



Technical Guidance Committee

Minutes

July 31, 2008

Department of Environmental Quality
Conference Room A
1410 N. Hilton
Boise, Idaho

Attendees

AJ Maupin, Wastewater Engineer, DEQ
Mike Reno, Environmental Health Supervisor, CDHD
Steve Pew, Environmental Health Director, SDHD
Joe Canning, P.E., B&A Engineers
Bob Erickson, Senior Environmental Health Specialist, SCPHD
David Hatt, Onsite Wastewater Coordinator, DEQ
Belinda McFarland, Wastewater Administrative Assistant, DEQ

Absent

Roger Albright, Complex Installer, RH Albright Construction

Guests

Jason Peppin, Senior Environmental Health Specialist, PHD
Barry Burnell, Water Quality Division Administrator, DEQ
Larry Jeffres, Marketing Director, R.C. Worst Co
Allen Worst, Vice President, R.C. Worst Co

AJ Maupin Calls the technical guidance committee meeting to order and introduces David Hatt as the new Onsite Wastewater Coordinator for DEQ.

Adoption of Past Meeting Minutes

November 2, 2006 meeting minutes

Motion: Steve Pew Motions to approve the November 2, 2006 minutes.

Second: Joe Canning

Voice Vote: Motion carried unanimously.



March 13, 2007 and June 1, 2007 meeting minutes

Motion: Mike Reno motions to approve the June 1, 2007 meeting minutes and table the March 13, 2007 minutes until the meeting.

Second: Joe Canning

Voice Vote: Motion carried unanimously.

Old Business

Definitions section

AJ Maupin definitions of *bedroom* and *module* are the same definitions submitted to the Legislature for approval.

TGC members discuss definition of *module*.

Motion: Bob Erickson motioned to approve the definitions section with the addition *the module* after *and* in the second sentence of the module definition.

Second: Steve Pew

Voice Vote: Motion carried unanimously.

Soils Section Modifications

AJ Maupin current changes to the soils section, update the *Domestic Wastewater Characteristics, table 08, and page 20-1*. The current table is from the 1980 EPA; Onsite Wastewater Treatment Systems Manual and should be updated to reflect the revised 2002, edition.

AJ Maupin another modification to the soils section is movement of the *Application and Checklist for non-domestic wastewater* from a sidebar on the DEQ website into the TGM.

Motion: Bob Erickson motioned to approve, updated wastewater section.

Second: Mike Reno

Voice Vote: Motion carried unanimously.

AJ Maupin changes to the *standard percolation test*. Page 13, will be replaced with the *ASTM D 3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using-Double Ring Infiltrometer* and *ASTM D 5093-02, Standard Test Method for Field Measurement of Infiltration Rate Using a Double-Ring Infiltrometer with a Sealed-Inner Ring*.

AJ Maupin the current method cited in the TGM uses a *falling head test*. This test creates



differing pressures as water is infiltrated into soils. The new ASTM Standards will correct this deviation with the use of calibrated rings and standardized testing procedures.

Joe Canning the current method in the TGM produces a lower absorption rates than other testing methods.

AJ Maupin *page 14, table 7 item 1, estimates only*. Rules used to determine application rate will still remain gallons per day per square foot (gal/day/sqft). The *ASTM standard tests* are a tool to be used in the field and will not supersede current rule.

Joe Canning the last two numbers (ASTM D 3385-03 and ASTM D 5093-02) reference the year adopted, removing the last two numbers allows for updates to be adopted without submitting changes to the TGM.

Steve Pew an insertion into the text, *most recent version of ASTM D 3385 and ASTM D 5093*.

AJ Maupin the *fill* subsection on *page 15 and 16*, is an update to the soils section clarifying vertical setback distances to unsaturated native soils.

Motion: Mike Reno motioned to approve changes to soils section and ASTM standards for percolation tests.

Second: Steve Pew

Voice Vote: Motion carried unanimously.

Rule Section

AJ Maupin rules currently in the TGM date back to when DEQ was a division of Health and Welfare. Rules created under IDAPA, 16.01.03, are now IDAPA, 58.01.03. The old rules should be removed and updated to reflect the current DEQ rules, but because the rules technically belong to the Department of Administration, the updated rules inserted into the TGM will be stamped *Unofficial Copy* on each page.

