

ATTACHMENT C

PERMITTING REQUIREMENTS FOR DAIRIES IN CALIFORNIA

INTRODUCTION

This document provides information on the regulation of dairies by California agencies charged with the protection of water quality. It specifically addresses the requirement that some dairies obtain permit coverage under the federal National Pollutant Discharge Elimination System (NPDES) program, including coverage for discharge¹ of *storm water*.² This document, was prepared in June 2009 by staff of the State Water Resources Control Board, and is provided for informational purposes only; it does not have any regulatory effect.

Terms that have generic meaning may also be defined in laws and regulations. Definitions for some terms used in this document are presented in Attachment A, and citations are provided where appropriate. The defined terms are italicized throughout this document. While the definitions are based on terms defined in federal and state laws and regulations, there may be instances where the definitions provided are not entirely consistent with applicable statutory or regulatory definitions (i.e., definitions in federal or state laws or regulations that apply to a discharge). The definitions presented in Attachment A are included for the convenience of the reader and do not substitute for the statutory definitions upon which they are based.

REGULATION OF WASTE DISCHARGES FROM DAIRIES

Wastes generated at dairies can adversely affect the environment if not managed properly. Wastes from dairies in California are subject to regulation under both state and federal regulatory programs which are implemented by the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively "Water Boards"). The programs for the protection of water quality are discussed below.

State Regulatory Program

The Porter Cologne Water Quality Control Act (California Water Code, beginning with section 13000) designates the Water Boards as the state agencies with primary responsibility for the coordination and control of water quality in the state, including prevention of pollution.

"Pollution" means 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 beneficial uses of the water; or (B) facilities which serve these beneficial uses. Pollution includes "contamination" which means an impairment of the quality of the *waters of the state* by *waste* to a degree which creates a hazard to the public health through poisoning or through the spread of disease. [reference: California Water Code § 13050].

As part of the process of protecting the quality of both surface water and groundwater, the Water Boards may regulate waste discharges from sources such as dairies and irrigated agriculture by issuing or conditionally waiving Waste Discharge Requirements (WDRs). Any dairy operator proposing to discharge wastes that could affect water quality, other than to a

¹ The word "discharge" may be used in the generic sense to mean 'deliberate release of a material.' The release may or may not be a discharge of a pollutant.

² The information on NPDES permit coverage for storm water is based on an 18 March 2009 State Water Resources Control Board memorandum from Alex Mayer, Office of the Chief Counsel, to James Giannopoulos, Division of Water Quality.

permitted landfill or wastewater treatment plant, must notify the local [Regional Water Board](#) (RWB) in advance, provide requested information, and pay a fee. In most cases, the discharge cannot commence unless the RWB has issued WDRs, conditionally waived WDRs, or a specified time has elapsed from submittal of a complete notification package. Because the California Water Code applies to agricultural discharges, runoff from cropland where *manure*, litter, or *process water* has been applied may be regulated under WDRs, even when the application was made pursuant to a *Nutrient Management Plan (NMP)*.

About 75 percent of the dairies in California are in the Central Valley Region. In May 2007, the Central Valley RWB required all cow dairies in the region to enroll under General [WDR Order No. R5-2007-0035](#). Since then, new and expanding dairies in the Central Valley Region have been issued individual WDRs or NPDES permits (see next section). Dairies and other confined animal facilities in other parts of the state are typically regulated under NPDES permits, WDRs, and conditional waivers.

Federal Regulatory Program

The federal [Clean Water Act](#) (CWA) established the NPDES permitting program for *point sources* to regulate the discharge of pollutants³ to *waters of the U.S.* Most states, including California, have the authority to issue NPDES permits. Either general⁴ or individual NPDES permits may be utilized. Separate NPDES permits may be issued for *process water* and *storm water*, or a single combined permit may be used for both. The following information applies to dairies in California.

The United States Environmental Protection Agency (U.S. EPA) has issued regulations for concentrated animal feeding operations (CAFOs), and revised those regulations ("the CAFO Rule") in November 2008. The CAFO Rule describes a process for a CAFO operator to assess the need for an NPDES permit. It also describes a process to voluntarily certify that there is no regulated discharge, and that therefore an NPDES permit is not needed. It is not known if RWBs will implement a voluntary certification process.

