

Manure Irrigation Workgroup Meeting - August 26, 2014

DRAFT MEETING NOTES

Original Agenda

August 26, 2014, 9:00am – 3:00pm

Wisconsin Department of Agriculture, Trade, and Consumer Protection

Executive Board Room, First Floor

2811 Agriculture Dr., Madison, WI 53718

Meeting Overview:

This meeting will focus primarily on full workgroup discussion and review of draft “risk tables” summarizing droplet drift, odor, water quality, and air quality. A working draft of the tables will be presented at the meeting with the intention of incorporating workgroup feedback and distributing revised versions for further review. A comparable risk table addressing airborne pathogens is expected to be developed in the future following completion of the QMRA study. The workgroup will also revisit the outline for a workgroup report and, time permitting, will discuss the scenarios. Please bring your calendars to help identify dates for remaining workgroup meetings and establish a timeline for completing our work. Background information is available at the workgroup document site and the project website (fyi.uwex.edu/manureirrigation).

Agenda

8:30am	Room available – coffee
9:00	Welcome, introductions, agenda overview/revisions, and review of ground-rules
9:10	Review of notes from last meeting (April 4, 2014)
9:15	Updates and Announcements <ul style="list-style-type: none">- update on QMRA/risk study- other relevant updates and announcements
9:45	Presentation/Discussion/Revision: Risk tables for 1) droplet drift, 2) odor, 3) water quality, 4) air quality, and a synthesis table.
11:00	Break
11:15	Continue discussion
12:15pm	Lunch – box lunches (provided)
12:45	Continue discussion
1:45	Break
2:00	Presentation/Discussion/Review: outline for workgroup report. Identify workgroup tasks. Schedule remaining meetings
3:00	Adjourn

NOTES from August 26, 2014 Meeting

1. Attending:

Workgroup members attending: Mark Borchardt, Kenn Buelow, Andrew Craig, Ken Genskow, Suzanne Gibbons-Burgener, Sarah Grosshuesch, Carrie Laboski, Becky Larson, Shelly Mayer, Pat Murphy, Jeff Polenske, Gloria Smedema, Jeff Sommers, Steve Struss, Rob Thiboldeaux, Lynn Utesch, Jim VandenBrook,

Workgroup members not attending: Dana Cook,
Others attending: Joe Greening (public), Sarah Koske (CDC/DHS) Joe Baeten (DNR), Tucker Burch (USGS)

2. Review of Notes from April 4, 2014:

- Draft notes from the April 24 meeting were reviewed. No changes were suggested.

3. Updates and Announcements:

- Transitions in workgroup membership: Todd Boehne has left DATCP (for Montana); Steve Struss will take his place on the workgroup. Andrew Craig will continue with the workgroup, but his new position at DNR does not allow him as much time for CAFO permit activities; Joe Baeten will attend workgroup meetings and represent DNR when Andrew is not available.
- Lynn Utesch announced that the City of Algoma passed an ordinance banning all application of liquid manure within the city. He also reported that Kewaunee County is considering an ordinance that would restrict winter applications of liquid manure (and other waste types) in areas where soil depths are less than 20 feet from bedrock. Individual Towns would adopt if approved. Utesch also noted a study released by UW Stevens Point, Center for Watershed Science and Education, examining connections between nutrient management plans and groundwater quality.
- Pat Murphy provided an update on the process to revise the NRCS 590 standard for Wisconsin, which will incorporate concerns about N loss to groundwater. An initial review draft is expected for late Fall or Winter. NRCS hopes to finalize the new standard by October 2015.
- Mark Borchardt reported on a pilot study he is leading that is seeking to establish that human and bovine markers can be used to distinguish between human wastewater and bovine manure as sources of contamination in groundwater.
- Becky Larson (and others) discussed recent public meetings in Wood County regarding Wood County's interest in an ordinance restricting or banning manure irrigation. The ordinance is modeled after a similar ordinance in Adams County, which allows the practice only under a conditional use permit. Wood County has formed an ad hoc committee to continue the discussion.
- Andrew Craig reported that since the April meeting, DNR has approved 4 new uses of manure irrigation on specific fields under specific conditions through review and approval of nutrient management plans. As an update on an issue previously discussed by the workgroup, he also reported that the contested case hearing for Eberts Enterprises will take place in December.
- QMRA/Risk study update: Mark Borchardt and Tucker Burch provided an update and summary of their field trials to date and potential timing for the remaining work. They have completed 20 trials at 3 different farms. 17 were during the day time; 3 at night. 7 involved center pivot; 13 with a traveling gun, and for comparison, 1 from a conventional tanker applying manure from the top. Trial data stretched from May through October. 10 of the 20 trials were conducted in 2014. The trials produced 4,200 data points that will support the QMRA modeling runs. Of those, 3700 data points are qPCR, which produce a total count but does not distinguish between

