form:

- (Tom O.) suggested a redevelopment form including types and volume of chemicals utilized, pumping test results, specific capacity, video tape, condition of well, gravel well, well results, water quality, yield (prior and subsequent to redevelopment).
 - (Paul) said that MassDEP does not currently regulate this activity and further discussion is required as to whether this information should be collected. (See previous Action Item in Section V.)

Action Item: (Laurene) will provide committee with draft copies of all updated forms within 7 – 10 days.

Action Item: (committee) will review the drop down options in current code lists (e.g. casing thickness, well test method, etc.) and recommend to Laurene additional selections where applicable.

VI. Search Well

- (Brent) suggested there should be 3 different levels within Search Well:
 - Search criteria (e.g. town, street, type of wells)
 - What appears as search results (Steve wanted x, y, z, values displayed)
 - What appears when clicking on search results (Glen wanted the ability to export to PDF/Excel)
- (Steve) suggested different maps as overlay options (e.g. surficial geologic and bedrock maps) on the well location map.
- (Steve) and (Brent) suggested ability to view all or toggle some of the different well types (color coded in a legend).
- (Glen) suggested ability to export to GPX format to be used in handheld units, Google Earth, or arcGIS.
- (Brent) asked that data points be viewable in MassGIS Oliver.

Next Meeting: July 14, 2009, John Augustus Hall, West Boylston, MA

Adjournment.