

**IDAPA 02
TITLE 04
CHAPTER 14**

02.04.14 - RULES GOVERNING DAIRY BYPRODUCT

000. LEGAL AUTHORITY.

This chapter is adopted under the legal authority of Title 37, Chapters 3, 4, and 6, Idaho Code. (3-29-17)

001. TITLE AND SCOPE.

01. Title. The title of this chapter of the Idaho State Department of Agriculture is IDAPA 02.04.14, "Rules Governing Dairy Byproduct." (3-29-17)

02. Scope. This chapter has the following scope: These rules shall govern the Department's review, approval, and enforcement of dairy environmental management plans to ensure that dairy environmental management systems are constructed, operated and maintained in a manner that protects the natural resources of the state. This section's citation is 37-602(2), Idaho Code. Nothing in this rule affects the authority of the department of environmental quality to enforce an IPDES permit for dairy farms that discharge pollutants to waters of the United States, including without limitation, the authority to issue permits, access records, conduct inspections and take enforcement actions. The provisions of this rule do not alter the requirements, liabilities, and authorities with respect to or established by the IPDES program. (3-29-17)

002. WRITTEN INTERPRETATIONS.

There are no written interpretations of these rules. (3-20-97)

003. ADMINISTRATIVE APPEAL.

Hearing and appeal rights are set forth in Title 67, Chapter 52, Idaho Code. There is no provision for administrative appeal before the Department of Agriculture under these rules. (3-20-97)

004. INCORPORATION BY REFERENCE.

The following documents are incorporated by reference, and copies of the documents may be obtained from the Idaho State Department of Agriculture central office at 2270 Old Penitentiary Road, Boise, Idaho, 83712 or accessed online. (3-29-10)

01. Natural Resources Conservation Service Agricultural Waste Management Field Handbook Appendix 10D (Appendix 10D) (1997 Edition) (USDA, NRCS). This document is available online at http://www.agri.idaho.gov/AGRI/Categories/Animals/Documents/nrcs_10d_1997.pdf. (3-29-10)

02. Nutrient Management Standard (NMS). The 1999 publication by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Idaho Conservation Practice Standard, Nutrient Management Code 590, available online at http://www.agri.idaho.gov/AGRI/Categories/Animals/Documents/nutrient_Management_code_590.PDF. (3-29-10)

03. Natural Resources Conservation Service (NRCS) Idaho Conservation Practice Standard Waste Storage Facility Code 313 December 2004. This document is available online at http://www.agri.idaho.gov/AGRI/Categories/Environment/Documents/nrcs_313_Dec_2004.pdf. (3-29-10)

04. American Society of Agricultural and Biological Engineers Specification ASAE EP393.3 Manure Storages February 2004. This document is part of a copyrighted publication and is available for viewing at the ISDA offices or a copy may be purchased online at <http://www.asabe.org/>. (3-29-10)

05. Natural Resources Conservation Service (NRCS) Web Soil Survey Database. This document is available online at <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. ()

06. Natural Resources Conservation Service (NRCS) Part 630 Hydrology National Engineering Handbook January 2009. This document is available online at <https://www.wcc.nrcs.usda.gov/ftpref/wntsc/H&H/NEHydrology/ch7.pdf>. ()

07. The Phosphorus Site Index: A Systematic Approach to Assess the Risk of Nonpoint Source Pollution of Idaho Waters by Agricultural Phosphorus, June 1, 2017. ()

005. OFFICE -- OFFICE HOURS -- MAILING ADDRESS AND STREET ADDRESS.

01. Office. The central office of the Idaho State Department of Agriculture is located at 2270 Old Penitentiary Road, Boise, Idaho 83712. (3-29-10)

02. Office Hours. Office hours are 8 a.m. to 5 p.m., Mountain Time, Monday through Friday, except holidays designated by the state of Idaho. (4-11-15)

03. Mailing Address. The mailing address for the central office is Idaho State Department of Agriculture, PO Box 790, Boise, Idaho 83701. (3-29-10)

