

**OHIO DEPARTMENT OF AGRICULTURE
LIVESTOCK ENVIRONMENTAL PERMITTING PROGRAM**

**Responsiveness summary to public comments on the
Assen Dairy draft Permit to Install and draft Permit to Operate
June 23, 2004**

The Ohio Department of Agriculture issued a public notice on May 5, 2004, of Assen Dairy's draft Permit to Install and draft Permit to Operate. This public notice opened the public comment period on the draft permits and informed the public that a public meeting would be held on June 7, 2004, to accept oral comments. The comment period ended at 5:00 p.m. on June 14, 2004.

Comments in quotation marks are taken word for word from oral and written comments, with no editing (other than some corrected spelling). Some comments offered on Assen Dairy were not applicable to the draft permits; nonetheless ODA wishes to acknowledge these comments by including them in the Responsiveness Summary. Finally, even though a comment's response was "None," the comment was considered. The table below outlines the comments received by ODA:

No.	Date received	Name	Organization, if any	City, State
1	5/17/04	Bruce Roberts, Garnett Hunter, Merrill Geyer	Union Township Trustees (Madison County)	London, OH
2	6/7/04	Tom McQuitty		London, OH
3	6/7/04	Liz Tyson		London, OH
4	6/7/04	Diane Furbee		London, OH
5	6/7/04	William Eby		South Vienna, OH
6	6/7/04	June Slaughter		South Solon, OH
7	6/9/04	Melissa Freeman		London, OH
8	6/10/04	Jean Blain		London, OH

1. **Comment:** "As you have no direct control over rate of application of liquid manure, we fear that an occurrence such as that which happened on April 8 th when liquid manure entered Bradford Creek from field tile will be repeated." [1]

Response to comment 1: If the permit for Assen Dairy would be approved, ODA does have jurisdiction over rate of application of liquid manure and manure run-off incidents. See the response to comment 2 and 16.

2. **Comment:** "The head water of Bradford Creek originates on Assen property and surrounding farms and any over flow of the manure storage pond or other spills will enter Bradford Creek." [1]

" True farmers use the livestock waste as an efficient and safe cross-nutrient. Corporate farming uses the land as a place to dump waste in any quantity that they can get away with. And waste has been dumped, millions of gallons along with the decaying bones of dead

animals and the piles of afterbirth from their delivery room. ... Let me tell you about my grandson Luke over here. He's six months old, and he lives even closer to this Assen factory farm than I do. His bathing and his drinking water comes from the underground wells in our area, and those are the same manure and bone fields surrounding the area." [4]

Response to comment 2: Assen Dairy is required to be designed, built, and operated so that there are no leaks and no discharges of manure into waters of the state. A site-specific geological exploration was made for the Assen Dairy. According to the site specific geological exploration and verified by water well logs for the farm, the separation distance between the bottom of the manure storage pond and the uppermost aquifer will be greater than the minimum siting criteria of 15 vertical feet required by rule (Ohio Administrative Code Rule 901:10-2-02) for an aquifer that yields less than 100 gallons per minute. In addition to the separation distance, a recompacted clay soil liner is required at this site for the earthen manure storage pond. This liner shall be a minimum of 3 feet in depth and be compacted to a density that provides a permeability of not greater than 1×10^{-7} cm/sec, as required by ODA rules. The borrow material at this site that will be utilized for constructing this clay liner had a remolded tested permeability of 2.8×10^{-8} cm/sec. Testing will be performed during construction and submitted as part of the completed as-builts to verify that the appropriate compaction and permeability was provided to meet ODA rules. ODA believes that meeting these standards, which are recognized throughout the nation and used by the U.S. Department of Agriculture's Natural Resources Conservation Service, should provide the necessary protection in preventing any impairment to the aquifer underlying the Assen Dairy. It is important to note that there has been no evidence in Ohio that manure lagoons have leaked, as stated in the comment.