Under the CAFO rule, a dairy that confines 700 or more mature dairy cows is a CAFO, and is therefore a "*point source*" under the Clean Water Act. A dairy with less than 700 mature dairy cows may be considered a CAFO if it meets specific criteria.

CAFOs that discharge any *manure*, *process water*, or any other *pollutant* to *waters of the U.S.* must have an NPDES permit for the discharge. Facilities that propose such a discharge must apply for an NPDES permit in advance of the discharge. Those permits are issued by the RWBs. CAFOs that do not currently have such a discharge, and will not have such a discharge in the future, do not need an NPDES permit. Failure to obtain NPDES permit coverage, as required by the CWA, could result in significant penalties.

The CWA requires NPDES permit coverage for most storm water discharges from industrial sites. The State Water Board adopted General Industrial Storm Water Permit Order No. 97-03-DWQ (the General Storm Water Permit) which requires certain facilities, including

³ The addition of any pollutant or combination of pollutants to waters of the U.S. from any point source [reference: 40 Code of Federal Regulations (CFR) § 122.2].

⁴ A general NPDES permit may be used for a group of dischargers with similar operational practices and waste management systems. Individual dischargers enroll under the general permit.

CAFOs, to obtain coverage for any *storm water discharge associated with industrial activities to waters of the U.S.* or to municipal separate storm sewer systems.

Coverage under the General Storm Water Permit is not required for CAFOs that do not directly or indirectly discharge *storm water associated with industrial activities to waters of the U.S.* A dairy operator may be able to implement measures that prevent all storm water discharges, and thus may not require coverage under the General Storm Water Permit. Such measures may involve:

- 1) diverting storm water to ensure that it does not contact *manure, process water*, or other sources of *pollutants* in areas associated with industrial activity such as the *production area*; shipping, receiving, and storage areas; materials handling sites; equipment maintenance areas; and access roads and rail lines used by carriers of raw materials, products, by-products, or *wastes*;
- 2) collecting all *storm water associated with industrial activities* and retaining it for use or disposal as allowed by law; or
- 3) other measures that accomplish the required result.

To avoid liability under the CWA, a CAFO operator should be certain that, under any circumstances, the facility will not discharge *storm water associated with industrial activities to waters of the U.S.* If such a discharge is expected, the operator should obtain permit coverage.

Historically, some dairies enrolled under the General Storm Water Permit for reasons other than having a discharge that requires a permit. Those dairies are not required to continue their enrollment if they do not discharge *storm water associated with industrial activities to waters of the U.S.*; they may submit a "Notice of Termination" (NOT) to the Regional Water Board. NOTs take effect only when they are approved by the Regional Water Board.

COMPLIANCE WITH REGULATIONS FOR DAIRIES

Discharges of *manure* or *process water* at a dairy must be managed to ensure compliance with applicable laws and regulations. The following information concerns compliance issues.

- Transfer of *manure* or *process water* to another person is not a discharge, but anyone applying that material to land must comply with applicable state regulations. Some RWBs have developed waiver and permitting programs for discharges from irrigated lands. Any farmer using *manure* or *process water* from a dairy must comply with all applicable state regulations.
- Under federal regulations, "*agricultural stormwater*" is a precipitation- related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO where the manure, litter, or process wastewater has been applied in accordance with a site specific *NMP*. Anyone discharging agricultural stormwater from cropland at a CAFO is exempt from NPDES permitting requirements.⁵ To qualify for the exemption, a CAFO operator must maintain implementation records, either on site or at a nearby office, or otherwise make such documentation readily available to the Regional Water Board upon request. The documentation must comply with requirements set forth at 40 CFR § 122.42(e)(1)(ix).

⁵ However, storm water discharges from cropland may also be regulated under State regulations (WDRs or waivers) if the stormwater discharged can adversely impact receiving water.

- Some RWBs may allow the discharge of tailwater under specified circumstances. For example, Central Valley RWB General [WDR Order No. R5-2007-0035](#) specifies monitoring that must be conducted for such discharges.

Dairies that have an NPDES permit can discharge pollutants into *waters of the U.S.* waters whenever precipitation causes an overflow of manure, litter, or process wastewater provided: (1) the production area is designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event, and (2) the production area is operated in accordance with the additional measures and records required by 40 CFR §412.37(a) and (b) [reference 40 CFR §412.31].