04. Telephone Number. The telephone number of the central office is (208) 332-8500. (3-29-10)

05. Fax Number. The fax number of the central office is (208) 334-2170. (3-29-10)

006. PUBLIC RECORDS ACT COMPLIANCE.

These rules are public records and are available for inspection and copying at the Idaho State Department of Agriculture. (3-29-10)

007. -- 009. (RESERVED)

010. DEFINITIONS.

The following definitions shall apply in the interpretation and enforcement of this chapter: (3-20-97)

01. Agricultural Stormwater Discharge. A precipitation-related discharge of dairy byproducts from land areas under the control of a dairy farm where the dairy byproducts have been mechanically land applied in accordance with an approved nutrient management plan. (3-29-17)

02. Best Management Practice. A practice, technique, or measure that is determined to be a reasonable precaution, a cost-effective and practicable means of preventing or reducing the discharge of pollutants from a point source or a nonpoint source to a level compatible with environmental goals, including water quality goals and standards. (4-11-15)

03. Certified Planner. A person who has completed nutrient management certification in accordance with the Nutrient Management Standard (NMS) and is approved by the Department. (3-29-10)

04. Certified Soil Sampler. An individual qualified and approved by the Department to collect soil samples according to the 1997 University of Idaho Soil Sampling protocols or other method as approved by the Department. (3-29-10)

05. Dairy Animal. Milking cows, sheep or goats. (3-29-17)

06. Dairy Byproduct. Solids and liquids associated with dairy animal rearing and milk production including, but not limited to, manure, manure compost, process water, bedding, spilled feed, and feed leachate. (3-29-17)

07. Dairy Environmental Management Plan. A plan for managing a dairy environmental management system. The dairy environmental management plan shall consist of dairy storage and containment facilities criteria and a dairy nutrient management plan that are approved by the Director. (3-29-17)

08. Dairy Environmental Management System. The areas and structures within a dairy farm where dairy byproducts are collected, stored, treated, or applied to land. These areas and structures may include corrals, feeding areas, collection systems, conveyance systems, storage ponds, treatment lagoons, and evaporative ponds and land application areas, but do not include pastures as defined in these rules. (3-29-17)

09. Dairy Farm. The land owned or operated by a person as an integral component of a Department-permitted grade A or manufacture grade facility where one (1) or more milking cows, sheep, or goats are kept, and from which all or a portion of the milk produced thereon is delivered, sold or offered for sale for human consumption. A dairy farm does not include those lands that contain non-dairy animals provided a physical separation exists from lands owned or operated by the dairy, byproducts remain separate, and dairy animals are not comingled with non-dairy animals. (3-29-17)

10. Dairy Nutrient Management Plan (DNMP). A plan prepared in conformance with the NMS for managing the land application of dairy byproducts that is prepared by a certified planner and approved by the Department. (3-29-17)

11. Dairy Storage and Containment Facilities. The areas and structures within a dairy farm where dairy byproducts are collected, stored, or treated in conformance with engineering standards and specifications published by the USDA Natural Resources Conservation Service or by the ASABE, or other equally protective criteria approved by the Director. These areas may include corrals, feeding areas, collection systems, conveyance systems, storage ponds, treatment lagoons, evaporative ponds, and compost areas, but do not include pastures as defined in these Rules. (3-29-17)

12. Department. The Idaho State Department of Agriculture. (3-29-10)

13. Director. The Director of the Idaho State Department of Agriculture or his designee. (3-29-10)

14. Export. The delivery of dairy byproducts from a dairy farm to a third party for the third party's use. (3-29-17)

15. Fieldman. An individual qualified and approved by the Department to perform dairy farm inspections. (3-20-97)

16. Idaho Pollutant Discharge Elimination System (IPDES). Idaho's program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under these rules and the Clean Water Act sections 307, 402, 318, and 405. (3-29-17)