Assen Dairy is required to perform an annual groundwater quality test as a part of this permit. For concerns related to manure storage, the best place to sample is at the farm itself. The well used at the site would pull more water from the aquifer than the surrounding individual homes, and any pollution would show up at the production site first. Assen Dairy has submitted water test results and will perform these tests annually to determine if there is any contamination of ground water from their operations. The tests submitted did not indicate groundwater impacts.

Regarding groundwater pollution from land application of manure, it is believed that these concerns are negligible to that of manure storage structures. At an average annual application rate of less than 1 inch per acre per year, the crop would utilize a portion of these nutrients, and the remaining nutrients (P 2 O 5 and K 2 O) attach to the soil particles, generally in the upper 8 inches of the soil. Since nitrogen is a concern for leaching through the soil profile and does not readily attach to soil particles, the maximum amount of nitrogen to be applied in any given year cannot exceed the nitrogen requirements of the following crop, which prevents excessive nitrogen application and any leaching effects it may have to groundwater. For land application of any manure, best management practices and nutrient balances are to be utilized to prevent excessive application of manure and concerns with these nutrients polluting surrounding ground and/or surface waters.

ODA requires each permitted farm to have a manure management plan, so the manure is distributed and recycled properly as a nutrient to the soil and growing plants and to prevent manure run off. Because the farm has whole farm manure management plans, we force the farmer to find adequate distribution for all his manure. Manure and soil testing determines how much manure is allowed to be applied to farm fields, and applying more is in violation of the laws. Manure application is also dependent on available water holding capacity, and farmers are required to monitor and control drainage tile flow. Our routine inspections of farmers'

actually applying manure, as well as inspections of all their records of manure application will track this and assure that they are distributing and using manure correctly. If the permit would be approved and it is not followed, the farm could be subject to an enforcement action by ODA.

3. **Comment:** "... and I'm wondering if someone in the state or wherever is thinking about the impact that these large dairy farms all over the state and what their impact is going to be on smaller dairy farmers who don't have a very large operation like these people do." [2]
 " And over the past decade the livestock industry has steadily expanded and CAFO's have grown increasingly concentrated, displacing smaller, family-owned farms. " [3]

Response to comment 3: This comment relates to the economics of large versus small farms. It does not relate to Assen Dairy's draft Permit to Install or draft Permit to Operate.

4. **Comment:** " Also I'm afraid that if too many of these large farms get established, it might encourage a lot of the California dairy farmers to come here and do the same thing. With tightening environmental regulations in California, a lot of the dairy farms out there are trying to leave and come east of the Mississippi. ." [2]

Response to comment 4: This comment relates to the potential for more large farms to move into Ohio. It does not relate to Assen Dairy's draft Permit to Install or draft Permit to Operate.

5. **Comment:** " As more animals are packed into massive factory farms, the facilities produce ever larger heaps of you know what, which emit noxious air pollutants, including ammonia and hydrogen sulfide, both of which are on par with cyanide and arsenic as hazardous substances, as well as volatile organic compounds and particulate matter from fecal dust. In the past ten years, nearly a dozen people have died in CAFO's in the US from exposure to these gases. And according to a study released in February 2002 by Iowa State University and the University of Iowa Study Group, up to 70 percent of workers exposed to pollutants at CAFO's in the US are afflicted with acute bronchitis and 25 percent with chronic bronchitis, and so far the EPA is unable to do anything about it." [3]

Response to comment 5: Deaths and illnesses related to farming have most often been related to manure in confined spaces, like the deep manure pits under hog barns or in upright silos, or machinery accidents. These deaths are a tragedy and show that farming is a dangerous occupation, especially for farmers .

U.S. EPA and other scientific and medical researchers are working to complete studies on air emissions attributable to farming operations and to make baseline recommendations. It is our understanding that U.S. EPA may consider standards for ammonia and particulate emissions from large livestock facilities and particulate emissions from all other farming at some future date. The Ohio State University is also doing research into this issue. To date, only California has implemented air pollution rules for large farms, but those rules are directed to diesel emissions from the use of farm equipment.

