

ATTACHMENT E

California Regional Water Quality Control Board San Francisco Bay Region

Conditional Waiver of Waste Discharge Requirements

Definitions

25-year, 24-hour rainfall event: precipitation event with a probable recurrence interval of once in twenty five years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, or equivalent regional or State rainfall probability information developed from this source.

Animal Feeding Operation (AFO): a lot or facility where the following conditions are met: 1. Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility (Federal CAFO regulations).

Agricultural stormwater discharge: where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agriculture utilization of the nutrients in the manure, litter, or process wastewater, a precipitation-related discharge of manure, litter, or process wastewater from land application areas is an agricultural stormwater discharge (**40CFR 122.23(e)**).

Agonomic rates: the land application of irrigation water and nutrients (which may include animal manure, bedding, litter, or process wastewater) at rates of application in accordance with a nutrient management plan that will enhance soil productivity and provide the crop or forage with needed nutrients for optimum health and growth.

Aquifer: ground water that occurs in a saturated geologic unit that contains sufficient permeability and thickness to yield significant quantities of water to wells or springs.

Catastrophic rainfall event: a rainfall event greater than the 25-year, 24-hour rainfall event, and includes events like tornadoes, hurricanes or other catastrophic conditions that would cause an overflow.

Concentrated Animal Feeding Operation (CAFO), Large, Medium and Small: A facility is defined as a Concentrated Animal Feeding Operation (CAFO) if it is either large (e.g., 700 or more mature dairy cows, 500 or more horses, 10,000 or more sheep/lambs), medium (e.g., 200-699 mature dairy cows, 150-499 horses, 3000-9999 sheep/lambs, and which discharges pollutants to waters of the United States as specified), or small (e.g., less than 200 mature dairy cows, less than 150 horses, less than 3000 sheep/lambs and which has been specifically designated as discharging pollutants to waters of the United States). The size thresholds for all animal sectors are listed in CFR 122.23(b) and (c).

Confined area: the area where cows are confined within the production area.

Cropland: the land application area where dry or solid manure and/or process wastewater is recycled for the purpose of beneficially using the nutrient value of the manure and/or process wastewater for crop production.

Degradation: any measurable adverse change in water quality.

Design volume: includes allowances for the volume of manure, process wastewater, and other wastes accumulated during the storage period; volume of “normal precipitation” minus evaporation; volume of runoff from the facility’s drainage area during normal rainfall events; volume of precipitation from the 25-yr, 24-hr storm event on the storage structure area; volume of runoff from the facility’s drainage area for the 25-yr, 24-hr storm event; volume of solids; necessary freeboard requirements; and any additional storage requirements, such as to meet management goals, or the minimum treatment volume for anaerobic lagoons.

Discharge: the discharge or release of waste to land, surface water, or ground water. The Federal Pollution Control Act states that “**discharge**” includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

Discharger: the property owner and/or the operator of an existing milk cow dairy subject to Conditional Waiver or General Permit requirements.

Existing facility: a facility that is constructed and operating as of date of adoption, and which has subsequently undergone no expansion in size of its physical facilities. Physical facilities include the roofed structures, such as stall barns, that limit the size of the animal herd.

Fecal coliform: means the bacterial count (Parameter 1) at 40 CFR 136.3 in Table 1A which also cites the approved methods of analysis.

Field moisture capacity: the upper limit of storable water in the soil once free drainage has occurred after irrigation or precipitation.

Freeboard: the elevation difference between the process wastewater (liquid) level in a pond and the lowest point of the pond embankment before it can overflow.

Grazing Operation: are those ranches where animals are fed or maintained on irrigated vegetation or rangeland, animals forage for a total of 45 days or more in any 12-month period, and vegetation forage growth is sustained over the parcel or ranch during the normal growing season. A Grazing Operation includes auxiliary appurtenances such as roads, reservoirs, etc.

Grazing Lands: are lands encompassing an area of 50 acres or more, where Dischargers conduct grazing, such as ranchlands, riparian areas, and pasturelands.

Groundwater: water stored underground in rock crevices and in the pores of geologic materials that make up the earth’s crust; and water that flows downward and saturates soil or rock, supplying wells and springs. The upper surface of the saturated zone is called the water table.