17. Inspector. A qualified, trained person employed by the Department to perform dairy farm inspections. (3-20-97)

18. Land Application. Mechanical spreading on, or incorporating into the soil mantle, dairy byproduct as a soil amendment for agricultural use of nutrients and for other beneficial purposes. Land application does not include pasturing animals as defined in these rules. (3-29-17)

19. Modification or Modified. Structural changes and alterations to the dairy storage and containment facility that would require increased storage or containment capacity or the function of the facility. (3-29-17)

20. Non-Compliance. A practice or condition that does not meet the requirements of a dairy environmental management plan. Noncompliance does not include an upset condition. (3-29-17)

21. Nutrient Management Standard (NMS). Criteria for managing the land application of nutrients and soil amendments published in the USDA NRCS conservation practice standard nutrient management code 590 or other equally protective criteria approved by the Director. (3-29-17)

22. Pasture, Pasturing, and Pastured. For purposes of these rules, a pasture is an irrigated or dryland field with forage plant growth covering a minimum of fifty percent (50%) of the field. Pasturing and pastured is dairy animals and other animals owned, leased, or otherwise under the control of the producer, grazing in the same dairy farm pasture. (3-29-17)

23. Permit. A permit issued by the Department allowing the sale of Grade A milk or manufacture grade milk. (3-29-17)

24. Person. Any individual, partnership, association, firm, joint stock company, joint venture, trust, estate, political subdivision, public or private corporation, state or federal governmental department, agency, or instrumentality; or any legal entity that is recognized by law as the subject of rights and duties. (4-11-15)

25. Phosphorus Site Index. A method to evaluate the relative potential for off-site movement of phosphorus from a field or pasture based upon risk factors relating to surface transport, phosphorus loss potential and nutrient management practices. ()

256. Process Water. Water directly or indirectly used or produced in dairy animal rearing, milk production and environmental management processes including, but not limited to: (3-29-17)

- a. Excess milk: spillage or overflow from watering, washing, spraying or cooling dairy animals; (3-29-17)
- b. Water containing dairy manure: water used in washing, cleaning, or flushing barns, manure pits and other areas involved in the milk production and environmental management processes; (3-29-17)
- c. Water used for dust control; and (3-29-17)
- d. Water that comes into contact with any raw materials, products, or byproducts of the dairy production and environmental management processes. (3-29-17)

2627. Producer. The person who owns or operates a permitted dairy farm. (3-29-17)

2728. Unauthorized Discharge. A discharge of pollutants from a dairy farm to waters of the United States as defined in the federal clean water act that is required to be but is not authorized by an IPDES permit. Unauthorized discharge does not include an upset condition or agricultural stormwater discharge. (3-29-17)

2829. Unauthorized Release. A release of dairy byproducts to ground water or surface waters of the state that are not waters of the United States or beyond land owned or operated by the dairy farm that results from a dairy farm's failure to comply with its environmental management plan. Unauthorized release shall not include an upset condition, an agricultural stormwater discharge or infiltration from storage and containment facilities that is within engineering standards and specifications published by the USDA, NRCS or by the ASABE, or other equally protective criteria approved by the Director. (3-29-17)

2930. Upset Condition. Precipitation, earthquake, vandalism, or other occurrence beyond the control of the dairy farm owner or operator that exceeds criteria for storage and containments facilities and nutrient management in an approved environmental management plan. (3-29-17)

011. ABBREVIATIONS.

01. ASABE. American Society of Agricultural and Biological Engineers. (3-29-17)

02. IPDES. Idaho Pollutant Distribution Elimination System. (3-29-17)

- 03. NMS. Nutrient Management Standard (3-29-17)
- 04. NRCS. Natural Resources Conservation Service. (3-29-17)
- 05. USDA. United States Department of Agriculture. (3-29-17)

012. -- 029. (RESERVED)

030. DAIRY ENVIRONMENTAL MANAGEMENT PLAN APPROVAL.

The Department is authorized to approve environmental management plans, as provided in Section 37-606A, Idaho Code. (3-29-17)

