

Emergency Disposal of Milk for Dairy Farms during COVID-19

The guidance in this document is provided to assist farms in making decisions during the COVID-19 public health emergency about the dumping and land spreading of milk or manure/milk mixtures. It is intended to complement, not supersede, any existing regulatory requirements.

What you should do if you need to dispose of milk

- One immediate option is to land apply the milk if conditions permit.
- Another option is to dispose of the milk in an existing manure storage structure, especially when expecting rainfall amounts that increase the chance of surface runoff and water impacts from land applied milk. Then, when feasible, you can land apply the storage contents according to your Animal Waste Management Plan or Nutrient Management Plan (AWMP/NMP).
- Implementing any of these emergency actions must not cause an unpermitted discharge of pollutants to waters of the state.
- Inform your Confined Animal Feeding Operation (CAFO) inspector if milk dumping is expected to continue for more than one day.

Recordkeeping recommendations

- In the event that state or federal programs become available to help farmers with lost revenue during the COVID-19 public health emergency, you are advised to create a record that includes the date, volume, reason, and location of disposal.
- Maintain all records, so that documentation can be produced upon request.

Recommendations to minimize risk of surface and groundwater contamination from land application of milk, manure, and process wastewater

- Applications should be made only when rainfall is not expected that would cause the soils to become saturated or for runoff to occur.
- Use the farm's AWMP/NMP to determine the best places to apply the milk to meet the nutrient needs of this year's crop and adjust other planned nutrient applications to account for the nutrient content of the milk.
- If milk is land applied, the NMP should be updated to reflect the milk application, and nutrient applications from manure and/or fertilizer should be reduced. If a farm does not have an NMP, milk applications should meet, but not exceed, the nutrient needs of the crop and application of other nutrients should be reduced or eliminated.
- Milk should be applied uniformly across a field using liquid manure application equipment.

- Account for the nutrient content of land-applied milk. Applying 4,500 gallons of milk per acre will provide about 200 pounds of nitrogen (N), 81 pounds of phosphorus (P; in the form of P₂O₅) and 67 pounds of potassium (K; in the form of K₂O).
- All of the N and P in milk are considered immediately plant available, so care must be taken to apply milk to fields that have the lowest risk of groundwater or surface water contamination. Applying to fields with a perennial crop or those recently seeded increase the opportunity for plant uptake of the nutrient applied.
- Consider making multiple applications with less volume per application to reduce the risk of nutrient losses.
- Consider injecting or incorporating land-applied milk.

Finding appropriate land for spreading may be difficult during the growing season. Where possible, land applications of milk should be avoided on fields with:

- Soils of sandy or loamy sand textures, particularly in the subsoil.
- Soils shallow to bedrock.
- Large drying cracks at the soil surface.
- Seasonal or permanent high water tables.
- High to moderate potential for flooding.
- Tile drainage.
- Steep slopes or long slope lengths.
- Bare fields where the crop grown in the previous year was, or will be, terminated before planting another crop this season.
- Manure or fertilizer already applied at agronomic rates for this growing season's crop.
- Nearby streams, rivers, lakes, wetlands, drainage ditches, and wells.

Strategies to avoid other potential problems associated with milk disposal

- Milk will have a very strong odor as it decomposes, so consider applying milk to fields farthest from neighbors if possible.
- The solids in milk may plug valves, tanks, pipes, hoses and other storage and spreading equipment. Cleaning after each application may reduce plugging with future applications.
- Exercise extreme caution if considering adding milk to anaerobic digesters. Consult the digester company before adding milk to the digester to determine appropriate volumes of milk that can be added without negatively impacting the digester's microbial communities.

Additional options and recommendations for milk disposal

- Milk can be utilized for animal feed by the producer, however it may not be sold or distributed as animal feed unless the producer has a commercial feed license and the milk can be labeled accordingly. Questions regarding distributing milk for animal feed should be directed to Richard Teneyck at rtenecky@oda.state.or.us.
- See University of Wisconsin Extension publication on managing waste milk for additional information: <http://learningstore.uwex.edu/Assets/pdfs/A3610.pdf>

ODA is allowing some additional flexibility during this emergency

For permitted Confined Animal Feeding Operations (CAFOs), during the current COVID-19 emergency, on a case-by-case basis ODA can reduce the number of days required for public comment for modifications to a nutrient management plan (NMP), such as adding fields, which will allow CAFOs flexibility to quickly change their land application plans if necessary.