California Regional Water Quality Control Board
Santa Ana Region

August 20, 1999

ITEM: 10

SUBJECT: General Waste Discharge Requirements For Concentrated Animal Feeding Operations (Dairies And Related Facilities) Within The Santa Ana Region, Order No. 99-11, NPDES No. CAG018001

DISCUSSION:

See attached Fact Sheet

RECOMMENDATION:

Adopt Order No. 99-11, as presented.

Comments were solicited from the following agencies and/or persons:

U.S. EPA, Washington, Office of Wastewater Enforcement and Compliance - Michael B. Cook
U.S. EPA, San Francisco – Alexis Straus
U.S. EPA, Permit Issuance Section - Terry Oda (W-5-1)
U.S. EPA, San Francisco – Dan Meer
State Water Resources Control Board, Office of the Chief Counsel - Ted Cobb
State Water Resources Control Board, DWQ – Jim Kessel, Jack Hodges, Cheryl Closson
State Department of Water Resources - Glendale
State Department of Health Services - San Bernardino/Santa Ana/San Diego
State Department of Fish and Game - Fred Worthley
Regional Water Quality Control Board (1) - Lee Michlin
Regional Water Quality Control Board (2) - Loretta Barsamian
Regional Water Quality Control Board (3) - Roger Briggs
Regional Water Quality Control Board (4) - Dennis Dickerson
Regional Water Quality Control Board (5) - Gary Carlton
Regional Water Quality Control Board (6) - Harold J. Singer
Regional Water Quality Control Board (7) - Philip Gruenberg
Regional Water Quality Control Board (9) - John Robertus
San Bernardino County Board of Supervisors
San Bernardino County Department of Environmental Health Services - Pam Bennett
San Bernardino County Transportation/Flood Control District - Naresh Varma
San Bernardino County LEA
Riverside County Board of Supervisors
Riverside County Department of Environmental Health Services

Riverside County Flood Control and Water Conservation District - Jason Christie
Riverside County LEA
City of Chino
City of Ontario
Milk Producers Council - Robert Feenstra
California Milk Producers Association – John Godino
Santa Ana Watershed Project Authority - Joseph Grindstaff
Inland Empire Utilities Agency – Doug Drury
Orange County Water District - Bill Mills, Nira Yamachika
U.C. Extension, San Bernardino - Abraham Wubishet
Inland Empire West Resource Conservation District - Jeff Wilson
National Resource Conservation Service - Jim Earsom
City of Lake Elsinore – Dick Watenpaugh, Pat Kilroy
Eastern Valley Municipal Water District
Western United Dairymen - Gary Conover, John Borges
Chino Basin Watermaster - Tracy Stewart
Daily Bulletin - Bob Page
Orange County Register
Press Enterprise - Leslie Bergman
Northwest Mosquito and Vector Control District
Santa Ana River Watershed Group - Lindel Marsh
Orange County Sanitation District - Blake Anderson
Water Advisory Committee of Orange County – H. E. Hartge
Los Alisos Water District – Kenneth Petersen
Municipal Water District of Orange County – Stanley E. Sprague
El Toro Water District – Ronald Kennedy
Mesa Consolidated Water District – Fred Bockmiller
Irvine Ranch Water District – Paul D. Jones II
Metropolitan Water District – Bob Huntley
Yorba Linda Water District – Arthur C. Korn
City of Anaheim, Public Utilities Department – Edward K. Aghjayan
Dairy Mailing List

California Regional Water Quality Control Board
Santa Ana Region

FACT SHEET

GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (DAIRIES AND RELATED FACILITIES) WITHIN THE SANTA ANA REGION, ORDER NO. 99-11, NPDES NO. CAG018001

I. Need for General Waste Discharge Requirements

There are approximately 302 animal feeding operations (AFOs), including dairies, heifer ranches and calf nurseries in the Santa Ana Region. These AFOs contain about 370,000 animals [213,000 lactating (milking) cows, 37,000 dry (pregnant) cows, 56,000 heifers (12-18 month old cows), and 60,000 calves (less than 12 month old cows)]. Two hundred and seventy nine of these facilities (320,000 animals) are located in the Chino Basin, while 23 of the facilities (50,000 animals) are located in the San Jacinto Basin. The wastes generated at these facilities include manure, wash water[1] and storm water runoff from manured areas. About 950,000 tons of manure (at 33% moisture) were produced in the corrals by these facilities in 1998. This is equivalent to about 4,000,000 cubic yards of manure (at 33% moisture). About 15 million gallons of washwater, which contains about 10% of the manure produced by milking cows, is discharged to the ground each day. Wastes produced at AFOs contain high levels of bacteria, biochemical oxygen demand, ammonia, nitrate, phosphorus, and other salts.

Wastes in rainfall runoff from AFOs in the Chino Basin affect Chino Creek, Mill Creek and Reach 3 of the Santa Ana River, which are 303(d) listed impacted water bodies. Wastes from AFOs that are discharged to the Santa Ana River also affect the quality of groundwater in Orange County, since the Orange County Water District captures and percolates a significant amount of the flow of the Santa Ana River to recharge the Santa Ana Forebay Groundwater Subbasin. The Chino Basin is considered to have the highest concentration of dairy animals in the world, with its 279 facilities and 320,000 animals located within an area of less than 50 square miles (30,000 acres). The application of manure to the ground in the Chino Basin has resulted in significant groundwater pollution, specifically total dissolved solids (TDS) and nitrate. Affected groundwater in the Chino Basin also impacts the quality of the Santa Ana River because the Santa Ana River becomes a gaining steam in the Prado Basin where groundwater from the Chino Basin contributes to the surface flow of the Santa Ana River.

Wastes in surface runoff from AFOs in the San Jacinto Basin affect the San Jacinto River, Canyon Lake and Lake Elsinore. Phosphorus from AFOs is considered to be the primary cause of algae blooms in Lake Elsinore, the largest natural freshwater lake in Southern California. These algae blooms deplete oxygen in the lake, creating fish kills and other conditions which affect the economic development and aesthetics of the area. Proper management of wastes from AFOs is essential to protect the surface and groundwater resources of the Region.

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[1] Water used to wash cows prior to milking, milking equipment and the milk barn.