01. Dairy Storage and Containment Facility Criteria. (3-29-17)

a. Dairy storage and containment facilities shall be constructed to meet a minimum of one hundred eighty (180) days of holding capacity. Process water containment structures that are utilized as the secondary or final storage for effluent shall have a minimum two (2) vertical feet of freeboard. (3-29-17)

b. Earthen dairy storage and containment facilities less than ten (10) vertical feet high with a maximum high water line of eight (8) vertical feet shall be required to have a top embankment width of at least eight (8) feet and a minimum of one (1) vertical foot of freeboard shall be maintained. The combined inside and outside embankment slopes must be at least five (5) horizontal to one (1) vertical, and neither slope shall be steeper than two (2) horizontal to one (1) vertical. Earthen dairy storage and containment facilities with outside embankments higher than ten (10) vertical feet from the naturally occurring ground level shall meet the NRCS Idaho Conservation Practice Standard Waste Storage Facility Code 313 December 2004 embankment requirements as incorporated by reference in Subsection 004.03 of these rules. (3-29-17)

c. The inside bottom of the dairy storage and containment facility shall be a minimum of two (2) feet above the high water table, bed rock, gravel, or permeable soils. For an earthen dairy storage and containment facility, a soil liner shall be installed such that the specific discharge rate of the containment structure meet 1×10^{-6} cm³/cm²/sec or less as described in Appendix 10D. Concrete or synthetic liners must be constructed to the American Society of Agricultural and Biological Engineers Specification ASABE EP393.3 Manure Storages February 2004 and Appendix 10D as incorporated by reference in Section 004 of these rules. (3-29-17)

d. Storage areas for dairy byproduct, including compost and solid manure storage areas, shall be located on approved soils and appropriately protected to prevent run on and run off. (3-29-17)

e. Dairy environmental management systems shall be maintained in a condition that allows the producer to regularly inspect the integrity of the systems. (3-29-17)

02. Dairy Nutrient Management Plan (DNMP). Except as provided below, each dairy farm shall have a dairy nutrient management plan that is approved by the Department and included in the dairy farm's environmental management plan. The DNMP shall cover the dairy farm site and other land owned and operated by the dairy farm owner or operator to which dairy byproducts are land applied. A new dairy farm governed by the IPDES program is not required to submit a DNMP to the Department. An existing dairy farm with an approved DNMP that has a discharge to waters of the U.S. that requires an IPDES permit must comply with the nutrient management plan requirements under the IPDES rules and IPDES permit, notwithstanding the Department approved DNMP. Requirements to comply with the provisions of a DNMP include the following: (3-29-17)

a. Producer annual soil tests shall be conducted as set forth in IDAPA 02.04.30, "Rules Governing Nutrient Management." (3-29-17)

b. Regulatory soil tests will be conducted at frequencies sufficient to provide assurance of compliance with Section 031 and with IDAPA 02.04.30, "Rules Governing Nutrient Management." (3-29-17)()

i. ~~If the regulatory or producer soil tests reveal that phosphorus thresholds have exceeded the levels established in the NMS, the producer shall only apply nutrients at the appropriate phosphorus crop uptake rate.~~ (3-29-10)

~~ii. Subsequent regulatory soil test(s) on fields and pastures that were identified as exceeding the phosphorus threshold will be conducted. If two (2) out of three (3) tests reveal the phosphorus index continues to trend upward, the producer will be penalized as provided in these rules. These tests shall be taken in the top one (1) foot of soil. (3-29-17)~~

c. Accurate DNMP records shall be maintained. These records shall include at a minimum: (3-29-17)

i. Regulatory soil samples shall be taken by a Certified Soil Sampler and tested by a laboratory that meets the requirements and performance standards of the North American Proficiency Testing Program under the auspices of the Soil Science Society of America outlined in the NMS, as incorporated by reference in Subsection 004.02, as part of NMS 590 or other methods as approved by the Department; (3-29-10)

ii. Annual soil analysis; (3-29-10)

iii. Date and amount of dairy byproduct and commercial fertilizer applied to individual dairy owned or operated fields; (3-29-17)