The Livestock Environmental Permitting Program's law and rules are based on the federal Clean Water Act, and state requirements are stronger than the federal minimums in the areas of siting criteria, construction design standards, on-farm inspections, ground water testing, and insect and rodent control.

The Ohio Agriculture Director's authority is to "protect waters of the State." Ohio Revised Code Chapter 903 contains no reference to the federal Clean Air Act or to the Ohio EPA Director's

authority under Ohio Revised Code Chapter 3704 regarding "air" issues.

The Director has authority in enforcement proceedings to address public health and the environment in Section 903.18 of the Ohio Revised Code. ODA has incorporated recommendations from the Ohio Department of Health into the Insect and Rodent Control Plan, required by law and rule as an integral part of all Permits to Operate.

6. **Comment:** "There was a lady -- well, she was with the -- she was with the EPA's enforcement division, filed the agency's first suit against a CAFO for Clean Air Act violations in October of '99, and a suit was brought against the company and that particular one produced more sewage than the City of St. Louis with violating clean-air standards and was settled out of court. A second such suit was filed by the EPA and was also settled out of court. But the Bush administration put the kibosh on these enforcement efforts according to Merkle ..." [3]

Response to comments 6: This comment relates to U.S. EPA and enforcement of air pollution laws and does not relate to the Assen Dairy's draft Permit to Install or draft Permit to Operate.

7. **Comment:** "... I live at 7810 Armstrong Road just three quarters of a mile from the Assen factory. That's right, I consider this a factory operation." [4]

Response to comments 7: State laws acknowledge agricultural uses and that livestock production, regardless of size, is agriculture. The passage of S.B. 141 (which created the Livestock Environmental Permitting Program and authorized the creation of the rules) and H.B. 152 (which updated the Livestock Environmental Permitting Program's law) did not change that.

8. **Comment:** "We have discussed just about every aspect of the Assen factory farm over the past year and a half, but nobody is really listening. Many of our elected state representatives and senators have slept or talked on cell phones or just didn't bother to show up when we had appointments to meet with them." [4]

Response to comments 8: This comment relates to the political process as viewed by the commenter. It does not relate to comments on the Assen Dairy's draft Permit to Install or draft Permit to Operate.

9. **Comment:** "Our learned land grant universities have all the answers, and they don't find it important to listen to someone who has worked with the land all of their lives or who lives next to one of these mega-farms." [4]

Response to comments 9: This comment relates to Ohio State University and does not relate to the Assen Dairy's draft Permit to Install or draft Permit to Operate.

10. **Comment:** "And the lobbyists have helped push through agriculture laws that ties the hands of our local government officials who might begin to understand the needs of our local communities." [4]

Response to comments 10: This comment relates to changes to state law and does not relate to the Assen Dairy's draft Permit to Install or draft Permit to Operate.

11. **Comment:** "With all the questions, concerns, and misunderstandings of this community

never once have we heard directly from the Assens about what they are or can do to protect this community from being torn apart. They're not even here tonight to hear what the community has to say." [4]

"First and foremost, I believe if this expansion was that important to the Assen's they should have attended the meetings." [7]

Response to comments 11: It is not a requirement that the owners or operators be at any of ODA's information sessions or public meetings on their draft permits. However, the owners of Assen Dairy Farm attended the first two information sessions (May 17 and May 26) and heard the questions that were asked at those meetings. They will also receive a copy of the responsiveness summary to public comments.

12. **Comment:** " We were told this would help our community. I ask you to take another look and show me where. Are they hiring local workers? Are they purchasing local feed and supplies? " [4]

Response to comment 12: This comment deals with local economic issues and does not relate to the Assen Dairy's draft Permit to Install or draft Permit to Operate.