Beginning in 1972, and continuing through 1994, the Board's regulatory approach was to issue individual waste discharge requirements to each AFO. Changes in the location, size, number of animals, or operator of these facilities were frequent and necessitated rescinding existing waste discharge requirements and issuing new requirements. The time demands to draft and rescind individual waste discharge requirements far exceeded the staff resources available to do so.

Criteria cited in 40 CFR 122.28 state that general permits may be issued for facilities 1) involving the same or substantially similar types of operations; 2) discharging the same types of wastes; 3) having the same or similar operating conditions; 4) requiring the same or similar monitoring; and 5) that are more appropriately regulated under a general permit rather than individual permits. The types of wastes and appropriate waste discharge requirements for dairies and related facilities are similar. Given this, the AFOs in the Region can be adequately and appropriately regulated by coverage under the terms of a general waste discharge permit.

On February 17, 1994, the Board adopted Order No. 94-7, General Waste Discharge Requirements For Concentrated Animal Feeding Operations, Including Dairies, Within The Santa Ana Region (NPDES NO. CAG018001). Order No. 94-7 has allowed the Board to better utilize staff resources. Currently, approximately 215 AFOs have been enrolled under Order No. 94-7. The remaining AFOs are either covered under individual waste discharge requirements issued prior to 1994, have submitted a Notice of Intent (NOI) to be covered under Order No. 94-7, or have not yet submitted a NOI. AFOs that have submitted a NOI and have not yet been granted coverage under Order No. 94-7 and AFOs that are still covered under individual waste discharge requirements, have not been granted coverage under Order No. 94-7 because they have not yet completed Engineered Waste Management Plans (EWMPs). Order No. 94-7 expired on March 1, 1999. Therefore, it is necessary to renew the waste discharge requirements contained in Order No. 94-7.

Although Order No. 94-7 regulated the discharge of waste from all AFOs (including non-dairy related facilities), the proposed order only addresses the discharge of wastes from dairies and related facilities, such as calf nurseries and heifer ranches. Over 95% of the dischargers enrolled, or waiting to be enrolled, under Order 94-7 are dairies and related facilities. Many of the requirements contained in Order No. 94-7, and this proposed order, are not appropriate for most other types of AFOs. Therefore, persons discharging, or proposing to discharge, wastes from other types of AFOs must obtain coverage under individual waste discharge requirements or another general permit, if one is adopted.

Currently, the larger AFOs are required to get coverage under the State Water Resources Control Board (State Board) General Industrial Storm Water Permit (Order No. 91-13-DWQ) for storm water runoff from their facilities. However, the proposed order consolidates all requirements for AFOs, including those for storm water runoff, into a single permit. Once coverage is granted under this order, other waste discharge requirements issued by this Regional Board and coverage under the State's General Permit will be terminated.

The Federal Clean Water Act (CWA) states that all concentrated animal feeding operations (CAFOs) are point sources and are subject to NPDES permitting requirements. The CWA defines a CAFO as any AFO that has more than 1,000 animal units (i.e., dairy cattle are considered 1.4 animal units). About 70% of the AFOs in the Region have over 1,000 animal units, and are, therefore, considered CAFOs under the CWA. However, the CWA states that smaller facilities can be designated as CAFOs by the permitting authority (i.e., Regional Board) after considering certain criteria. These criteria include, in part, the location of the AFO relative to surface waters, the slope, rainfall and other factors that increase the likelihood or frequency of discharges, and the impact of the aggregate amount of waste from many small operations in a watershed that exceed that of lager operations. Board staff has determined that all dairies, heifer ranches and calf nurseries in the Region meet one or more of these criteria, and, therefore, should be designated as CAFOs under the CWA. Tentative Order No. 99-11 designates all dairies, heifer ranches and calf nurseries in the Region as CAFOs, and makes them subject to NPDES requirements. Therefore, the acronym "CAFO" will be used to describe all facilities addressed by Tentative Order No. 99-11.

II. Basis for Discharge Limitations

Development and Implementation of Engineered Waste Management Plans

In compliance with the CWA and the California Code of Regulations, Tentative Order No. 99-11 prohibits discharges to any surface water bodies, or tributary thereof, unless rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 25-year, 24-hour rainfall event. (Title 27, Chapter 7, Subchapter 2, Article 1, Section 22562(a), California Code of Regulations and 40 CFR Part 412). Therefore, process waste water in overflows resulting from rainfall events that are chronic or catastrophic, or are in excess of a 24-hour, 25-year rainfall event, may be discharged to surface water bodies in accordance with requirements specified in this order. To insure that compliance with these requirements is achieved, all CAFOs are required to develop and implement an Engineered Waste Management Plan (EWMP). The guidelines for the preparation of an EWMP are included in Attachment "B" of the proposed order. Attachment "B" is intended to be revised by the Executive Officer in the near future. As with expired Order No. 94-7, Tentative Order No. 99-11 authorizes the Executive Officer to make necessary revisions to "Attachment B".

Prohibition on the Application of Manure to Land in the Chino Basin

The Regional Board has conducted extensive studies on TDS and nitrate using computer models to determine acceptable salt loading rates to groundwater from various land uses, including dairies and other animal confinement facilities. These studies are the basis of the TDS and nitrogen management plan specified in the Water Quality Control Plan (Basin Plan) for the Region. In accordance with the TDS/nitrogen management plan, since 1972, waste discharge requirements adopted by the Board for CAFOs limited the amount of manure disposal on disposal acreage at

CAFOs to 3 (dry) tons (4.38 tons @ 33% moisture) per acre per year to address potential groundwater impacts. The resultant salt load is roughly equivalent to that permitted by the plan for other types of land use when the affected receiving waters have salt assimilative capacity. Dairy manure contains much more salt per unit of nitrogen than other types of fertilizers. The Board's 1990 Dairy Report, "Dairies and Their Relationship to Water Quality Impacts in the Chino Basin", showed that the use of manure as a fertilizer results in two to four times more salt reaching groundwater (up to 10 times more non-nitrate salts) than the use of non-manure commercial fertilizers. For this reason, the use of manure to meet the nutrient needs of crops results in excessive application of salts that are not utilized by plants and which can, therefore, migrate to groundwater. Order No. 94-7 limited manure application to cropland to agronomic rates [up to 12 (dry) tons (17.5 tons @ 33% moisture) per acre per year]. Limiting the amount of manure applied to cropland to agronomic rates was an attempt to minimize the amount of salt that would reach groundwater from the use of manure on cropland, without hindering the effective use of manure as a fertilizer.