AJ Maupin the URL link provided in this section will direct users to the Department of Administrations web site where official copies can be viewed and downloaded.

Joe Canning an explanation should be inserted preceding the URL, describing the link and where the URL takes the user when clicked on.

David Hatt will insert an explanation on the title preceding the URL.



Motion: Steve Pew Motions to remove the old 16.01.03 rules, replace them with the current 58.01.03 rules, accompanied by a statement explaining what the admin rules link means and include the page numbers.

Second: Bob Erickson

Voice Vote: Motion carried unanimously.

Pressurized Distribution System Section

AJ Maupin summarizes a letter from the engineering board; the guidance currently written requires a good knowledge of engineering practices, individuals using the guidance are practicing engineering without a license.

Bob Erickson additional information should be placed into this section as to when a pressurized system should be required. ([Insert into doc.](#))

AJ Maupin I will include a table into the TGM indicating when a pressure distribution system will be required based upon number of bedrooms, soil type, total square footage and application rates. ([Still to develop](#))

Mike Reno *Page 59-1*, the allowance of pump baskets to be placed into septic tanks was a request from Panhandle District when building sites are small and unable to meet required setbacks for both a septic tank and a pump tank. A statement inserted into this section should read: *this configuration is only to be used when site conditions prohibit the installation of a pump tank.*

Mike Reno the septic tank is commonly used for primary settling and when a pump basket is introduced into a septic tank, the risk to the drain field increases because the pump operation does not allow primary settling to initially take place. Pump chambers are also used for retention in case of electrical outages or pump replacement.

AJ Maupin this has been an issue in the past and will be written into the next draft.

Bob Erickson *page 59-1* insertion of the letter *h.* followed by the statement *that the anticipated volume does not exceed one hundred and fifty gallons per day.*

Mike Reno these types of installations should be limited to replacement systems only.

Bob Erickson recommends the statement to read *h. may be used for replacement systems and new construction engineered with flow rates not to exceed one hundred and fifty gallons per day.*

AJ Maupin *page 51.* comments.



Joe Canning the *lift station* section on *page 51*, the word *leak* does not make sense. AJ Maupin word *leak* will be replaced with *pump*.

Joe Canning the statement about lift station should be placed elsewhere in this section.

Joe Canning *synthetic media filters* should also be included after (*ISF*) in the section

AJ Maupin after the word distribute *and may include but may not be limited to*, into the text of the section giving flexibility for inclusion of future products into the TGM.

Joe Canning the words *media* and *drain field* should be swapped.

TGC members and guests discuss lift stations and if engineering will be needed for systems pumping to gravity fed drain fields. General consensus reached, engineering should not necessary for simple lift stations, pumping from one elevation to another then, dropping into a gravity fed D- Box.

Barry Burnell change section to *pump systems* with two subsections, one titled *lift stations* and the second *pressurized distribution*.

AJ Maupin I will make these modifications to the section.

AJ Maupin *page 52*, comment.

Joe Canning for *b.* in the construction section, end laterals should be accessible for future servicing.

Open Discussion amongst TGC members as to what requirements will be necessary when the laterals are installed.

AJ Maupin *page 53*, comment.

Joe Canning minimum dosing requirements have been removed from this section will this be left up to the engineer only, or should some minimum requirement be reinserted.

AJ Maupin the old guidance had four doses as a minimum and was deleted from the guidance because, engineers should not limit designs to only four doses, but should design dosing for the site and soil conditions.

Bob Erickson *page 51*, *system approval criteria, number five*, mentions dosing requirements.

AJ Maupin strike numbers *three* from *page 53*.

AJ Maupin *page 54*, comment.



Joe Canning the *low level off switch* is mislabeled and should be *low level alarm switch*. This whole diagram should be updated and requests other diagrams be submitted into guidance showing different configurations of float and pump placement.

AJ Maupin Bob will you submit sketches of commonly seen configurations in the field?

AJ Maupin *page 55*, comment.

Bob Erickson this section should be more specific when *explosion proof boxes* are required. Only, multi-family and commercial properties are explosion proof boxes a requirement not single family residence.

Bob Erickson suggests changing *explosion proof* to *electrical junction box*.

AJ Maupin *electrical connection per NEC requirements* will be inserted into draft.

