

**Livestock Siting Technical Expert Committee
Odor Subcommittee
Meeting Notes for October 26, 2010**

Attendance: All odor subcommittee members, except for Dean Perlick, attended (Chuck McGinley along with Larry Jacobson participated via conference call). Richard Castelnuovo from DATCP was also present. Others attending were Dave Jelinski of DBA, Miriam Ostrov of MEA, and Joan Sanstadt of Agri-View News.

Meeting called to order at 9:32 a.m.

The subcommittee addressed specific odor assignment questions and developed recommendations as follows:

Question 1 Existing odor sources on Appendix A Worksheet 2, Chart 2, p. 390-25

- Alley flush to storage (DBAF) The group reviewed and discussed example odor score spreadsheets which they had earlier requested to be run for their consideration. They also considered current research, comparable odor generation sources, and real-life examples. They then discussed how using the control practices of treated water flush and immediate return of flush water can help to reduce odors.

Group Consensus: The odor generation number for alley flush to storage should be increased from its current level of 10 to 20. They also agreed that treated water flush should be given an odor control credit of 30% reduction, and immediate return of flush water should be given an odor control credit of 50%. As a final recommendation, the group encouraged DATCP to coordinate any final changes with the DNR as they develop their 445 rule.

- The subcommittee then reviewed the list of existing structures on the summary sheet of subcommittee recommendations. All members verified that the summary accurately reflects their consensus recommendations.

Question 2 Identify new odor sources (structures or manure management methods) that could be added to Appendix A Worksheet 2, Chart 2, p. 390-25

- Sand separation lanes (a.k.a. sand channels) The group revisited this issue for the purpose of clarifying odor generation number for this source. The general agreement was that the odor from treatment area was significant but the odors from adjacent sand piles are far less than significant and comparable to the generation number from manure stacks.
-

Group Consensus: Sand separation lanes should be assigned an odor generation number of 40, and sand weeping and storage pads should be assigned an odor generation number of 2.

- The group then considered sand and manure solids separation buildings, enclosed areas where separation equipment is housed to prevent freezing in cold weather. The general agreement was that these generate odors in very much the same way as sand separation channels, and as such, could reasonably be assigned similar odor generation numbers. The group also discussed whether these buildings should be exempt from the odor standard due to their relatively small size. The subcommittee considered but did not recommend an exemption of this odor source based on the small footprint of the buildings. As a side note,

it was suggested that DATCP provide in the siting rule the rationale for allowing certain buildings to be exempted from the odor standard.

Group Consensus: Odors from these structures can be significant and should be treated the same as sand separation lanes in terms of the generation numbers assigned treatment and storage areas. An odor generation number of 40 should be assigned to sand and/or manure solids separation buildings, and an odor generation number of 2 should be assigned to solids storage areas. A building which houses both separation equipment and storage will need to be divided according to these two functions, and the appropriate generation number applied to each area. It was also recommended that biofilters be considered as odor control practice which could be applied to these buildings, since they are positively ventilated.

- The group discussed poultry dryer-belt systems, and although they agreed that there have been observations that odors are reduced, these are insufficient to make the group comfortable with recommending an odor control number. Since the technology is not removing odorous compounds, there remains a mass balance consideration.

Group Consensus: DATCP needs to research this practice further before assigning an odor control number. Also, DATCP should consider assigning different odor generation numbers for poultry high-rise housing versus conveyor belt set-ups that store the litter away from the housing.

- The subcommittee then reviewed the list of new structures on the summary sheet of subcommittee recommendations. All members verified that the summary accurately reflects their consensus recommendations. One member added that odors from feed storage will see increased attention in the future if feed costs increase and distiller grains become more attractive.

Question 3 Odor Control Practices on Appendix A, Worksheet 2, Chart 3 p.390-26

- The subcommittee then reviewed the list of odor control practices on the summary sheet of subcommittee recommendations. All members verified that the summary accurately reflects their consensus recommendations.

Question 4 Identify new odor control practices that could be added to Appendix A, Worksheet 2, Chart 3 p.390-2

- **Wet/Bio Scrubbers:** A member of the group having considerable experience with this technology suggested that these two systems be handled separately. Wet scrubbers use chemicals to treat air contaminants and therefore can produce a waste product with disposal issues. Bio scrubbers, on the other hand, use only water and encourage biological breakdown of contaminants, and therefore generally do not result in difficult disposal issues. A new technology which is being developed for odor control is the use of ozone or hydroxyl ion radicals. It was suggested that this technology, similar to wet and bio scrubbers, is still emerging with regards to agricultural operations, and therefore should be handled on a case-by-case basis.

Group Consensus: DATCP should stay abreast of emerging odor control technologies, and assign odor control credits, as warranted by data and field experience on agricultural operations.

Question 5 Exemptions from the Odor Standard

- The group confirmed its earlier decision to recommend that DATCP eliminate the 2,500 foot exemption, since there is no technical justification for it.
- The group then discussed at length whether the 500-1,000 Animal Unit exemption for expanding operations should be continued. It was pointed out that smaller farms can have major odor issues. Also, it can be to a producer's advantage to get an odor score early on to lock in their nearest neighbor. This can also be a planning tool for farms that may expand up to or beyond 1,000 AU in the future. One member pointed out that there is no technical basis for providing this exemption. Others discussed the benefits of DATCP encouraging, but not requiring, expanding farms (between 500 and 1,000 AU) to comply with the odor standard.

Group Consensus: The group did not wish to take any action on this item beyond its initial recommendation; however, the group wanted DATCP to review the "under 1000 AU" exemption and consider the benefits (e.g. long range planning) and impacts (e.g. increased costs) for producers.

Questions 6 and 7 Mandatory and Optional Odor Management Plans

- The group confirmed its prior recommendations about strengthening plan requirements. After some discussion, the group agreed that all farms should be required to complete all three management plans (employee training, incident response, and optional odor management). One member pointed out that farmers responding to neighbor complaints is very important and should be stressed in the incident response plan. The group also agreed that all farms applying for a siting permit, even those not having to comply with the odor standard, should be required to submit some type of odor management plan. Farms exempt from the odor standard may have different plans that cover manure storage and other sources addressed in the odor standard. The group conceded that enforcing compliance with these plans may be difficult; however, members felt that plans served valuable functions for farmers and local governments. The group then discussed at length how many points should be allotted in the odor score calculation for farmers who develop compliant plans.

Group Consensus: The current 3 plans (employee training, incident response, and optional odor management) should be rolled into one mandatory plan. More direction should be provided to producers as to what constitutes an adequate plan from an odor standpoint, with perhaps a fill-able form being provided on DATCP's siting Website. Applicants who must meet the odor standard should receive no more than 50 points toward passing score if they have compliant plan.

Question 8 Compliance Monitoring

- The group reviewed the draft prototype checklist. All comments were very favorable.

Group Consensus: DATCP should continue to develop and refine the draft prototype checklist for compliance monitoring. It could serve as a useful tool for local governments to oversee compliance with siting permits, as well as tool that producers might be use to check compliance with their permit conditions.

The odor subcommittee meeting adjourned at 2:30 p.m.