A discharge of *manure, process water, storm water associated with industrial activities, or any other pollutant* other than as described above is probably a violation of law, and the person or persons responsible for the discharge may be held civilly or criminally liable for the discharge. Penalties may include jail sentences or substantial fines. Unpermitted *point source* discharges to *waters of the U.S.*, are subject to citizen lawsuits if a regulatory agency has not diligently prosecuted an enforcement action to require compliance.

FEES FOR PERMITS

The State Water Board's annual fee schedule is set forth at California Code of Regulations, Title 23, Section 2200 and can be found on the Board's web site. Separate annual fees are assessed for each order or permit issued to a permittee. Facilities that are subject to more than one permit must pay the fee applicable to each permit.

DEFINITIONS

The following definitions apply to this document. These definitions are provided for convenience to the reader. For a complete and accurate definition of any of the terms, a person should consult the state or federal statute.

General Definitions

“Industrial Storm Water” means *storm water associated with industrial activity* (see below).

“Material handling activities” include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.

“Notice of Termination” is a form submitted by an enrollee under the General Industrial Storm Water Permit program to cancel coverage under the permit. A Notice of Termination is not effective unless approved by the Regional Water Board. The form is available at http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/indusnot.pdf.

“Point source” means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation (CAFO), or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture. Discharges from point sources are subject to permitting under federal regulations.

“Pollutant” is defined in federal regulations as dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water [reference: 40 CFR § 122.2]. Manure, litter, and process water are considered pollutants.

“Process water” is water - including *industrial storm water* – which, during manufacturing or processing, comes into direct contact with or results from the production or use of raw materials, finished products, intermediate products, by-products, or wastes. At concentrated animal feeding operations (CAFOs), process water means water directly or indirectly used in the operation of the CAFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding [reference: 40 CFR § 412.2(d)].

“Storm water” is storm water runoff, snow melt runoff, and storm water surface runoff and drainage.

“Storm water Associated with Industrial Activity” means storm water that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. For the categories of industries identified at Attachment 1 of the General Industrial Storm Water Permit, including dairies with 700 or more mature dairy cows, the term includes, but is not limited to, storm water from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters⁶; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken

⁶ As defined in 40 CFR, Part 401

place in the past and significant materials remain and are exposed to storm water [reference: General Industrial Storm Water Permit].

For dairies, the term includes *storm water* from areas described in the previous paragraph, including areas where feed, manure, mortality, or wastes are handled or deposited including milk barns, wash pens, corrals, holding ponds, and storage pads. The term does not include *storm water* excluded from the NPDES program such as precipitation-related runoff from cropland resulting from the land application of manure, litter or process water pursuant to an *NMP*.

"**Waste**" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. It includes substances that have leaked from storage containers or otherwise been released into the environment [reference California Water Code § 13050].

"**Waters of the State**" means all surface water or *groundwater*, including saline waters, within the boundaries of the State of California [reference: California Water Code § 13050].

"**Waters of the United States**" (U.S.) is defined in 40 CFR § 122.2, and includes most lakes, rivers, streams (including intermittent streams) in the U.S., and the tributaries to those water bodies. Additional information on Waters of the US is available from the US EPA at <http://www.epa.gov/owow/wetlands/guidance/CWAwaters.html>.

Definitions Specifically Applicable to Dairies

"**Agricultural stormwater**" is a precipitation- related discharge of manure, litter or process wastewater from land areas under the control of a CAFO where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in § 122.42(e)(1)(vi)–(ix) [reference: Title 40 CFR § 122.23(e)].

"**Manure**" means the accumulated moist animal excrement that does not undergo decomposition or drying as would occur on open grazing land or natural habitat. This definition includes bedding materials, spilled feed, soil, compost and raw materials, and other materials mixed with manure or set aside for disposal [reference: CCR Title 27 § 20164, 40 CFR § 122.23(b)(5)].

"**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 Title 40 CFR § 122. 42(e)(1)(vi)-(ix).

"**Production area**" includes areas used for animal confinement, storage of raw materials and manure, waste containment, and any area used in the storage handling treatment, or disposal of mortalities [reference: 40 CFR § 122.23(b)(8)].