

Drainfield to Surface Water Setback Distance Subcommittee

Teleconference Meeting Minutes

Tuesday, 01/11/11, 10:00 am

Teleconference
Date: 2011-01-11
Start: 10:00 a.m.

ATTENDEES:

Athol: George Miles, PE
Boise: AJ Maupin, PE; Joe Canning, PE
Coeur d'Alene: Allen Worst
Hayden: Dick Martindale
Idaho Falls: Nathan Taylor
Rapid City, SD: Bill Holder, PE

Absent:

Kimberley: Dr. Jim Ippolito, Ph.D. USDA
Idaho Falls: Brett Skidmore (Building Contractors Association Representative)
Coeur d'Alene: John Corcoran (Realtor Association Representative)

Support Staff: Lindsey Stanton, DEQ clerical

Meeting called to order: 10:07 a.m.

Past Meeting minutes:

The subcommittee reviewed the November minutes. Under the second bullet of "position statements," Jim needs to be taken off of the "yes" list and replaced with Joe. Motion made to approve the minutes with the change, the motion was seconded and the minutes passed unanimously.

The subcommittee reviewed the December minutes. Motion made to approve the minutes as presented, the motion was seconded and the minutes passed unanimously.

Colman article:

The subcommittee discussed the 2005 article titled *Response Curves for Phosphorus Plume Lengths from Reactive-Solute-Transport Simulations of Onland Disposal of Wastewater in Noncarbonate Sand and Gravel Aquifers*, written by John A. Colman and published in USGS, Scientific Investigations Report 2004-5299. While the article raised concerns regarding the ability of soils to absorb phosphorus, the non-calcareous soils used in the study do not apply to southern Idaho. According to the study, effluent loaded to the drainfield with a high concentration of phosphorus is more efficiently adsorbed than effluent with a low concentration of phosphorus. This information will be valuable when phosphorus removal products are considered. Phosphorus concentrations exceeding 2 mg/l were shown to be necessary to exceed the solubility product of phosphorus minerals in order to initiate phosphorus sequestration. There was also applicable information about what happens when a drainfield is no longer being used. The article indicates that the phosphorus desorbs from the soil media and migrates down gradient in the aquifer. Although much of the information in the article does not apply to Idaho soils, it adds complexity to the subcommittee's project and contains information that needs to be considered.

Modified Flowchart:

The subcommittee discussed the modified flowchart.

Action Item: AJ will research questions that arose during the discussion and further modify the flowchart.

Sampling Protocols:

Tabled until the next meeting.

Action Item: Subcommittee members will research sampling protocol.

Operating Permits:

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Tabled until the next meeting.

Action Item: AJ will research how other states deal with operating permits.

White Paper:

Tabled until the next meeting.

Action Item: AJ will complete a draft introduction to the white paper.

Open Discussion:

Allen expressed concern that the flowchart forces people to follow specific steps and requirements and provides few options.

There are several issues that the subcommittee needs to keep in mind. Per state statute, if a person is able to hook up to a sewer district, he must take that route. Additionally, in state ~~statute~~ rule is the requirement that if a standard system cannot be installed, an alternative system may be considered. What happens if the best drainfield site on a property is also the chosen site for the house? If an operating permit was required, how would the state handle people who couldn't afford measures that need to be taken to remain in compliance? What about people who have access to a sewer district, but aren't annexed into the city? If they are within a city, will not annex them could an onsite system then be considered? (yes, if the city provides a letter to the DHD that they are not willing to serve the parcel in question, and/or do not have capacity. Lastly, should sites with A2 soils be considered for onsite systems or should the soils for phosphorus sequestration be limited to B and C type soils. The soils should be evaluated for their percent large fraction and percent fine fraction (% sand, silt and clay).

NEXT SCHEDULED MEETING:

The next meeting is scheduled for Tuesday, 25 January 2010, from 10:00 am MDT (9:00 am PDT) to 12:00 pm MDT (11:00 am PDT).

ADJOURN: Meeting Adjourned at 12:00 p.m.

Next Meeting Topics:

1. Review and discuss the modified flowchart.
2. Discuss subcommittee members' findings regarding sampling protocols.
3. Discuss AJ's findings regarding how other states deal with operating permits.
4. Review the introduction to AJ's white paper.