



State of Wisconsin  
Jim Doyle, Governor

Department of Agriculture, Trade and Consumer Protection  
Rod Nilsestuen, Secretary

## DATCP ADVISORY NOTICE

### Livestock Siting Law (s. 93.90. Stats. and ATCP 51) Reconciling animals numbers in a siting application

Date: August 1, 2008

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**Scope of Advisory:** The livestock siting law requires that livestock operators submit applications that are “complete, credible and internally consistent.” (ATCP 51.30) This advisory will explain how to ensure that local permit applications are consistent and credible in meeting different requirements that involve calculations based on the number of animals kept at the operation. This advisory is intended for livestock operators who are applying for a local permit under the siting law, and the professionals who are required to sign off on worksheets required by the application. This advisory also alerts users of SNAP Plus to future updates to the program that are intended to better estimate manure production consistent with the animal units listed in the application.

**Importance of this Issue:** The Livestock Facility Siting Review Board (LFSRB) recently decided an appeal (*Ronald S. Stadler v. Crawford County*, Docket No. 08-L-01) which emphasized the importance of reconciling and documenting different calculations involving animal numbers. In this case, it became unclear if the nutrient management plan accounted for the maximum number of animals allowed under the permit. The Board finally upheld the permit only after it was able to determine that different calculations in the permit application (Worksheet 1 animal unit conversions) and the nutrient management plan (Midwest Plan Service conversion factors) both accounted for the same number of animals at the operation. This advisory will help permit applicants and their consultants submit consistent documentation as part of their permit applications, and avoid the problems encountered by the operator in this case.

**Summary of Key Points:** Livestock operators must make sure that nutrient management planners and engineers are aware of the animal unit calculation in Worksheet 1, before these professionals complete and sign off on Worksheets 3 and 4. These professionals should provide documentation to show how calculations based on different animal classifications and conversion systems square with the maximum number of animals permitted for the facility as represented in Worksheet 1.

- ATCP 50, ATCP 51, the NRCS 590 Standard, nor the Wisconsin Conservation Planning Technical Note WI-1 require any single manure quantity estimation method to be used.
- The department suggests that producers include a written narrative describing their proposed expansion, and key calculations used to complete the application. For example, in the case of Worksheet 3, this can be done by including this information in the narrative portions of the nutrient management plan.

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- If an application is amended to change a worksheet or calculation, the applicant should ensure that the local government documents this change in the record, and clearly identifies how it relied on the amended application to make its decision.

**Discussion of Key Points:** The state-mandated application for a local siting permit requires applicants to convert the number of animals at their operation into animal units using the conversion factors in Worksheet 1 (Animal Units). This part of the application establishes the maximum number of animals that are allowed at the facility under the permit. To accurately calculate manure volumes for Worksheet 3 (Waste and Nutrient Management) and Worksheet 4 (Waste Storage), nutrient management planners and engineers must ensure that they have properly accounted for the maximum number of animals listed in Worksheet 1.

The different calculations and formulas for each worksheet are described below:

- **Worksheet 1 – Animal Units** uses an animal classification and conversion system based on NR 243. The producer identifies the maximum number for each type of livestock (e.g. heifer 400 lbs to 800 lbs) to be kept on the farm, and this is multiplied by the relevant AU factor to determine the AU for each type. The last step is to add all of the AUs for every livestock type to determine the total AUs for the facility. This sum becomes the permit limit establishing the maximum number of animals allowed on the facility. Alternate methods to calculate AU are not allowed.
- **Worksheet 3 – Waste and Nutrient Management** requires an estimate of manure production from the proposed facility, identification of the land base for applying all nutrients, and certification that the facility meets the standard for nutrient management plans. Each element of this worksheet should account for the maximum number of animals kept at the facility (as shown on Worksheet 1); however, it is not necessary that you use the animal categories and AU conversions in Worksheet 1. Volumes of manure are more accurately calculated when using more precise inputs. Planners should use recognized methods to calculate manure volumes and nutrient content; e.g. the manure calculator included in the SNAP Plus program, methods specified in Wisconsin Conservation Planning Technical Note WI-1, Companion Document to NRCS FOTG Standard 590 Nutrient Management, book values, or historical production records for the farm. Use the most precise and accurate methods.

Page 1 of the 590 Standard requires annual plan updates to document the crops, tillage, nutrient application rates, and methods actually implemented. Therefore future annual nutrient management plan updates are required to be based on the manure that is actually produced and applied.

- **Worksheet 4 – Waste Storage Facilities.** Engineers can calculate design storage volumes using the procedures and default values found in the Wisconsin supplement to Chapter 10 of the NRCS Agricultural Waste Management Field Handbook (AWMFH) or estimates and measurements documented in the plan. The design storage duration and volume should be consistent with the nutrient management plan and emptying schedule.

In addition to ensuring that Worksheets 3 and 4 are consistent with Worksheet 1, an applicant should make sure that Worksheets 3 and 4 are consistent. There are differences in calculating manure production for manure storage and land application as part of nutrient management plan. For example, nutrient management manure production estimates in MWPS reflect volumes excreted; however an engineer designing manure storage might include an additional quantity of bedding and waste water. Nutrient management planners may not factor in bedding and storage in the same way unless they appreciate the importance of a consistent application. Once an operation is fully running, planners are encouraged to use manure analysis and actual volumes of stored manure to develop a plan for spreading the manure.

**Future Action to Improve Manure Estimates for Nutrient Management:** To eliminate concerns about inconsistencies between Worksheet 1 and the manure generation calculations, the manure generation calculator in Snap Plus (the computer-based tool for nutrient management planning) will be changed to better reflect the animal units in Worksheet 1. DATCP will issue a separate alert close the release date for the updated version of SNAP