13. **Comment:** " Are they following the same good management plan that other local farmers follow to protect our land and natural resources?" [4]

Response to comment 13: Assen Dairy's draft Permit to Install and draft Permit to Operate is based on the regulations governing all large livestock farms in Ohio. ODA regulations for large livestock farms are comparable to rules established for smaller farms in Ohio. Section 903.10 (C) of the Ohio Revised Codes states, in pertinent part, "Best management practices established in rules adopted under Division (C) of this section shall not be in conflict with best management practices established in rules that have been adopted under any other section of the Revised Code and that are in effect on March 15, 2001." ODA rules refer to Best Management Practices established in Chapter 1501:15-5 of the Ohio Administrative Code. If approved, Assen's permits would be subject to routine and complaint inspections by ODA. If the permits are not followed, the farm could be subject to an enforcement action by ODA. In addition to following the same best management practices followed by the smaller farms, larger farms including the Assen Dairy if the permit is finalized, must minimize odors, minimize insects and rodents, and do yearly groundwater sampling.

14. **Comment:** " Who will be paying for the road improvements?" [4]

"There is also a great problem with their large trucks breaking up our roads." [6]

"I am also concerned about the truck traffic on the roads and how the roads will be maintained from the wear. I have lived on a corner less than a mile and half from the farm all my 72 years. I have never seen this type of truck traffic (milk trucks, feed trucks and livestock carriers) before the farm started operations with only 700 cows." [8]

Response to comment 14: Local government authorities (township and county) are responsible for road repairs and weight limits on roads, even with an increased amount of trucks and traffic. Permit applicants to ODA are required to notify the board of county commissioners and the board of township trustees when an application is submitted. Assen Dairy fulfilled this requirement in June 2003.

15. **Comment:** " The Ohio Department of Agriculture has told us we don't have anything to worry about. They'll be watching and looking over the paper report at the Assen farm at least

twice a year. Should we gamble that what they tell us will be true? ” [4]

Response to comment 15: When ODA inspects a farm, not only do the inspectors review paperwork, they look at the actual farm and its management and maintenance. Inspectors also view manure application fields and manure actually being applied. The routine inspection rate is at least twice per year, and may be more often if there are complaints or compliance issues.

16. **Comment:** “ After watching thousands of gallons of black thick manure running down our creek, you can bet that this little boy will never be able to safely play in that creek. Test results still haven't been shared from the water tests from this manure spill this past Easter. ” [4]

Response to comment 16: This comment refers to a manure application runoff on April 8, 2004. It is noted in the environmental background check performed as part of the permitting process for Assen Dairy Farm.

On April 8, 2004 the farm contacted ODA and also contacted the Madison SWCD to notify both agencies of a discharge resulting from land application of manure. The manure was conveyed to a nearby ditch through a tile. Assens immediately plugged the tile. Upon investigation by ODA, some minor additional work was done by the Assens to strengthen the plug. Investigation by the Madison SWCD indicated that manure was being injected into the field, and came out of the tiles. Spreading conditions were good and manure was not over applied by the applicator, Mr. Pitstick. Manure was probably flowing out of the tiles for several hours before the tile was crushed by a backhoe. Once cut, hydraulic pressure caused some manure to come out on top of the ground and run off from the field into the ditch. As of April 9, 2004, the ditch ran clear and there was no evidence of a fish kill.

Before issuing any permits, the Director considers the reliability, expertise, and competence of the applicant. In this case, the Assens worked with the Madison County Soil and Water Conservation District office in developing a Comprehensive Nutrient Management Plan, which Assen Dairy has submitted to ODA as part of the Permit to Operate application. Generally, the Assens have been prompt in responding to advice and direction provided to them by the SWCD. The Assens have also applied for the NPDES permit as directed by Ohio EPA.

Proper management in accordance with the legal requirements of the permits, including any NPDES requirement imposed by Ohio EPA, and construction improvements with regard to the facility's manure storage and treatment facilities should avoid any issues of odor at the facility.

Therefore, while ODA staff acknowledge that there have been complaints and a discharge to waters of the state as a result of an unplugged tile, we find no evidence of substantial noncompliance with applicable environmental laws; and that Peter Assen and Johannes Assen have the expertise and competence to operate the facility, with the proposed Permit to Install and Permit to Operate application, at issue in substantial compliance with Chapter 903 and the rules promulgated there under.