Incorporation into soil: the complete infiltration of process wastewater into the soil, the disking or rotary tiller mixing of manure into the soil, shank injection of slurries into soil, or other equally effective methods.

Irrigation return flow: has the same meaning as return flow from irrigated agriculture in Section 502 (14) of the federal Clean Water Act, and is defined as surface and subsurface water that leaves a field following application of irrigation water, where the irrigation water is not a wastewater and

when such irrigation water has been applied in accordance with a site specific nutrient management plan. "Tailwater" may be considered an irrigation return flow if it meets the conditions in this paragraph.

Irrigation water: water that is applied to fields to grow crops.

Land application: the application of manure, litter, or process wastewater onto or incorporated into the soil.

Land application area: land under control of the cow dairy owner or operator, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling.

Liquid manure handling system: a system that collects and transports or moves waste material with the use of water, such as in washing of pens and flushing of confinement facilities. This would include the use of water impoundments for manure and/or wastewater treatment.

Manure: the fecal and urinary excretion of livestock and other commingled materials. Manure may include litter, bedding, compost, raw materials, and waste feed.

Manured solids: manure that has sufficient solids content such that it will stack with little or no seepage.

Method Detection Limit (MDL): the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in: Title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML): is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

New Source: defined in the federal regulations as "*any building, structure, facility, or installation from which there is or may be a 'discharge of pollutants,' the construction of which commenced: (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.*" (40 C.F.R. § 122.2) Further, a facility is a "new source" if (1) the facility is constructed at a site where no other facility is located, (2) the facility totally replaces the process or production equipment that causes the discharge of pollutants at the existing facility, or (3) the facility process is substantially independent of an existing facility at the same site. (40 C.F.R. §122.29 (b)).

Non-Point Source: Diffuse discharges of waste throughout the natural environment which are a major cause of water pollution. Difficult to pinpoint physically, but often classified by type: such as, urban runoff, agriculture, mining, septic tank leach fields, silviculture, construction, etc.

Not Detected (ND): are those sample results less than the laboratory's MDL.

Notice of Intent (NOI): is a form submitted by the owner/operator applying for coverage under a general permit. It requires the applicant to submit the information necessary for adequate program implementation, including, at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the receiving stream(s). See Attachment A.

Notice of Termination: is a letter or email to the Regional Board stating that the facility is no longer operating as a confined animal facility. This notice must contain all information related to facility closure such as dates of closure, any changes in facility ownership or management, tasks performed to remediate manured areas and to prevent erosion, a schedule for animal removal, and a schedule for waste removal, treatment and/or storage. Regional Board staff will review the submittal and verify that all manure and animal waste impacted soil has been disposed of appropriately so as not to pose a threat to surface water or groundwater quality or create a condition of nuisance.

Normal Precipitation: the long-term average precipitation based on monthly averages over the time that data has been collected at a particular weather station. Normal precipitation is usually taken from data averaged over a 30-year period (e.g.1971 to 2000) if such data is available.

Nuisance: is defined in section 13050 of the Porter-Cologne Water Quality Control Act as
“...anything which meets all of the following requirements:

(1) *Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.*

(2) *Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.*

(3) *Occur during, or as a result of, the treatment or disposal of wastes.”*

Nutrient: is any element taken in by a plant which is essential to its growth and which is used by the plant in elaboration of its food and tissue.

Nutrient Management Plan (NMP): is a description of site-specific nutrient management practices that ensure appropriate agricultural utilization of manure, litter, or process water, as specified in MRP, Appendix 2, NMP.

Nutrient recycling: the application of nutrients at agronomic rates for crop production.

Off-property discharge: the discharge or release of waste beyond the boundaries of the property of the dairy's production area or the land application area or to water bodies that run through the production area or land application area.

Overflow: the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.

Persistent pollutants: are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Physical facility: is defined as the roofed structure, such as the stall barn, that limits the size of the animal herd. No expansion of the physical facility (roofed structure that houses the cows, such as the stall barn) is allowed under this permit. If roofed structures need replacing/repair during permit coverage, it must be similar size and location. Limited alterations are allowed, such as converting corrals to freestalls, as long as these alterations do not increase the capacity of the physical facilities.