live and dead organisms. 500 are Culture, which detects live organisms. As explained by Borchardt, qPCR has the potential for over-estimating the count, and Culture has the potential for under-estimating. Graphs were distributed showing relative humidity, solar irradiance, temperature, and wind speed for all 20 trials, along with comparisons to National Climate Data Center and at UW Stevens Point.

4. Presentation/Discussion/Revision: Risk tables for 1) droplet drift, 2) odor, 3) water quality, 4) air quality, and a synthesis table

The workgroup reviewed and discussed information compilations (“risk tables”) for droplet drift, odor, and air quality, that had been developed by Becky Larson with input from workgroup members. Draft issue summaries were distributed for each topic and provided structure for the conversation. Each included a brief overview of the issues of concern, current practices and regulation, unknowns and remaining uncertainties, and a table of topic (e.g., odor/drift/air quality) issues related to manure irrigation practice. The tables were updated versions of similar tables discussed at previous workgroup meetings. Discussion included many suggested clarifications and additions. Larson maintained notes for each table. Becky plans to update the tables, solicit feedback from other researchers, and then share revised versions with the workgroup.

Becky also distributed an additional “synthesis” table as a first cut at pulling together important information related to each major issue. Workgroup members discussed the synthesis table and provided feedback and recommendations for revisions.

The group did not have time to discuss another table addressing water quality but agreed to discuss at the next meeting.

Discussions of all tables will continue at the next workgroup meeting.

5. Presentation/Discussion/Review: outline for workgroup report. Identify workgroup tasks. Schedule remaining meetings

The workgroup discussed the content of a workgroup report following a draft outline distributed at the meeting. Consistent with the original intent of the workgroup, the report would summarize information compiled and reviewed by the workgroup, as it would be intended for “WDNR, producers using or interested in the practices, and other interested stakeholders, including, but not limited to, local government officials.” As outlined, the workgroup report would include an 6 main sections plus an executive summary; additional appendices could be added if necessary. The main sections are: 1) Introduction and background (covering workgroup goals and objectives, expressed concerns and benefits, and workgroup process and activities); 2) Manure and manure application (a primer about manure, additions to manure, basic handling processes, and characteristics of manure/liquid material used in manure irrigation), and existing rules, regulations, and practices related to manure irrigation; 3) Risk, public policy, and the precautionary principle as discussed by the workgroup; 4) the risk tables/issue summaries [see item 4 in these meeting notes]; 5) Workgroup responses and recommendations (responses to the expressed benefits and concerns, and recommendations emerging from the workgroup (which are yet to be determined); and 6)

Scenarios/examples to help illustrate manure management options and implications with and without manure irrigation. Initial assignments were made to begin writing parts for which information already exists (e.g., sections 1-3). Workgroup members were asked to review the outline between meetings and discuss potential changes at the next meeting.

6. Actions.

- Assignments
 - Becky Larson will revise tables based on feedback and solicit additional input
 - Ken Genskow will begin drafting Section 1 of the report
 - Becky Larson will begin drafting the Manure primer in Section 2 of the report
 - Andrew Craig will begin drafting the existing rules part of Section 2
 - Steve Struss will begin revising the odor table and summary
 - Kenn Buelow will begin drafting a scenario for Section 6
 - Others will review the draft outline to discuss at the next meeting

- Future meeting dates were set for the rest of 2014:
 - Tuesday, October 14, 2014, 9am-3pm at DATCP (Board Room)
 - Monday, November 10, 2014, 11am-4pm at DATCP (Board Room)
 - Monday, December 15, 2014, 9am-3pm at DATCP (Board Room)