



Proper Disposal of Dairy Waste and Cleanup Requirements

Office of Land Quality

(317) 234-6965 • (800) 451-6027

www.idem.IN.gov

100 N. Senate Ave., Indianapolis, IN 46204

Introduction:

The Indiana Department of Environmental Management (IDEM) is offering guidance regarding the proper disposal of dairy waste to prevent damages to waters of the state. This fact sheet is intended to inform and assist dairy producers, haulers, samplers, cooperatives, transfer stations, and processing plants.

IDEM regulates spills and the proper management of wastes, including dairy wastes. IDEM developed this fact sheet in consultation with the Indiana State Board of Animal Health (BOAH), which regulates production, transportation, processing, packaging and distribution of dairy products for human consumption, the Office of Indiana State Chemist (OISC), which regulates animal feeds and manure use and applications, and the Indiana State Department of Health (ISDH), which regulates commercial septic systems.

What Is Dairy Waste?

Dairy waste includes milk, milk products and all dairy processing wastes that do not meet applicable quality standards, have become contaminated, or otherwise have become unusable for human consumption, animal feed, or any other beneficial use.

Disposal Requirements for Dairy Waste:

Milk, milk products and all dairy processing wastes must be properly disposed when they have been spilled, do not meet applicable quality standards, have become contaminated, or otherwise have become unusable for human consumption, animal feed, or any other beneficial use. Milk that cannot be sold to a processor may be recycled by the farmer in the same manner used for manure. Waste from milk processing, including but not limited to raw milk, processed milk, wash water, and disinfectants, is considered industrial process wastewater and may not be discharged to septic systems, or to waters of the state through field tiles, direct dumping or any other method.

- **What are the proper disposal requirements for raw milk and related waste liquids owned by the producer (dairy farmer)?**

Producers must use the following methods for disposal of dairy waste liquids, including but not limited to raw milk, wash water, and disinfectants. Raw milk is unpasteurized and unprocessed and its physical, chemical, or biological properties have not been altered.

1. Land application alone or in combination with manure. Follow manure management guidelines outlined in the Confined Feeding Operations (CFO) rule. A permit for manure management may still be applicable under CFO.
2. Solidification and disposal at a permitted municipal solid waste landfill.
3. Haul to a permitted wastewater treatment plant.
4. Discharge into a permitted sanitary sewer. A pretreatment permit from the local sewer authority or an Industrial Wastewater Pretreatment permit from IDEM is required.
5. When a producer retains ownership of raw milk that has left the production farm, that raw milk may be

returned to the farm of origin for land application.

- **What are the proper disposal requirements for raw milk, milk products, milk by-products, and related waste liquids by owners other than the producer?**

Bulk milk haulers, bulk milk samplers, milk transfer stations, cooperatives, and processing plants must use the following methods for proper disposal of raw milk; milk products, including but not limited to pasteurized milk, flavored milk, canned milk, condensed milk, cheeses, ice cream, or yogurts; milk by-products, including but not limited to whey and cow water; and related waste liquids, including but not limited to disinfectants and spent wash water.

1. Land application by permit. IDEM requires a permit for land application of industrial process wastes, including dairy wastes.
2. Solidification and disposal at a permitted municipal solid waste landfill.
3. Haul to a permitted wastewater treatment plant.
4. Discharge to a permitted sanitary sewer. A pretreatment permit from the local sewer authority or an Industrial Wastewater Pretreatment permit from IDEM is required.

Spill Cleanup Requirements:

Dairy producers, haulers, samplers, cooperatives, transfer stations, and processing plant operators need to be aware of the requirements for disposing of dairy waste and measures to respond to accidental spills, should they occur. When milk or milk wastes have been spilled in or near waters of the state, whether the spill occurs at a facility or during transportation, the responsible party must do the following:

1. Immediately contain the spill and prevent additional spilled materials from entering waters of the state.
2. Perform a spill response, which means to contain the spill and remove spilled materials.
3. Report the spill to IDEM's 24-hour spill reporting line at 888-233-7745, as soon as possible but within 2 hours.
4. Submit a written report to IDEM, upon request.
5. Notify affected landowners and any downstream water user within the nearest 10 miles.