iv. Date(s) of exported dairy byproduct, number of acres applied, amount of dairy byproduct exported, and to whom dairy byproduct was exported; and (3-29-17)

v. Actual crop yields on dairy owned or operated fields. (3-29-10)

vi. A nitrogen management plan worksheet (page 35 of the 2017 Idaho Phosphorus Site Index Standards) shall be completed for all fields and pastures receiving land application of nutrients. ()

d. Pasturing. Pastures utilized for grazing of dairy animals, and other animals owned, leased or otherwise under the control of a producer within the same pasture, shall be incorporated in and subject to the DNMP. These pastures are also subject to the following requirements: (3-29-17)

i. Soil testing. Soil tests shall be conducted pursuant to the NMS and Section 031 on all lands utilized as pasture. ~~If pasture soil tests exceed the phosphorus threshold, the producer must take action to demonstrate a downward trend in the phosphorus index in subsequent soil tests. If two (2) out of three (3) subsequent soil tests reveal the phosphorus index continues to trend upward, the producer will be penalized as provided in these rules. (3-29-17) ()~~

ii. Surface water access. If pastured animals have access to surface water within a pasture, the producer may be required to implement one (1) or more NRCS conservation practice standards to minimize adverse impact on surface water quality. (3-29-17)

iii. Land application. If land application occurs within a pasture, soil tests shall be conducted annually on that pasture. (3-29-17)

iv. Confinement areas. Confinement areas shall not be considered part of a pasture. (3-29-17)

031. PHOSPHORUS MANAGEMENT. Dairy farms shall utilize either Phosphorus Indexing (Section 031.01) or the Phosphorus Threshold (Section 031.02) to manage nutrient application. After June 30, 2023, dairy farms will no longer be allowed to use the Phosphorus Threshold (Section 031.02) provision and all facilities will be required to use Phosphorus Indexing (Section 031.01) ()

01. Phosphorus Indexing. The dairy farm shall utilize phosphorus site indexing (PSI) for each field where dairy byproducts and/or commercial fertilizers are land applied and for each pasture utilized for grazing, in accordance with the 2017 Idaho Phosphorus Site Index Standards. The PSI shall be calculated by a Nutrient Management Planner, certified by the Department, and be included as a component of the DNMP in the dairy farm's

Environmental Management Plan. It shall be the dairy farm's responsibility to provide updated information, including annual soil test results, to the Nutrient Management Planner for calculation of the PSI on all fields and pastures on an annual basis. Failure to abide by the nutrient application and management provisions of a field or pasture's PSI risk classification in the DNMP shall constitute a non-compliance and the producer may be penalized as provided in these rules. ()

a. Notwithstanding anything to the contrary in the 2017 Idaho Phosphorus Site Index Standards, no land application of nutrients shall be permitted on any fields or pastures that possess a soil phosphorus level exceeding three hundred (300) parts per million, as determined by the required annual soil test (via Olsen method). Further, the dairy farm shall not receive BMP Coefficient credit for implementing any best management practice designed to reduce phosphorus loss on fields exceeding three hundred (300) parts per million, via Olsen method. ()

b. The Department may award zero or partial BMP Coefficient credit when a dairy farm implements a best management practice designed to reduce phosphorus loss from fields that does not fully conform to NRCS standards or the standards set forth in the 2017 Idaho Phosphorus Site Index Standards BMP definition section. ()

02. Phosphorus Threshold. If the regulatory or producer soil tests reveal that phosphorus thresholds on fields and pastures have exceeded the levels established in the NMS, the producer shall only apply nutrients at the appropriate phosphorus crop uptake rate. Subsequent regulatory soil test(s) on fields and pastures that were identified as exceeding the phosphorus threshold will be conducted. If two (2) out of three (3) tests reveal the phosphorus index continues to trend upward, the producer will be penalized as provided in these rules. These tests shall be taken in the top one (1) foot of soil. ()

~~031-032~~ -- 039. (RESERVED)