

Approved Minutes of the Technical Advisory Committee Meeting
August 17, 2005

Members present: Roger Thompson Lance Phelps
 Allison Lowry Alan Huizenga
 Steve Revell Craig Heindel
 John Forcier Bernie Chenette
 Phil Dechert

Others present: Chris Thompson Anne Whiteley
 Frank O'Brien Bruce Douglas
 Jeff Wennberg

Scheduled meetings:

September 20, 2005 1-4 PM Room 107 Stanley Hall

Review of agenda

The agenda was reviewed and accepted as proposed.

Review of minutes

The draft minutes of the June 14, 2005 meeting were reviewed and accepted as drafted.

The draft minutes of the July 19, 2005 meeting were reviewed and accepted as drafted.

Surface discharge subcommittee

Craig was asked to provide an overview of the subcommittee's work. Craig thanked Jeff for attending and indicated that the committee wanted to get some direction before proceeding further as there are significant policy issues to be decided.

Jeff noted that he had reviewed the summary of the subcommittee's recommendations and that the strong recommendation to require an operating permit had caught his eye. Jeff noted that he had been opposed to the use of operating permits but now sees the rationale and is coming around to the concepts, particularly if it could be part of a general permit approach.

Anne noted that a general permit might be acceptable if it was not a NPDES permit. Anne stated that many of our existing permits include permit conditions controlling the operation of systems. Roger noted that operating permits have ongoing fees used to support the regulatory oversight of the projects with operating permits. Anne said that theoretically these could be included in the fee bill. Craig suggested that a need for the money should be determined first.

Direct discharge issues

Anne said the first hurdle is statutory language that says you cannot issue permits for systems that discharge to surface waters or to the ground surface. There is also federal jurisdiction over direct discharge that is incredibly more expansive than in the past. Any swale or ditch discharging to surface water is regulated. Federal law requires permits with 5 year terms. State law would require a waste management zone for individual homes, presumptively at least one mile long. The legislature could change the statute but would find it hard to justify. (The one mile requirement is an operating procedure number). The application process for a direct discharge requires analysis of the impact on the receiving stream.

Anne will talk to Brian Kooiker about categorizing surface discharge systems as outside of the NPDES requirements. Anne also noted that discharges to ground water are regulated. Anne noted that no level of treatment will avoid the NPDES requirements as any waste that was originally pathogenic is included. Anne noted that recent court decisions related to CAFO (concentrated animal feeding operations) and other topics have left the whole direct discharge area in limbo relative to what is regulated and to what degree.

Committee discussion

Craig noted that there are two trains of thought that need to be pursued- science and regulatory framework.

John stated that if any statutory changes are required, ANR needs to get started soon in order to be ready for the legislative session.

Anne noted that there is no indirect discharge component in the Federal rules. Anne reviewed the origin of the indirect discharge concept as coming from a decision by Act 250 related to a Hawk Mt. project. Act 250 said that the effect of large leachfields on streams must be addressed in the Act 250 process and that the existing environmental permit rules were not sufficient. This led to the Indirect Discharge Rules.

Jeff said that there are some legislators who intend to “fix” the problem. Anne noted that there are also some legislators who might not support radical changes. Jeff said that the mission is to fairly and seriously examine the issues and obstacles. Anne suggested that TAC not take a pro or con stance, but rather list all of the options with

their associated pro and con aspects. Jeff asked for a write-up of the science and the legal issues.

Anne asked the members who design systems if they can certify designs for surfacing systems as not reaching ground water.

Anne reviewed the difference between point discharges and sheet flow. Under federal law sheet flow is not regulated, though sheet flow is captured under state law.

Anne also noted that there are surface water quality standards for E. coli. Craig and Roger replied that with disinfection, or even common sand filter technology the required treatment level can easily be achieved.

John expressed concerns about focusing on a statutory change unless it would be significant. It would not be worthwhile if after making the change only 5% more lots could be developed.

The concept of providing a layer of imported soil for 50' or so downslope of the leachfield was also discussed. A 6" layer of sand would ensure that there would not be surfaced effluent at the toe of the leachfield. There are issues as to whether effluent appearing at the end of the sand layer would be considered a discharge or not. Roger stated that conversations with Brian Kooiker made it clear that a "wick" or "wedge" of sand leading to the edge of surface water would be considered to be a direct discharge and therefore it is not clear whether or not adding a sand layer would result in the surfacing effluent not being considered to be a discharge when further from a surface water.