Point-Source: discernible, confined and discrete conveyance such as a pipe, ditch or channel, tunnel, conduit, well container, concentrated animal feeding operation or vessel, from which pollutants are or may be discharged. Does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Pollutant: is defined in Title 40 Code of Federal Regulations Section 122.2 as “...*dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.*”

Pollution: is defined in Section 13050(l)(1) of the Porter-Cologne Water Quality Control Act as “...*an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses.*” "Pollution" may include "contamination".

Pollution Prevention: any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Pond: retention ponds, storage ponds, settling ponds, or any structures used for the treatment, storage, disposal, and recycling of process wastewater. Ponds are differentiated from sumps, which are structures in a conveyance system used for the installation and operation of a pump.

Process water: water directly or indirectly used in the operation of a confined animal facility for any or all of the following: spillage or overflow from animal watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other facilities; washing or spray cooling of animals; on-site slaughtering; or dust control, and includes any water or precipitation and precipitation runoff which comes into contact with any raw materials, products, or byproducts including manure, feed, milk, or bedding. Process water may also include waste water streams from ancillary on-site operations such as cheese-making.

Propose to Discharge: is defined as a dairy facility being designed, constructed, operated, or maintained such that a discharge to waters of the United States will occur.

Production area: is that part of a confined animal facility that includes the animal confinement

area, the manure storage area, wastewater, litter, waste containment area, the raw materials storage area such as feed, silage, and bedding materials. The animal containment area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, animal wash areas and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. Also included in the definition of production area is any area used in the storage, handling, treatment, or disposal of mortalities.

Residual Dry Matter (RDM): is a term referring to the accumulation of dead plant material and is used in rangelands as a monitoring tool to indicate watershed health and rangeland productivity.

Retention Pond: means a constructed holding pond for temporary storage of solid and liquid animal manure, prior to cropland application.

Salt: sodium chloride and any added minerals (such as calcium, phosphorus, potassium, sulfur, iron, selenium, copper, zinc, or manganese) in the animal ration. Salts commonly break up into cations (sodium, calcium, etc.) and anions (chloride, sulfate, etc.) when dissolved in water. Total dissolved solids is generally measured as an indication of the amount of salts in a water or wastewater.

Setback: a specified distance from waters of the United States or potential conduits to waters of the United States where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: Open drainage ditches, tile drainage lines, intake structures, sinkholes, and agricultural well heads.

Significant quantity: the volume, concentrations, or mass of a pollutant that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and/or cause or contribute to a violation of any applicable water quality standards for the receiving water.

Significant storm event: a precipitation event that results in continuous runoff of storm water for a minimum of one hour, or intermittent discharge of runoff for a minimum of three hours in a 12-hour period.

Source of Drinking Water: any water designated or potentially suitable as municipal or domestic supply (MUN) in the Water Quality Control Plan for the North Coast Basin (Basin Plan).

State: the State of California.

State Water Board: the State Water Resources Control Board.

Stormwater: stormwater runoff, snowmelt runoff, and storm water surface runoff and drainage.

Subsurface (tile) drainage: water generated by installing and operating drainage systems to lower the water table below irrigated lands. Subsurface drainage systems, deep open drainage ditches, or drainage wells can generate this drainage.

Surface water: includes essentially all water that is on the Earth's surface, such as in a stream, lake, river, reservoir, or ocean. Surface waters include waters of the United States and their tributaries such as interstate waters and their tributaries, intrastate waters, all impoundments of these waters, and all wetlands hydrologically connected to lakes, streams, or rivers. Manure ponds are not considered surface waters in the context of this Regional Water Board Order.

Tailwater: the runoff of irrigation water from an irrigated field.

Vegetated buffer: a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching waters of the United States.

Waste: is set forth in Water Code Section 13050(d), and includes manure, leachate, process wastewater and any water, precipitation or rainfall runoff that came into contact with raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, or bedding. The Basin Plan states that "waste" includes sewage and any and all other substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Wastewater: is the same as "process water" as defined above.

Waters of the State: is defined in Section 13050 of the California Water Code as "...*any surface water or groundwater, including saline waters, within the boundaries of the state.*" Note this includes isolated wetlands.

Waters of the United States: is defined in 40 CFR § 122.2 as (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland.

Wetland: For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."