

## Standard 629 Companion Document Index

### Companion Document

### Subject

629-1 ..... Milking Center Wastewater Treatment

It is the intent of these companion documents to provide design guidance in implementing Conservation Practice Standard 629, Waste Treatment. These companion documents will be updated as experience is gained with the new standard, new information is found, or better methods are developed. These documents will be maintained by the NRCS State Conservation Engineer. Comments, questions, or suggestions should be directed there.

# COMPANION DOCUMENT 629 - 1

## PRACTICE STANDARD 629 – WASTE TREATMENT

### MILKING CENTER WASTEWATER TREATMENT

#### General

Milking center wastewater can sometimes be the most difficult waste stream to deal with on a project. Both the quantity and quality of wastewater can be extremely variable. In general, wastewater from a milking parlor system should be stored in a Waste Storage Facility designed in accordance with Conservation Practice Standard 313. Wastewater from vacuum systems (stanchion barns) can usually be treated with an overland flow or buffer process treatment strip.

University of Wisconsin Extension publication A3592, "Pollution Control Guide for Milking Center Wastewater Management", is an excellent reference for milking center wastewater treatment. Included in this reference is a discussion of environmental aspects of milking center wastewater, source control and milking center wastewater management, and milking center wastewater disposal systems. This reference is filed at the end of Chapter 10, Agricultural Waste Management Field Handbook. There is also a publication from the Northeast Regional Agricultural Engineering Service (NRAES) number NRAES-115, entitled "Guidelines for Milking Center Wastewater" published in 1998. NRAES-115 is available from Cornell University Cooperative Extension, 152 Riley Hall, Ithaca, NY 14853-5701. Web site: <http://rcwpsun.cas.psu.edu/NRAES>. The Wisconsin supplements to Chapter 9 of the AWMFH also include suggestions with respect to alternate ways of handling milking center wastewater.

#### Pretreatment

Pretreatment that is required under section V.B., Specific Criteria for Milking Center Wastewater Treatment, of Standard 629 can be accomplished using a prefabricated concrete, steel, or plastic sewage ("septic") tank. Requirements for use of these tanks include:

- The tank must be currently listed on the Wisconsin Department of Safety and Professional Services (WDSPS), Safety and Building Division. This can be found at <http://dsps.wi.gov>.
- All stipulations listed in the database that relate to liquid tightness or structural strength must be complied with.
- The tank must be located further than 15 feet from any established or future roadway.
- The tank must contain appropriate baffling to function as a grease trap.
- The tank must be located at least 25 feet from any channelized flow path, surface water feature, well, or karst feature; further than 10 feet from any water supply line; further than 5 feet from any building; and further than 2 feet from any property line.
- The tank must have adequate ballast to prevent flotation.

Stipulations in the WDSPS approval that are unrelated to structural integrity or liquid tightness can and should be waived at the discretion of the designer. An example of such a stipulation would be a requirement for an effluent filter on a discharge pipe. It is expected that an effluent filter in a milking center wastewater application would quickly plug, and therefore should not be installed.

#### Treatment Strip Dosing

Septic tanks as described above can also be used to provide the hydraulic retention time and/or dosing requirements prior to discharging to other treatment systems described in Standard 629. The same requirements listed above apply.