Anne asked about when designers would be able to certify that effluent would not reach surface water. John said that if the site was a mile from the brook it would be easy, but at 52' it could not be done. John indicated that there should not be a "magic" number. Roger suggested that a number is needed in order to ensure some certainty in the process. If there is no number, the decision is subject to review where a current regional engineer would find a situation acceptable but when a new reviewer appears it might be determined to not be compliant. Any concept of relying on certification by the designer without a concurring opinion by a reviewer leaves the certification open to question in the future unless there is an objective standard for comparison.

Steve suggested the answer is to define what is and what is not a discharging system for the purposes of the rules. Anne noted that a system designed to discharge to surface water would not be a failed system under the rules. Steve noted that in actual operation the effluent surfaces in the same location where the SHWT surfaces because the effluent is mixed with the SHWT.

Bruce suggested a concept based on giving up the 6" design factor and depending on disinfection and an operating permit concept. Anne asked if this was useful. Craig noted that the 6" number was a consensus decision for non-discharging systems.

Jeff asked that TAC assemble a document with the list of issues. Anne suggested an options paper concept – 1, 2, 3 etc, - with each outlined in context with its use and requirements. John said that TAC could do the technical parts but that legal issues should be by the Agency. Bernie said that the amount of relief and the cost of the systems should be included.

As a separate issue, John said that he is finding that towns do not understand the significance of the changes that will occur on July 1, 2007.

It was decided to have another subcommittee meeting on September 15, 2005 to work on the draft document before the next TAC meeting. Lance suggested that there be a list of the changes already made to the minimum site conditions. He also asked that the list of subcommittees show his membership on the lake water subcommittee.

Innovative systems

Frank said that he had received a proposal by New England Biofilter to use a concrete tank that would contain both the Ecoflo Biofilter and a pumping unit. Frank stated that based on his preliminary review, he would be issuing an approval letter shortly.

Items prioritized for discussion with high, low, and medium ranking

1. Mound sand specifications **high**
2. Encourage I/A **low**
3. Soil identification vs. perc test **medium**
4. Colorado rule **low**
5. Permit by certification **low**
6. Lake water potable water supplies **high**
7. Curtain drain with presumption of effectiveness **high**
8. Terralift system **low**
9. Field change policy **high**
10. Revisions to desktop hydro chart **medium**
11. Minimum amount of sand under a mound **high**
12. Grandfathered design flow and conversion of use policy **high**
13. Updating of design flow chart **high**

Topics list - items not ready for drafting for inclusion in rule revisions

1. Drip disposal
2. Mound sand requirements
3. Encourage I/A
4. Changing the 20% slope restriction to 30%
5. Replacing perc test with soil identification approach
6. Defining when effluent is no longer wastewater
7. Disinfection
8. Colorado Rule – reduction in isolation distance to wells based on construction methods
9. Certification and audit approach to permitting
10. Lake water systems
11. Curtain drains
12. Terra-Lift System
13. Installation certification language
14. Field change policy
15. Revise existing desktop hydro chart
16. Conversion of use policy, including grandfathered flows
17. Revise design flows

Executive Committee

John Forcier, Steve Revell, Lance Phelps, Phil Dechert, and Roger Thompson
Alternates – Chris Thompson, Bernie Chenette, Spencer Harris, Jeff Williams

Subcommittees

Hydrogeology - Allison Lowry, Craig Heindel, Dave Cotton and Steve Revell.

Training subcommittee - John Forcier, Roger Thompson, Allison Lowry, Dave Cotton,
and Barbara Willis.

Licensed designers - Spencer Harris, Alan Huizenga, and Gerry Kittle.

Well driller's knowledge checklist - Jeff Williams, Rodney Pingree, Roger Thompson,
Bernie Chenette, Gail Center and Steve Revell.

Interested in the delegation rules - Spencer Harris, Gerry Kittle, Phil Dechert, and Alan
Huizenga

Drip Disposal – Frank O’Brien, Roger Thompson, Dave Cotton, Steve Revell, Alan Huizenga

Legislative field trip – Phil Dechert, Gerry Kittle, Dave Cotton, Roger Thompson

Lake water – Alan Huizenga, Gail Center, Rodney Pingree, Lance Phelps

Surfacing systems – Craig Heindel, Steve Revell, Frank O’Brien, Roger Thompson, Bruce Douglas, Kim Kendall, Gail Center, and Brian Kooiker.