Ninety percent of the CAFOs in the Region are located in the Chino Basin, which has severe TDS and nitrate groundwater quality problems. As noted in the Board's Basin Plan, the Chino II and III Groundwater Subbasins lack assimilative capacity for these constituents. For groundwater subbasins without assimilative capacity, additional salt inputs at rates above Basin Plan objectives cannot be allowed (State Water Resources Control Board Order No. 73-4, the Rancho Caballero decision). To meet the Chino Basin groundwater objectives, the discharge of manure and other animal wastes, such as dairy wash water, and their application as fertilizer, cannot be legally permitted unless this salt load is offset. The Basin Plan contains a dairy regulatory strategy that was developed in the Board's 1990 Dairy Report. One element of that strategy addresses waste discharge requirements for manure and wash water disposal and application of wastes to cropland. That element specifies that ongoing manure and wash water disposal or application to cropland in the Chino Basin must be prohibited unless suitable salt offset programs are implemented.

In 1994, the Board was informed that two desalters would be built in the Chino Basin. The Board was also informed that a significant amount of manure would be exported from the Chino Basin by the proposed Chino Basin Co-Composting Facility. It was assumed that after the Chino Basin Co-Composting Facility began operation and began exporting a significant amount of manure, the amount of salt to be extracted from the Chino Basin by the two desalters would be adequate to provide sufficient salt removal to offset the present and projected salt loads from ongoing dairy discharges. Therefore, the Board adopted Order No. 94-7, allowing manure and wash water discharges to continue, on the assumption that adequate salt offsets would be implemented. However, the desalters were never built (although one is now under construction) and the Co-Composting Facility, built in 1995, has never exported the significant amount of manure that had been projected. Therefore, sufficient offsets were not implemented, and manure and wash water discharges, and the use of manure on cropland, have been continuing without adequate salt offsets, in violation of State law.

Board staff estimates that over 13 million tons of manure have been applied in the Chino Basin since the mid-1950's, resulting in over 1.4 million tons of salt that have reached, or will reach,

groundwater. The application of about 400,000 tons of manure (@ 33% moisture) per year to disposal land, cropland and ongoing stockpiles in the Chino Basin is continuing. Board staff estimates that the current rate of application of manure and wash water to land in the Chino Basin is resulting in about 34,000 tons of salt that will reach groundwater each year. About 30,000 tons per year is from the application of manure, and about 4,200 tons per year is from the discharge of wash water. A desalter is currently being built in the Chino Basin. The extraction wells that will supply water for the desalter are expected to remove about 11,500 tons of salt per year from the Chino Basin. Kaiser Steel will be credited with an offset of 4,000 tons of this salt each year for a period of 25 years, in accordance with a previous settlement agreement with the Board. The Board has previously indicated that it would accept the remainder of the salt that will be removed from the extraction wells as an offset for continuing discharges from CAFOs in the Chino Basin. However, that amounts to an offset of only 7,500 tons of salt per year, compared to a current CAFO salt loading to groundwater of about 34,000 tons per year. In addition to the 4,200 tons of salt that reaches groundwater each year from wash water discharges, salt also is discharged to groundwater as a result of the percolation of rainfall runoff from corrals and drainage from manure stockpiles. The amount of salt that reaches groundwater each year from the percolation of rainfall runoff from corrals and percolation of drainage from manure stockpiles has not yet been adequately determined. However, staff believes that it may account for the remaining 3,800 tons of salt offset provided by the desalter, leaving no, or very little, salt offset available for continued manure application in the Chino Basin. No other mitigation measures are currently in place, and none are expected to be in place immediately, to offset the salt loading from ongoing manure application in the Chino Basin. Therefore, the discharge of manure and its application as fertilizer in the Chino II and Chino III Subbasins must be prohibited. The remainder of the subbasins in the Chino Basin are of excellent quality and are tributary to the Chino II and Chino III Subbasins. Also, the addition of salt to those subbasins by the application of manure was not considered when the assimilative capacity for those subbasins was determined. Therefore, Tentative Order No. 99-11 prohibits the discharge of manure and its application as fertilizer throughout the entire Chino Basin (The accompanying cease and desist order allows manure to continue to be applied to cultivated croplands within the Chino Basin at agronomic rates as long as significant progress is being made towards the construction and operation of a second desalter within the Chino Basin). Tentative Order No. 99-11 does not prohibit the on-site discharge of wash water, rainfall runoff from corrals, or drainage from manure stockpiles, since the salt loadings from these discharges appear to be offset by the salt that will be removed by the desalter facility.

Removal of Manure from the Facility

Tentative Order No. 99-11 requires that manure be hauled from each facility within 180 days after being removed from the corrals. Any manure remaining at the facility after 180 days of being removed from the corrals is considered to be disposal of manure and is prohibited by Tentative Order No. 99-11. Draft Order No. 99-11, which was distributed for comments in March and April 1999, proposed requiring the removal of manure from the facility within 90 days after removal of the manure from the corrals. Several comments were received in writing and orally at Board Workshops, stating reasons why this time frame was unreasonable. Board staff also solicited

comments from farm advisors with the University of California Cooperative Extension. It was determined that it is beneficial to "cure" manure for 90 to 180 days prior to composting or for application to cropland, and that the nutrient value of the manure is not significantly affected when manure is stored for less than 180 days. During the winter, 90 days would not allow sufficient time for the manure to dry adequately prior to hauling. Providing 180 days of storage will allow the moisture content of the manure to be sufficiently reduced, making it lighter per unit of volume, and easier and less expensive to haul. Some commercial fertilizer facilities in the Chino Basin prefer receiving manure that has been aged for at least 150 days. Also, CAFOs generally remove manure from their corrals twice a year. Allowing up to 180 days (6 months) storage will result in manure being removed from the facility prior to the next corral cleaning, and will still achieve the goal of preventing the long term accumulation of manure at CAFOs. Board staff believes that allowing for 180 days storage is reasonable, and that there would be no significant difference in water quality impacts from storing manure at the facility for 180 days instead of 90 days.