Environmental Impacts:

Unpermitted discharges and/or accidental spills of milk and dairy products into a waterway have been known to impact water quality and cause fish kills. When milk is released into a stream or lake, it provides a food source for bacteria, which use oxygen in the water to live and grow. Bacteria growth following a significant release or spill will often cause stress, or death, for fish and other aquatic life living in the impacted waterway.

IDEM's Role:

IDEM is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy. The Office of Land Quality's Confined Feeding Operation Compliance Section oversees manure management activities at regulated animal feeding operations in Indiana.

Citizen's Role:

Owners and operators of regulated operations, and members of the general public, should immediately report accidental spills of raw milk, milk products, and dairy processing waste to IDEM's 24 hour emergency spill line at (317) 233-7745 or, toll free in the United States, at (888) 233-7745.

Citizens can learn more about IDEM's regulatory program for confined feeding operations by visiting IDEM's website at www.in.gov/idem/4994.htm.

Reach Agency Programs and Staff:

- IDEM's Confined Feeding Operation Compliance Section Chief, toll free, at (800) 451-6027, ext. 4-6965
- IDEM's Confined Feeding Operation Permits Branch, toll free, at (800) 451-6027, ext. 2-8732
- IDEM's Office of Community and Government Affairs, toll free, at (800) 451-6027, ext. 2-8587
- BOAH's Dairy Division, toll free, at (877) 747-3038, ext. 350
- ISDH Sanitary Engineering at (317) 233-7173
- OISC Feed Administrator at (765) 494-1492

Additional Information:

- Regulations (*laws and rules*) contained in the *Indiana Code (IC)* and the *Indiana Administrative Code (IAC)* (*please visit the Indiana General Assembly's website at <http://iga.in.gov/> to find and view the regulations online*):
 - Enforcement and Legal Actions administered by IDEM, IC 13-30
 - Spills; Reporting; Containment; and Response, 327 IAC 2-6.1
 - Land Application of Biosolids, Industrial Waste Product, and Pollutant-Bearing Water, 327 IAC 6.1 (refer to for specifics about industrial process wastewater)
 - Confined Feeding Operations, 327 IAC 19
 - Industrial Wastewater Pretreatment Programs (NPDES) Wastewater Pretreatment, 327 IAC 15-16
 - Management of Sewage Disposal System Wastewater, 327 IAC 7
 - Solid Waste Land Disposal Facilities, 329 IAC 10
 - Milk and Milk Products; Permits; Standards; Inspections, administered by BOAH, IC 15-18-1
 - Dairy Products, 345 IAC 8
 - Commercial Feed, administered by the Feed Administrator under OISC, IC 15-19-7
 - Commercial On-Site Wastewater Disposal, administered by ISDH, 410 IAC 6-10
- Useful websites and links:
 - Fertilizer Material Use, Distribution and Record Keeping (355 IAC 8) - www.IN.gov/legislative/iac/T03550/A00080.pdf
 - Purdue University's website for CAFO topics - www.ansc.purdue.edu/cafo/
 - IDEM website - www.idem.IN.gov
 - OISC website - www.OISC.purdue.edu
 - Indiana's Confined Feeding Rule (327 IAC 19) - www.in.gov/legislative/iac/T03270/A00190.PDF?
 - Indiana's Concentrated Animal Feeding Rule (327 IAC 15-16) - www.in.gov/legislative/iac/T03270/A00150.PDF?
 - Indiana's statute on prohibited acts (IC 13-30-2) - <http://iga.in.gov/legislative/laws/2014/ic/titles/013/articles/030/chapters/002/>
 - Indiana's Leaky Load law (IC 9-21-8-48) - www.IN.gov/legislative/ic/code/title9/ar21/ch8.html
 - The definition for CAFO in Indiana statute (IC 13-11-2-38.3) - <http://iga.in.gov/legislative/laws/2014/ic/titles/013/articles/011/chapters/002/>