17. **Comment:** “ We have allowed our government agencies and elected officials to grow into an assemblage to be reckoned with. We have seen it clearly through this entire process. We are now allowing them to make all the decisions that will affect our lives and homes. And after that decision is made, they'll be gone and they'll never have to face the consequences. ” [4]

Response to comments 17: This comment relates to the commenter's personal opinion about state agencies and the state legislature. This comment does not relate to the Assen Dairy's

draft Permit to Install or draft Permit to Operate.

18. **Comment:** “ My name's William Eby. ... I'm here tonight to introduce myself. I'm running for the 84th District Ohio House, which covers Greene, Madison, and Clark counties. I'm here to listen to testimony. I've been to that website. I've read some testimony online, and I think this is a very serious problem and something needs to be done. I'll listen to you people.” [5]

Response to comment 18: This comment relates to this individual's desire to be elected to the Ohio General Assembly, and it does not relate to the Assen Dairy's draft Permit to Install or draft Permit to Operate.

19. **Comment:** “We live 3-4 miles westward from Stardust dairies. Every once in a while in the summer we get odors from the dairy.” [6]

Response to comment 19: This comment does not relate to Assen Dairy.

20. **Comment:** “...if a farmer within a five to 6 mile radius could have trouble selling their farm land to a relative or someone else in order to build a home.” [6]

Response to comment 20: ODA does not have the authority to consider reduction in property values as criteria for a decision on draft permits. To date, ODA knows of no scientific study to confirm or refute that property values fall when large, permitted livestock farms move into a community. However, many county auditors are discussing this issue and scrutinizing property sales in their areas. And the Ohio State University is currently researching this issue, and we look forward to their findings.

21. **Comment:** “Why doesn't EPA consider the odors when granting approvals for any enlargement of any existing dairies, when we have trouble with the existing odors? ” [6]

Response to comments 21: EPA does not issue state Permits to Operate or Permits to Install; ODA issues these permits. ODA does consider odor minimization in the Permit to Operate. Environmental background checks are performed as part of the permitting process in the Ohio program. Odor complaints about Assen Dairy are mentioned in the compliance background check. Also see the response to comment 16.

22. **Comment:** “Neighbors between us and the dairies receive odors (stench) so much that they cannot plan on outdoor activities. They never know when the stench will be so badly that they could not sit outside, nor leave their windows open.” [6]
“I am writing to object to their expansion, as the odor is already horrible. I cannot hang my laundry out on a clothesline anymore, without it smelling like manure. We cannot sit outside on our porch and enjoy the fresh country air anymore.” [7]
“I won't even go into the aroma of the air at times.” [8]

Response to comment 22: Dairy farming, like any livestock or poultry farming, comes with some odors. There is not yet a proven, scientific technology to eliminate or measure odor. However, in their draft Permit to Operate Assen Dairy has identified specific best management practices to minimize odor, including removal, transfer and applying manure at optimum temperatures; removal, transfer, and applying manure when wind direction is less likely to affect neighboring residences; injecting manure; incorporating manure; using appropriate pressure and nozzles for spray irrigation; and using appropriate odor control volume in the design and operation of the manure treatment lagoon.

ODA encourages farmers and neighbors to communicate and work together. This includes neighbors sharing with farmers when they have family events or activities outside, and farmers taking these activities into consideration prior to manure application. Rural neighbors should also understand that farming is weather and seasonally dependent, and farmers should communicate with neighbors when farming could temporarily impact outdoor activities. This communication must happen on the local level.

23. **Comment:** "I've heard about where their water supply is coming from. My concern is how this is going to affect the community water supply needed for the surrounding properties or what we might expect in case of a water shortage with our wells." [8]

Response to comment 23: If a facility has the capacity to use greater than 100,000 gallons of groundwater per day, it is required to register with the Ohio Department of Natural Resources Division of Water as required by Ohio Revised Code Section 1521.16. Assen Dairy estimates it will use 49,300 gallons of water per day, or 17,994,500 million gallons per year. If there are additional concerns, local government officials, in cooperation with area residents, can request ODNR's Division of Water to assist in conducting detailed studies.