Change in Language Pertaining to Containment of Storm Water Runoff

Order No. 94-7 and Draft Order No. 99-11 included the following Discharge Specification: "The discharge to any surface water bodies, or tributary thereof, is prohibited unless a chronic, catastrophic or cumulative rainfall causes overflow from a storage facility designed, constructed, maintained and operated to contain all process generated wastewater plus the runoff from a 24-hour, 25-year storm." These Orders defined a chronic, catastrophic or cumulative rainfall as rainfall occurring over a 7-day period or less which is equivalent to that from a 24-hour, 25-year storm event. This language is slightly different than similar language included in the CWA that does not refer to "cumulative" rainfall, and does not contain a definition that refers to rainfall "occurring over a 7-day period." The specification included in Order No. 94-7 and Draft Order No. 99-11 is, overall, more stringent than the language in the CWA, and was developed to provide a more objective basis for determining compliance with the rainfall containment requirement and to be consistent with the Board's EWMP Guidelines. However, the USEPA, and others, have noted that there could be instances during certain storm events of less than 7 days when the specification included in Order No. 94-7 and Draft Order No. 99-11 can be less restrictive than the language included in the CWA. They have requested that the language proposed in Draft Order No. 99-11 be changed to be consistent with the language in the CWA, since NPDES permits cannot contain requirements that can be less restrictive than the CWA. Therefore, the term "cumulative" and the reference to rainfall "occurring over a 7-day period" has been removed from Tentative Order No. 99-11 to make the rainfall containment requirement consistent with the CWA.

Consistency with USDA/USEPA "Unified National Strategy for Animal Feeding Operations"

In March 1999, the United States Department of Agriculture (USDA) and the USEPA finalized their unified national strategy for AFOs. Among other items, the national strategy recommended that general permits require the development and implementation of Comprehensive Nutrient Management Plans (CNMPs). In general, development and implementation of CNMPs is intended to bring each CAFO into compliance with the requirements of the CWA and to minimize the

impacts to groundwater and surface water by the implementation of best management practices. The national strategy describes many best management practices that could be included in CNMPs for individual CAFOs. The best management practices included in each CNMP for each CAFO would include specific best management practices for that CAFO, depending on the specific situations that exist at that particular CAFO. In general, the CNMP would assure that appropriate wastewater facilities were developed, constructed and maintained to comply with the requirements of the CWA, and that the use and application of waste water and manure (i.e., nutrient management) was managed to minimize impacts to groundwater and surface water. Tentative Order No. 99-11 does not require the development and implementation of CNMPs, as described and recommended in the national strategy. This is because the requirements included in Tentative Order No. 99-11 are equivalent to, or more stringent than, what would be required in CNMPs. Also, many of the BMPs recommended to be included in CNMPs are not relevant to the specific, isolated conditions that exist in the Chino Basin. The requirements in Tentative Order No. 99-11 for wastewater and rainfall are equivalent to what the national strategy requires. General BMPs that can be implemented to comply with the wastewater and rainfall containment requirements will be further addressed in the Board's EWMP Guidelines when they are revised in the near future. Specific BMPs that will be implemented at each CAFO to comply with the wastewater and rainfall containment requirements will be addressed in each CAFO's specific EWMP. The prohibition on the application of manure in the Chino Basin is obviously a more stringent requirement than the BMPs for manure application and management that the national strategy recommends to be included in CNMPs, since application of manure is not permitted. The limitation on the application of manure to agronomic rates, not to exceed 12 (dry) tons (17.5 tons @ 33% moisture) per acre per year, in groundwater basins outside the Chino Basin where assimilative capacity exists and application of manure is permitted, is equivalent to the nutrient management guidelines included in the national strategy. Specific BMPs addressing application of manure will be included in each CAFOs specific EWMP.

Prohibition on Covering New Discharges in the Chino Basin Under this Order

The 1998 California 303(d) List and TMDL Priority Schedule includes several surface water bodies as impaired due to CAFOs, including Chino Creek, Mill Creek (Prado Area), and Reach 3 of the Santa Ana River for nutrients, pathogens, salinity/TDS/chlorides, and suspended solids. The CWA states that NPDES permits cannot be issued to a new source (discharger) if the discharge will cause or contribute to the violation of water quality standards, unless certain specified criteria are met, including the development of TMDLs. In the absence of a current TMDL, USEPA has recommended that this general permit be limited to current facilities, and that any new sources (i.e., construction of any new facilities) be processed through an application for an individual NPDES permit. Therefore, Tentative Order No. 99-11 prohibits new sources (i.e., new facilities) from being covered under this general permit. Since the most recent new construction of a CAFO facility in the Chino Basin was approximately 20 years ago, this prohibition is not expected to be a significant issue.

Inability of Many CAFOs to Immediately Comply with Several Requirements Included in this Order

Many CAFOs will not be able to immediately comply with several of the requirements contained in Tentative Order No. 99-11. These requirements include the prohibition on the application of manure in the Chino Basin, implementation of EWMPs and containment of rainfall from a 24-hour, 25-year storm. The Board will consider adoption of a Cease and Desist Order No. 99-65 with a time schedule for compliance with these requirements.

III. Coverage Under the General NPDES Permit

A. Dischargers Currently Regulated Under Order No. 94-7 or Under Individual Waste Discharge Requirements, and Dischargers that have Submitted NOIs

These dischargers will be automatically enrolled under the proposed order, once it is adopted. Dischargers who have not yet submitted an acceptable EWMP (see Attachment "B" of the order) are required to do so.

B. Dischargers Not Currently Regulated Under Order No. 94-7 or Under Individual Waste Discharge Requirements, and Dischargers that have not Submitted NOIs:

At least 60 days prior to initiating a discharge at an existing facility, the discharger shall submit a Notice of Intent (NOI) (see Attachment "A") with the appropriate filing fee (currently, the filing fee is $2,000.00 for each facility) and an acceptable EWMP[2].

IV. Discharge Authorization Letter

Upon adoption of this order, the Executive Officer shall issue discharge authorization letters to dischargers currently enrolled under Order No. 94-7, discharging waste under individual waste discharge requirements or who have submitted an NOI to be covered under a general permit.

Upon receipt of a complete application for initiation of a discharge at an existing facility, the Executive Officer will review the application to determine eligibility for discharge under this order. If the Executive Officer determines that the discharger is eligible to discharge wastes under this general order, the Executive Officer may authorize the proposed discharge. Otherwise, the Executive Officer may require the discharger to obtain individual waste discharge requirements.

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[2] New operators/owners of existing facilities for which an EWMP has been approved are not required to submit an additional EWMP.

