Minutes of the Technical Advisory Committee Meeting
January 21, 2003
As Revised on February 4, 2003

Members present:	Bernie Chenette	Alan Huizenga
	Spencer Harris	Rodney Pingree
	Steve Revell	Dave Cotton
	Barbara Willis	Jeff Williams
	John Forcier	Phil Dechert
	Roger Thompson	Allison Lowry
Others attending:	Marilyn Davis	Frank O'Brien

Review of Agenda –

John Forcier asked that an item called feedback be added to each agenda to ensure that the Committee members can share their impressions of what is happening outside of the committee activity.

Review of Minutes –

There were no comments or suggested revisions to the minutes of the January 7, 2003 meeting.

Hydro Chart Presentation –

Dave Cotton presented the work of the hydro subcommittee with the main points being:

A. The chart is a composite dealing with all of the issues in deciding what the linear loading rate should be. Everything is based on conservative assumptions.
B. The chart is intended to be a cookbook approach so that an in-depth understanding of hydrogeologic principles is not required to use it.
C. The chart is based on the hydrogeologic principles expressed in Darcy's Law, but in use all of that is concealed behind the factors in the table. This was intentional because the chart is not intended to make the users into hydrogeologists, rather it is to allow non-hydrogeologists to make some basic design decisions without needing detailed knowledge of the principles involved.
D. The ranges in the slope portion of the chart were discussed. Because in Darcy's Law an increase from 1% to 2% in slope would double the hydraulic capacity, the question was raised of whether this would result in

inaccurate determinations. Dave and other members of the subcommittee said that at very low slopes other factors really control the capacity. For instance, on a site with 1% slope, even a small amount of mounding would increase the effective slope to 2% and therefore result in the system performing as designed. The chart is based on using a mid-range slope and the built in conservatism is sufficient. This approach is necessary to make the system cookbook in nature.

E. This approach is usable for mound systems of less than 1000 GPD and other type systems of less than 2000 GPD.
F. The chart can not be used on soils with a consistence of firm or greater.
G. Soil textures will be based on USDA soil triangle based on sand, silt, and clay size particle fractions.

Discussion –

Roger asked about whether a definition of "firm" soil texture could be established? It was decided to refer back to the USDA method. This lead to a conversation about transition to the use of soil analysis in lieu of percolation tests. Roger indicated that this would be topic for the next rule making round and that with the required training (testing?) it would take a couple of years for implementation.

The issue of why the separation to the induced water table is different for septic tank effluent and filtrate effluent systems was raised. Septic tank effluent must maintain 36" to the seasonal water table and to the induced water table. Filtrate systems must maintain 24" to the seasonal water table but only 18" to the induced water table. This issue should be discussed in the future to decide if a standard approach should be used.

Bernie suggested that training should be required prior to use of the chart. Making the soils texture determination is new to some designers and use of the chart depends on an accurate determination. This was discussed and all agreed that training should be done, but because the soils determination will need to be agreed to by the regional office staff and they would also review the use of the chart for each case it was decided that the use of the chart could proceed. It was also noted that training in use of the chart was already scheduled for January 31 and February 7 and 10.

The committee reviewed the assumptions, numbers, and limitations in the chart and agreed they were appropriate. The committee agreed that the chart should be implemented as a practice as soon as possible once some minor wordsmithing is completed.

Revision to Minutes: There was discussion about incorporating the chart into the rules. The majority opinion of the committee was to publish the chart as a practice and not incorporate it into a future rule revision.

Draft Licensed Designer Rules –

Roger presented a draft of the licensed designer rules. The draft was based on the agreements reached by the committee on the issues presented by the subcommittee, which incorporated the new authority included in the recent statutory changes.

Discussion –

A. John asked if a strikeout and replacement format could be used to make it easier to follow, which will be done.
B. John raised concerns about allowing non-engineers to design systems that included advanced treatment. The committee reviewed the discussion that had occurred at the December 2, 2002 meeting. At that time the committee had decided that the general use approval would be tailored to the specific technology. If the technology would meet all of the requirements for general use approval but was complex enough, the general use approval would limit use to designs prepared by engineers. The Agency will review the general use approval with the committee prior to issuing a decision. John remained concerned and asked to see samples of the general use approvals so he could see what type of analysis is required when specifying a particular system.
C. It may be that continuing education requirements can only be required for designers who are not licensed engineers.
D. There was a suggestion to revise the language to count the upcoming designers training towards the first proposed two year time period. After further discussion it was decided that it was unnecessary to add the extra training period.
E. It was agreed that sections 1-313(e) (2) + (4) be removed as they request information that is not used in the licensing determination.
F. It was agreed to remove the condition that applications be submitted at least three weeks prior to the exam date. This was established to ensure enough time to process the application and let the applicant know they should appear for the test. This will be revised with a provision that also allows the Secretary to accept any application that can be processed in time.
G. The language will be revised to allow for possible use of an examination approved by the Secretary that is administered by others.

H. The continuing education language will be modified to be clear that the Secretary may recognize training provided by others.

Roger will revise the language and present it in the strikeout and replace format at the next meeting.

Well Driller's Knowledge Checklist –

The subcommittee gave a short presentation on this topic. The subcommittee met prior to the committee meeting and identified some issues, with the most important being whether a well driller using this concept would need to be able to identify soils. If soil identification were required, there would not be much difference from the licensed designer requirements for non-engineers. Bernie asked if the Agency had made any determination on this. Roger said that Commissioner Recchia had met with the well driller's association and had expressed hope that a limited process could be found that would require little or no soils knowledge. This would be based on dealing with replacement wells for existing single family residences on previously unpermitted lots. New lots, all buildings other than SFR on their own lots, and lots with existing permits are already required to have the wells sited by licensed designers. Roger noted that there is time to resolve any issues and provide any training that might be needed because the portion of the rules that will require permits for the currently unregulated wells does not take effect until July 1, 2007.

Feedback –

A. The committee asked that copies of the general use approvals be provided.

B. A comment was received that a designer had been told by a regional office person that staff presence is required for all soil testing when a performance based design is used. Roger said this is not correct and will issue a notice to the regional offices.

C. A comment was received that a replacement well site was required when using the improved lot subdivision portion of the rules. Roger noted that this was true only if the existing well site was not a complying location and will include this with the notice about site visits.

D. Two consultants said that while there had been only a few projects completed since the office operations memo had been issued, that a couple of recent projects had been processed more rapidly than in the past.

E. One consultant noted that there are several projects pending in the Rutland office, where the decisions have been made and in some cases the

work has been completed, that need to have the permit issued to complete the process. Roger said that he had been working on this issue and believed there was progress on catching up. This topic will be followed up for the future.

Subcommittees

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

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

Licensed designers - Spencer Harris, Gary Fern, Alan Huizenga for Lance Phelps, and Gerry Kittle.

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

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

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