AJ Maupin *page 56*, comment.

Bob Erickson the sentence on *page 56*, *Pressure distribution systems require....*, should be changed to *Pressure distribution systems should have a single day's storage....*

AJ Maupin *page 59-1*, comment.

Mike Reno insertion into the text to read, *h. may be used for replacement systems and new construction engineered with flow rates not to exceed one hundred and fifty gallons per day.*

AJ Maupin I will make the changes and present to the TGC for concurrence and a vote by e-mail these modifications to the pressure distribution section.

Motion: Joe Canning motions to accept recommendation by AJ to modify changes to the Pressure Distribution System through e-mails and follow-up with a teleconference if necessary.

Second: Mike Reno

Voice Vote: Motion carried unanimously.

Break for Lunch



Old Business (Continued)

Policies Section

AJ Maupin first policy for review is the *drain field size reduction policy*. This policy will clarify only one reduction may be taken when installing an ETPS system in conjunction with Gravelless products.

Motion: Second: Mike Reno motions to approve *drain field size reduction policy*.
(*Policy 2008-01*)

Second: Joe Canning

Voice Vote: Motion carried unanimously.

AJ Maupin the second policy relates to residential floor drains and when there use.

Motion: Second: Steve Pew motions to approve *residential garage floor drains policy*.
(*Policy 2008-02*)

Second: Mike Reno

Voice Vote: Motion carried unanimously.

AJ Maupin requests, and is granted withdrawal of the proposed policy; *Prohibition on Growing Season Nitrate Reduction Due To Plant Uptake*.

New Business

Policies Section

AJ Maupin the *Non Conforming Permit* policy is in anticipation of future rule changes. Development of this policy prioritizes the type of system to be installed at sites affected by the new rule, if approved by the legislature.

TGC members and guests discuss extensively the proposed policy.

Mike Reno insert the *extra drain rock trench* at number *three* and *absorption beds* at number *four* preceding the *alternate treatment technologies*.

Joe Canning recommends insertion of *seeking easement* into the list.



AJ Maupin will send the 1993 non conforming permit memo to the TGC members and insert into the policy *seek easement to install system on adjoining property or gain ownership to adjacent property.*

Motion: Second: Steve Pew motions to table the *non-conforming permit policy.*

Second: Bob Erickson

Voice Vote: Motion carried unanimously.

AJ Maupin next agenda item, *expedited product review and approval.*

A consensus is reached among TGC members that precedence had already been set in the past to approve products that may not warrant a full review, such as effluent filters.

Alternative Systems

AJ Maupin a proposed recommendation to change the annual reporting dates from the *January 31* deadline to a *June 30* deadline to be submitted no later than *July 31.*

AJ Maupin another proposed change, removal of requirement *three* under *design* in the ETPS Section. *Design for each specific application should be provided by a Professional Engineer licensed in the State of Idaho and specializing in environmental or sanitary engineering.*

Barry Burnell the requirement was placed into the TGM at a time when only a few prepackaged systems had been approved in the State and if someone wished to bring forward a design for a treatment system. The design would need a P.E. stamp.

AJ Maupin this recommendation should prevent problems experienced in the past from re-occurring and clear up any confusion that the third party testing is a requirement and can not be bypassed if designed by a P.E.

TGC has an open discussion as to weather striking this proposal would prevent development of these types of systems in the future.

David Hatt explains these types of systems would best be served if permitted under the experimental section of the TGM.

TGC agrees to accept the proposed change and strike item *three* under the design section in the extended treatment system section.

Joe Canning strike *c.* in the installation section and strike the second sentence in *d.*

AJ Maupin replaces the first five words from item *two* and replace with *O&M entity, service provider or licensed complex installer.*



AJ Maupin remove term *grab sample* on page 39-4.

AJ Maupin proposed changes to current test requirements from 30ppm (30mg/L) to 40ppm (40mg/L) CBOD₅ and 30ppm (30mg/L) to 45ppm (45mg/L) TSS. The proposed changes will be, representative of third party testing performed by NSF.

Mike Reno where did the 30/30 requirement come from?

Barry Burnell calculated 85% of 200.

Steve Pew we already looked at the test requirements during the June 1, 2007 committee meeting and recommended to leave the testing unchanged.