V. Antidegradation Analysis

The Regional Board conducted extensive TDS and nitrate studies using computer models to determine acceptable salt loading rates to groundwater from various land uses, including dairies and other concentrated animal feeding operations. These studies indicate that if the requirements specified in the proposed general permit are met, water quality of the Region is not expected to degrade as a result of discharges authorized under this general permit. The Regional Board, in establishing the requirements in the tentative order, has taken into consideration the requirements of the State and Federal "antidegradation policies" and has determined that the discharges are in conformance with the antidegradation policies.

VI. Written Comments

All written comments regarding the proposed general order should be submitted to: Robert Holub, Regional Water Quality Control Board, 3737 Main Street, Suite 500, Riverside, CA 92501.

VII. Information and Copying

Persons wishing further information may write to the address given below (see IX, below) or call the Regional Board at (909) 782-4130. Copies of the proposed waste discharge requirements, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying by appointment scheduled between the hours of 10:00 a.m. and 4:00 p.m., Monday through Thursday (excluding holidays).

VIII. Register of Interested Persons

Any person interested in a general permit, or in a particular application or group of applications, may leave his name, address, and phone number as part of the file for an application. Copies of tentative waste discharge requirements will be mailed to all interested parties.

IX. Workshops and Public Hearing

The Regional Board conducted public workshops on April 9, 1999, May 21, 1999, and June 25, 1999, to solicit comments on the draft general waste discharge requirements that were distributed in March and April 1999. Oral comments were received during these workshops, and written comments were submitted by several parties. These comments were considered by staff and incorporated into Tentative Order No. 99-11, as appropriate.

The Regional Board will hold a public hearing and consider adopting Tentative Order No. 99-11 during a public meeting on August 20, 1999, beginning at 9:00 a.m. The meeting will be held at the City Council Chambers of Loma Linda, 25541 Barton Road, Loma Linda.

Further information regarding the conduct and nature of workshops and pubic hearings concerning waste discharge requirements may be obtained by writing or visiting the Santa Ana Regional Board office, 3737 Main Street, Suite 500, Riverside, 92501 or by calling Robert Holub of Regional Board Staff at (909) 782-3298.

California Regional Water Quality Control Board
Santa Ana Region

Order No. 99-11
NPDES No. CAG018001

GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (DAIRIES AND RELATED FACILITIES) WITHIN THE SANTA ANA REGION

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Regional Board), finds that:

1. On February 17, 1994, the Board adopted Order No. 94-7, General Waste Discharge Requirements For Concentrated Animal Feeding Operations, Including Dairies, Within The Santa Ana Region (NPDES NO. CAG018001).

2. Order No. 94-7 satisfied the criteria cited in 40 CFR 122.28 and, as such, served as a General NPDES Permit. 40 CFR 122.28 pertains to the issuance of general permits to regulate discharges of waste that meet the following criteria:

   a. Waste discharges involving the same or substantially similar types of operations;
   b. Discharge the same types of wastes;
   c. Require the same or similar operating conditions;
   d. Require the same or similar monitoring ; and
   e. Are more appropriately regulated under a general permit rather than individual permits.

3. 40 CFR Part 122.23 defines a concentrated animal feeding operation (CAFO) as any animal feeding operation that has more than 1,000 animal units (dairy cattle are considered 1.4 animal units). Pursuant to the Clean Water Act (CWA), all CAFOs are point sources and are subject to NPDES permitting requirements. Smaller animal feeding operations can also be designated as CAFOs by the permitting agencies after considering certain criteria cited under 40 CFR 122.23 (b)(1). The Regional Board has determined that all dairies, heifer ranches, and calf nurseries in the Region shall be designated as CAFOs.

4. Order No. 94-7 has expedited the preparation of waste discharge requirements and has allowed the Regional Board to better utilize staff resources. To date, approximately 215 CAFOs have been enrolled under Order No. 94-7. Another 72 CAFOs are in the process of obtaining authorization to discharge wastes under that order. Order No. 94-7 expired on March 1, 1999. The dairies currently enrolled under Order No. 94-7, or in the process of enrolling under Order No. 94-7, will want to continue to discharge waste. Therefore, it is necessary to renew the waste discharge requirements contained in Order No. 94-7 to continue this expedited permitting process.

5. Persons discharging, or proposing to discharge, dairy wastes or other similar kinds of wastes from an existing dairy or related facility in any manner that may affect water quality are hereinafter referred to as "discharger" and are subject to the terms and conditions of this order. Persons discharging, or proposing to discharge, wastes from other types of animal feeding operations must obtain coverage under a separate general permit or individual waste discharge requirements. Persons proposing to discharge wastes from a new dairy or related facility must obtain coverage under individual waste discharge requirements.

6. The Regional Board adopted a revised Water Quality Control Plan (Basin Plan) on March 11, 1994. The Basin Plan became effective on January 24, 1995. The Basin Plan specifies beneficial uses and water quality objectives for surface and ground waters in the Santa Ana Region (Chapters 3 and 4). This order specifies requirements necessary to meet the water quality objectives and to protect the beneficial uses.

7. Revised regulations governing discharges from CAFOs, including dairies, are contained in Division 2, Title 27 of the Combined State Water Resources Control Board/California Integrated Waste Management Board AB 1220 Regulations, which became effective on July 18, 1997. Chapter 7, Subchapter 2 (Article 1) contains requirements for Confined Animal Facilities. Previously, these regulations were specified in Chapter 15, Division 3, Article 6, Title 23 of the California Code of Regulations.

8. Section 402(p) of the CWA as amended by the Water Quality Act of 1987 and the related regulations published by the U.S. EPA on November 16, 1990 (40 CFR Parts 122, 123 and 124), requires an NPDES permit for pollutant discharges from CAFOs. The EPA's Effluent Guidelines and Standards for Feedlots are contained in 40 CFR Part 412 (revised July 1, 1993).

9. On April 17, 1997, the State Water Resources Control Board adopted the General Industrial Storm Water Permit, Order No. 97-03-DWQ, NPDES No. CAS000001. Order No. 97-03-DWQ implements the final regulations (40 CFR 122, 123, and 124) for storm water runoff published on November 16, 1990 by the U.S. EPA in compliance with Section 402(p) of the CWA. This order includes those provisions of the General Industrial Storm Water Permit that pertains to dairies. Once a discharger is authorized under Order No. 99-11, coverage under the State Water Resources Control Board's General Industrial Storm Water Permit (Order No. 97-03-DWQ) will be terminated.

10. Wastes from CAFOs contain high concentrations of salts (total dissolved solids and nitrates). Previous studies conducted by the Board have shown that cow manure produced in the Region contains about 160 pounds of salt per (dry) ton of manure (110 pounds of salt per ton of manure @ 33% moisture). The application of manure or the discharge of process wastewater[1] to land results in the discharge of salts that has adversely impacted, and continues to adversely impact, the quality of groundwater and surface water in the Region.

[1] Process wastewater shall mean any process generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

11. Most of the CAFOs in the Region overlie the Chino Groundwater Basin. The Chino II and III Groundwater Subbasins lack assimilative capacity for additional salt inputs (total dissolved solids and nitrogen). For groundwater subbasins without assimilative capacity, salt inputs that exceed the water quality objectives for these subbasins cannot be allowed (State Water Resources Control Board Order No. 73-4, the Rancho Caballero decision). To meet the Chino Basin groundwater objectives, as well as the groundwater objectives for any other subbasin lacking assimilative capacity, the discharge of manure and other animal wastes, such as process waste water, and their application as fertilizer and irrigation water, must be controlled to prevent further exceedance of water quality objectives. Salt discharges in excess of water quality objectives can only be allowed if the additional salt inputs are offset.

12. The Basin Plan assumed that two desalters would be built in the Chino Basin. The amount of salt to be extracted from the Basin from these desalters was assumed to be adequate to provide sufficient salt removal to offset the present and projected salt loads from ongoing discharges from CAFOs. However, only one desalter is currently being built. This desalter will extract enough salt to offset the amount of salt being added to the basin from process wastewater water discharges. No mitigation measures are currently in place to offset the salt loading from manure application within the Basin. Therefore, the discharge of manure, and its application as fertilizer, must be prohibited.

13. The Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that these discharges are consistent with the State and Federal regulations, as long as appropriate salt offset programs are implemented.

14. In accordance with Water Code Section 13389, the issuance of waste discharge requirements for these discharges is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (Commencing with Section 21100), Division 13 of the Public Resources Code.

15. The Regional Board has notified interested agencies and persons of its intent to issue general waste discharge requirements for discharges of wastes CAFOs, and has provided them with an opportunity to submit their views and recommendations.

16. The Regional Board, in a public meeting, heard and considered all comments pertaining to discharges of wastes from CAFOs proposed to be regulated under the general waste discharge requirements.

IT IS HEREBY ORDERED that, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, dischargers, their agents, successors, and assigns, discharging wastes from CAFOs shall comply with the following:

A. DISCHARGE SPECIFICATIONS:

1. The discharger shall design, construct and maintain containment structures to retain all wastewater within its facility, including all process generated wastewater[2] and all precipitation on, and drainage through, manured areas resulting from storms up to and including a 24-hour, 25-year storm.

2. The discharger shall develop and fully implement an Engineered Waste Management Plan (EMWP) acceptable to the Executive Officer. The EMWP shall be developed by a registered professional engineer, or other qualified individual, in accordance with the guidelines specified in Attachment "B" of this order. The Executive Officer is hereby authorized to make necessary revisions to the guidelines for the preparation of an EWMP outlined in Attachment "B".

3. The discharge to any surface water bodies, or tributary thereof, is prohibited unless a chronic[3] or catastrophic[4] rainfall causes overflow from a storage facility designed, constructed, maintained and operated to contain all process generated wastewater plus the runoff from a 24-hour, 25-year storm.

4. Retention ponds and manured areas at CAFOs in operation on November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows. Facilities existing before November 27, 1984 that are protected against 100-year peak stream flows must continue to provide such protection. New facilities (built after November 27, 1984) shall be protected from 100-year peak stream flows.

5. No new containment structures shall be constructed of manure, and manure shall not be used to improve or raise existing containment structures.

6. Disposal of manure to land is prohibited, unless allowed by separate waste discharge requirements issued by the Board.

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[2] Process generated wastewater shall mean water directly or indirectly used in the operation of a feedlot for any or all of the following: Spillage or overflow from animal or poultry watering systems; washing, cleaning of flushing pens, barns, manure pits or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust control.

[3] Chronic rainfall means a series of wet weather conditions which would not provide opportunity for dewatering and which total the volume of the 25 year, 24 hour storm event.

[4] Catastrophic rainfall means any single event which would total the volume of the 25 year, 24 hour storm event; this could include tornadoes, hurricanes or other catastrophic conditions which could cause overflow due to winds or mechanical damage.

7. The use of manure as a fertilizer in any area that may affect a groundwater subbasin lacking assimilative capacity, including the Chino Groundwater Basin, is prohibited unless a plan, acceptable to the Executive Officer, is implemented which mitigates the effects of that use on the underlying groundwater subbasin.

8. Manure applied to cultivated cropland outside of any area that may affect a groundwater subbasin lacking assimilative capacity, including the Chino Groundwater Basin, shall not exceed agronomic rates and shall be incorporated into soil soon after application, or appropriate containment (based upon the specific crop grown) controls must be provided. For any application of manure to cropland in excess of 12 dry tons per acre per year (17.5 tons/year @ 33% moisture), an explanation of the type of crop and the number of times it is harvested per year shall also be included in the annual report.

9. Manure removed from the corrals shall be removed from the facility within 180 days. Any manure remaining at the facility after 180 days of being removed from the corrals is considered to be disposal of manure and is prohibited in accordance with Discharge Specification A.5. A manifest of the manure hauled away shall be prepared and submitted with the annual report in accordance with Monitoring and Reporting Program No. 99-11. (The discharger shall be responsible for active management of legal disposal of manure from the property over the six month period following removal of the manure from corrals. This means that legal disposal must be coordinated with periods of rainfall such that manure can be removed from the facility within 180 days of being scraped from corrals.)

10. On two designated "clean days" per calendar year, facilities subject to this order shall be free of all stockpiled manure that has been removed from corrals. These "clean days" shall be selected by each discharger, beginning in 2000. The two "clean days" shall be at least four months apart. Each "clean day" shall be identified and reported to the Board office at least five working days in advance of the selected date.

11. All surface drainage from outside of the facility shall be diverted away from any manured areas unless such drainage is fully contained.