AJ Maupin a request was made to bring this recommendation back to the TGC for further review.

Mike Reno changing the testing requirement rewards the O&M who exhibit poor performance.

Barry Burnell the TGC should reconsider, testing criteria because weekly averages (40 CBOD₅, 45 TSS) compared with monthly averages (30 CBOD₅, 30 TSS) differ when spread over a period of time. Methods to identify treatment systems not functioning properly over extended period of time may be accomplished by averaging the O&M entities performance on an annual basis.

AJ Maupin a recommendation has been made by Barry to take annual average of test results for a particular O&M, not to exceed 30 CBOD₅ and 30 TSS and individual sites test results not to exceed 40 CBOD₅ and 45 TSS.

Mike Reno we request DEQ to suspend an O&M prior to the CAP. This will help the Health Districts with enforcement for systems out of compliance. (page 39-4)

AJ Maupin if TGC accept DEQ's recommendation to increase individual site testing limits coupled with an O&M average limit will DEQ suspend an O&M when requested by the HD's.

AJ Maupin I will research the Drinking Water referral criteria with Barry's help, combine with this section and send to the TGC for acceptance or comment.

Mike Reno a combination of stepped up enforcement and a change to testing requirements should be reached.

AJ Maupin I propose removal of this section, make appropriate modifications and bring back for TGC review. Also if we increase the individual resident monitoring limits to CBOD₅ 40 and TSS 45 and include the average for the O&M not to exceed 30 CBOD₅, 30 TSS will we require two limits that if either are exceeded then we suspend the O&M. The two limits will be if more than 10% of the systems exceed the 40/45 limit or the O&M average overall exceeds the 30/30 limit then the O&M will be suspended.



TGC and Barry agree.

Mike Reno says it will be a trade off. If an O&M wishes to go 40 CBOD₅ and 45 TSS then 10% of the systems should not be out of compliance or an overall annual average should not exceed 30 CBOD₅ and 30 TSS.

AJ Maupin we should table this proposal and ask for input from involved parties (DEQ, HD, Stakeholders) and bring proposal back to the next TGC meeting.

David Hatt table only, the testing requirements and approve or disapprove the rest of the proposed changes.

Motion: Mike Reno motions to approve the proposed changes to the ETPS section and table the TSS and CBOD₅ requirements until the next TGC meeting.

Second: Steve Pew

Voice Vote: Motion carried unanimously.

AJ Maupin a new item to the agenda modifying the ETPS list to include only those products that have a viable entity within the state.

Bob Erickson for proprietary products in the TGM that the DEQ onsite coordinator send a list separate from the website with phone numbers and email addresses so the Health Districts have somewhere to send the developer when a treatment package is required.

Barry Burnell we would need documentation provided by the product manufacture at the time of approval or submitted to the file, allowing DEQ to publish this information to the web or other agencies because statute does not allow governmental agencies to publish mailing lists for solicitation without specified consent.

Belinda McFarland It may be possible to transfer information from one State agency to another provided the receiving agency assumes responsibility for the information.

Barry Burnell the O&M provider list on the web could be inserted as a table in the beginning of the ETPS section of the TGM.

Motion: Mike Reno motions to approve insertion of the *Non-Profit O&M Entity and Service Provider List* located on the DEQ website into the ETPS section of the TGM.

Second: Bob Erickson

Voice Vote: Motion carried unanimously.

David Hatt review and approve expanded table for the extra drain rock section.



Motion: Joe Canning motions to approve the expanded table for the *extra drain rock section*.

Second: Steve Pew

Voice Vote: Motion carried unanimously.

AJ Maupin move agenda item Gravelless Products Section scheduled for August 1 and address before close of business today.

TGC agrees to review the Gravelless Products Section today.

Bob Erickson under *conditions for approval* and *design, pipe* should be struck from the sentences. *Two* under *construction, 16 inches* should be changed to *12 inches*. *Three* and *four*, strike the word *line* and add in *trench*.

AJ Maupin remove example from *two* under *design*.

Bob Erickson *design* under *three* and *sludge* from *four* should be removed.

Motion: Mike Reno motions to retain section name and approve remaining proposed changes to the *Gravelless trench system*.

Second: Joe Canning

Voice Vote: Motion carried unanimously.