B. PROVISIONS:

1. Neither the treatment nor the discharge of wastes shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

2. This order shall serve as a general National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto. The general permit shall become effective 10 days after the date of its adoption provided the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

3. This order expires on August 1, 2004. However, it shall continue in force and effect until a new general permit is issued. All dischargers authorized to discharge under the expired permit may continue to discharge waste in accordance with that permit until a new permit is issued.

4. Upon receipt of an application to discharge wastes under this order, the Executive Officer shall authorize the proposed discharge by transmitting a "Discharge Authorization Letter" to the discharger. The discharge authorization letter may be terminated or revised by the Executive Officer at any time.

5. Upon issuance of a discharge authorization letter from the Executive Officer to discharge wastes under this order, the discharger's authorization to discharge waste under the State Water Resources Control Board's General Industrial Storm Water Permit (Order No. 97-03-DWQ) is hereby terminated.

6. All discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.

7. Storm flows in excess of a 24-hour, 25-year storm event may be discharged to surface water bodies in accordance with the requirements specified in U.S. Environmental Protection Agency's "Effluent Guidelines and Standards for Feedlot's, 40 CFR Part 412". Additionally, storm flows resulting from chronic or catastrophic events may also be discharged to surface water bodies in accordance with the U.S. Environmental Protection Agency's effluent guidelines referenced above.

8. The discharger shall comply with Monitoring and Reporting Program No. 99-11.

9. The discharge of wastes to property not owned or controlled by the discharger, except as authorized by this order, is prohibited.

10. The discharger shall comply with all Federal, State, County and local laws and regulations pertaining to the discharge of wastes from the facility.

11. Following a storm event, the discharger shall restore the wastewater holding capacity of retention ponds in a timely manner.

12. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

13. This order does not convey any property rights of any sort, or any exclusive privilege.

14. An authorization to discharge wastes under this order is not transferable to any person without written authorization from the Executive Officer.

15. The discharger shall comply with all requirements of this order and all terms, conditions, and limitations specified in the discharge authorization letter issued by the Executive Officer.

16. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

17. Any instance of noncompliance with this order constitutes a violation of the Clean Water Act (CWA), its regulations, and the California Water Code, and is grounds for enforcement action, and/or termination of the authorization to discharge.

18. The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this order shall not be affected thereby.

19. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order.

20. Compliance determination with the terms of this order shall be based on the following:

    a. Periodic inspections by Regional Board staff;
    b. Evaluation of the annual report of animal waste and storm water discharge submitted according to the attached monitoring and reporting program; and
    c. Any other information deemed necessary by the Executive Officer.

21. The Regional Board, USEPA, and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this general permit;
    b. Access to copy any records that are kept under the conditions of this general permit;
    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this general permit; and
    d. To photograph, sample, and monitor for the purpose of assuring compliance with this general permit, or as otherwise authorized by the CWA.

C. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE:

1. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, or amendments thereto, the Board will revise and modify this order in accordance with such standards.

2. This order may be reopened to address any changes in State or Federal plans, policies or regulations that would affect the quality requirements for the discharges.

D. PENALTIES:

1. The CWA provides that any person who violates a provision implementing sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed $11,000 per day of such violation. Any person who willfully or negligently violates provisions implementing these sections of the CWA is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

2. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $11,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $11,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day, or $20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

E. REQUIRED REPORTS AND NOTICES:

1. Reporting Provisions:

   a. All applications, annual reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22.

   b. Any discharger authorized to discharge waste under this order shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating their authorization or this general permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this order.

c. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this general permit shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of USEPA. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Section 13387 of the California Water Code.

2. The discharger shall notify the Regional Board by telephone within 24 hours of any unauthorized discharge of waste from the facility. This notification shall be followed by a written report including the following:

   a. The approximate date and time of the discharge;
   b. The volume and duration of the discharge;
   c. The cause of the discharge; and
   d. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of such discharges.

3. The discharger shall report promptly in writing to the Regional Board of any changes or proposed changes in:

   a. The control, ownership, operation or location of the facility;
   b. The character, location, volume or disposal methods of waste discharges; and
   c. The size of the animal population, if it increases beyond the design capacity of the facility specified in the EWMP.

4. The discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with this general permit.

F. APPLICATION REQUIREMENTS:

1. Dischargers previously authorized to discharge wastes under Order No. 94-7, dischargers currently discharging wastes under individual waste discharge requirements, and dischargers who have submitted a notice of intent to discharge wastes under Order No. 94-7 are automatically enrolled under this Order, unless they file an application to be covered under an individual permit. Once the Executive Officer issues a discharge authorization letter, the individual waste discharge requirements are hereby rescinded.

2. Dischargers not previously authorized to discharge waste under Order No. 94-7 are required to submit the following within 60 days of the effective date of this Order for existing discharges and at least 60 days before the start of any new discharge:

   a. A completed Notice of Intent Form (see attachment "A") with the appropriate filing fee;
   b. An Engineered Waste Management Plan for the facility, acceptable to the Executive Officer (see Attachment "B");
   c. If an acceptable EWMP has not been developed, the discharger must submit the name of the engineer, or other qualified individual, who will develop the EWMP and a proposed time schedule for its development; and
   d. Any other information deemed necessary by the Executive Officer.

   If the proposed discharge meets the requirements of this order, the Executive Officer will provide the discharger with a written authorization to discharge waste in accordance with these waste discharge requirements.

3. The following types of facilities are generally not required to obtain authorization under this order. Such facilities must not discharge waste which may affect water quality, or cause a nuisance or pollution as defined in Section 13050 of the California Water Code.

   a. Dairies where the animal population is less than 20 (dry or milking cows).
   b. Heifer or calf ranches where the herd size is less than 50.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 20, 1999.

Gerard J. Thibeault
Executive Officer

Attachment "A"

California Regional Water Quality Control Board
Santa Ana Region

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE WASTES
ASSOCIATED WITH CONCENTRATED ANIMAL FEEDING OPERATIONS

FACILITY

NAME AND ADDRESS OF FACILITY — CONTACT PERSON

TELEPHONE NO.

NAME AND ADDRESS OF LEGAL OWNER OF FACILITY — CONTACT PERSON

TELEPHONE NO.

NAME OF BUSINESS OPERATING FACILITY

TELEPHONE NO.

TYPE OF OPERATION

INDICATE NUMBER OF

1. DAIRY

_____ MILKING COWS

_____ DRY COWS

_____ HEIFERS

_____ CALVES

2. CALF/HEIFER RANCH

_____ CALVES

_____ HEIFERS

3. OTHER CAFO
(IDENTIFY TYPE AND NUMBER OF ANIMALS)

TYPE _____ NO. _____

TYPE _____ NO. _____

TYPE _____ NO. _____

DISPOSAL INFORMATION

TOTAL ACREAGE

_____ DISPOSAL LAND[1] _____ AGRICULTURAL LAND[1] _____ BUILDINGS/CORRALS[1]

([1] SEE ENGINEERED WASTE MANAGEMENT PLAN FOR DEFINITION)

SITE DESIGN CAPACITY

_____ PRESENT/PROPOSED POPULATION _____ DESIGN POPULATION/CAPACITY

HAS AN ENGINEERED WASTE MANAGEMENT PLAN (SEE ATTACHED) BEEN PREPARED? _____ YES _____ NO

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

HAS ANY CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? _____ YES _____ NO

IF "YES", PLEASE ENCLOSE A COPY
IF "NO", WILL ANY CEQA DOCUMENT BE PREPARED? _____ YES _____ NO

WILL A NEGATIVE DECLARATION BE PREPARED? _____ YES _____ NO

IF "YES", WHO WILL PREPARE THE NEGATIVE DECLARATION? _____ APPROXIMATE DATE OF COMPLETION _____

CERTIFICATION

I HEREBY CERTIFY UNDER PENALTY OF PERJURY THAT THE INFORMATION PROVIDED IN THIS NOTICE OF INTENT AND IN ANY ATTACHMENTS IS TRUE ICCURATE TO THE BEST OF MY KNOWLEDGE

SIGNATURE OF OWNER OF FACILITY — SIGNATURE OF OPERATOR OF FACILITY

PRINT OR TYPE NAME — PRINT OR TYPE NAME

TITLE AND DATE — TITLE AND DATE

REQUIREMENTS FOR AN ENGINEERED WASTE MANAGEMENT PLAN

The Engineered Waste Management Plan must be prepared by a registered professional engineer in the State of California or another qualified individual.

A. SITE PLAN:

Site plan shall include:

1. Address and/or legal description of the property.

2. Name, address, and telephone number of the owner and operator of the property.

3. Total gross acreage of the property, showing property boundaries and all existing and proposed facilities including buildings, storage areas, berms/levees, holding ponds, pumping facilities, culverts, drainage easements, disposal areas, croplands (whether farmed by the owner/operator or another party), etc. The site plan must include the overall dimensions, contours, a vicinity map, north arrow, and the date the plan was prepared. The plan shall be drawn on a standard blue print format using an appropriate scale that shows sufficient details of all facilities.

4. Containment facilities shall be designed to retain, on the property, all process generated wastewater and storm water runoff due to precipitation and drainage through manured areas which results from a 24-hour, 25-year storm event. Facilities in operation on November 27, 1984 shall be designed for protection of all manured areas from inundation or washout by overflow from any stream channel during 20-year peak stream flows. All manured areas for new facilities (built after November 27, 1984) shall be protected from inundation resulting from a 100-year peak stream flow. The site plan shall show all facilities necessary for containment and management of on-site storm water runoff as well as the interception and conveyance of any off-site storm water runoff through the property.

5. The site plan shall show the size, elevation, and location of all facilities proposed for containment of process generated wastewater and storm water runoff on the property (berms/levees, holding ponds, upstream diversion structures, etc.). Cross section details of these facilities shall be presented.

6. A description of existing and proposed disposal areas or cropland, designated to receive operational water.

B. DESIGN CALCULATIONS:

Design calculations shall include:

1. Present and proposed animal population (numbers of each: milk cows, dry cows, calves, heifers, etc.) and the volume of wash water generated.

2. Amount of storm water runoff resulting from a 24-hour, 25-year storm event.

3. Total amount of wastewater (wash water and storm water) to be contained on the property.

4. Dimensions and capacity of the holding ponds.

5. Percolation rates, if used.

C. CONSTRUCTION SPECIFICATIONS:

Construction specifications shall include the construction materials and method of compaction utilized to build berms/levees and other containment facilities.

D. OPERATION AND MANAGEMENT PLAN:

Operations and maintenance plan shall include:

1. A proposed holding pond management plan (to provide maximum pond capacity prior to winter storms; periodic dredging, etc.).

2. A proposed wastewater distribution plan (periodic rotation of wastewater to disposal areas or croplands).

3. A proposed maintenance plan for berms/levees and other containment facilities, including a proposed rodent control plan (periodic inspections to monitor for holes/cracks or breaks, etc.)

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. 99-11
for
Concentrated Animal Feeding Operations (Dairies and Related Facilities)
Santa Ana Region

A. Monitoring

1. The discharger(s) shall inspect the waste holding and disposal areas and note any discharges off the property that is under the control of the discharger. Inspections will be made daily when wastewater is being applied to cropland and weekly during other periods. The results of all inspections will be recorded and submitted with the required reports.

2. During each significant storm event[5], the discharger(s) shall make visual inspections of all storm water containment structures.

3. The discharger(s) shall record the approximate time of each storm-related discharge that results in off-property discharges of storm water commingled with wastewater or manure, and its approximate duration.

4. The discharger(s) shall record each manure-hauling event on a manure tracking manifest form.

B. Reporting

1. By January 15 of each year, an annual report of animal waste discharge and storm water discharge shall be submitted.

2. The annual report shall be submitted on forms provided by Regional Board staff and shall also include copies of all manure tracking manifests for the reporting period and copies of the inspection logs required to be maintained under A.1. and A.4. above.

3. The discharger shall notify the Regional Board by telephone within 24 hours of any unauthorized discharge of wastes. This notification shall be followed by a written

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[5] A significant storm event is defined as a storm event which results in continuous discharge of storm water for a minimum of one hour, or intermittent discharge of storm water for a minimum of three hours in a 12-hour period.

a. The approximate date and time of the discharge;

b. The flow rate and duration of the discharge;

c. The specific type and source of the waste discharges (e.g., overflow from holding pond, rainfall runoff from manure storage areas, etc.); and

d. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of the discharge.

All reports shall be signed by a responsible officer or duly authorized representative of the discharger(s) and shall be submitted under penalty of perjury.

Ordered by _____
Gerard J. Thibeault
Executive Officer

August 26 , 1999