# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
# COLORADO RIVER BASIN REGION

## BOARD ORDER NO. R7-2008-0800
## NPDES NO. CAG017001

## GENERAL WASTE DISCHARGE REQUIREMENTS AND GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS WITHIN THE COLORADO RIVER BASIN REGION

A Discharger, as described in the following table, who has complied with the requirements for coverage under this Board Order, is authorized to discharge wastes, once permit coverage is effective as described in this Board Order.

For the purposes of this Board Order, references to the "Discharger," "Permittee" or "Enrollee" in applicable federal and state laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

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| Dischargers | Persons discharging, or proposing to discharge wastes from a Concentrated Animal Feeding Operation or related facility in any manner that may affect the quality of the waters of the Colorado River Basin Region are hereafter referred to as "Discharger" and are subject to the terms and conditions of this Board Order. |

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| This Board Order was adopted by the Regional Water Quality Control Board on: | **June 25, 2008** |
| This Board Order shall become effective on: | **June 25, 2008** |
| This Board Order shall expire on: | **June 25, 2013** |

I, Robert Perdue, Executive Officer, do hereby certify that this Board Order, with all attachments, is a full, true, and correct copy of a Board Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 25, 2008.

Robert E. Perdue

Robert Perdue, Executive Officer

## Contents

## Attachments

## I. DISCHARGE INFORMATION

The Federal Clean Water Act (CWA) defines animal feeding operations (AFOs) as operations where 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 where vegetation is not sustained in the confinement area during the normal growing season. There are approximately 30 AFOs in the Colorado River Basin Region. These AFOs include dairies, feedlots, heifer ranches and calf nurseries. All of these facilities are located in the Imperial Valley.

The CWA defines a concentrated animal feeding operation (CAFO) as any AFO that either meets a certain animal population threshold, or, regardless of population, is determined to be a significant contributor of pollutants to waters of the United States by the appropriate authority. All AFOs with a herd size of more than 20 cows or 50 heifers or calves within the Colorado River Basin Region are considered to be potential significant contributors of pollutants to waters of the United States and are, therefore, classified as CAFOs. The CWA states that all CAFOs are point sources, and thus are subject to National Pollutant Discharge Elimination System (NPDES) permitting requirements. CAFOs in the Colorado River Basin Region that discharge or propose to discharge wastes to waters of the U.S. are subject to the requirements of this Board Order.

## II. NOTIFICATION REQUIREMENTS

### A. General Permit Application and Coverage

1. To obtain coverage under this Board Order, the Discharger must submit the items identified below:

| Discharger Type | Required Submittals | Submittal Deadline |
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| Dischargers previously authorized to discharge wastes under Order No. 01-800 | Automatically enrolled (No submittals required, unless Discharger proposes to apply manure to land. In this case a Nutrient Management Plan (NMP) is required.) | • NMP (if applicable): September 30, 2008 |
| Dischargers not previously authorized to discharge wastes under Order No. 01-800 | *Dischargers applying for coverage prior to September 30, 2008:*<br>• Completed Notice of Intent (NOI) Form<br>• First annual fee<br>• Engineered Waste Management Plan (EWMP)<br>• Any other information deemed necessary by the Executive Officer<br>• NMP (if Discharger is currently applying or proposes to apply manure to land) | Case 1 (No proposed land application of manure)<br>• at least 30 days before the start of coverage under this permit<br><br>Case 2 (Proposed or existing land application of manure)<br>• at least 90 days before the start of coverage under this permit |

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| Dischargers not previously authorized to discharge wastes under Order No. 01-800 | *Dischargers applying for coverage on or after September 30, 2008:*<br>• All of the above, plus<br>NMP (if Discharger proposes to apply manure to land; existing application is unauthorized and prohibited without an NMP) | Case 1 (No proposed land application of manure)<br>. at least 30 days before the start of coverage under this permit<br><br>Case 2 (Proposed land application of manure; existing land application is unauthorized and prohibited without an NMP)<br>. at least 90 days bofore the start of coverage under this permit |

2. Dischargers previously authorized to discharge wastes under Board Order No. 01-800 are automatically enrolled under this Board Order, unless they file an application to be covered under an individual Board Order or submit a request to terminate their enrollment under the Permit.

3. For Dischargers not previously authorized to discharge wastes under Board Order No. 01-800, if the proposed discharge meets the requirements of this Board Order, the Executive Officer will provide the Discharger with a written authorization to discharge wastes from the CAFO in accordance with these waste discharge requirements (WDRs).

4. The NOI shall include the name, address, and telephone number of the operator and the landowner. The NOI shall also include the name and address of the facility, the animal population, and the size (acres) of existing ponds, corrals and wastewater disposal areas. The NOI form is available on the internet at http://www.epa.gov/npdes/pubs/cafo_fedrgstr_form2b.pdf. A hard copy of the NOI form can be obtained from the Regional Water Board Office at the address below.

5. All required submittals shall be submitted to the California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter, Regional Water Board), at the following address:

   California Regional Water Quality Control Board
   Colorado River Basin Region
   73-720 Fred Waring Drive, Suite 100
   Palm Desert, CA 92260

6. The following types of facilities are generally not required to obtain authorization under this Board Order. Such facilities shall not discharge wastes 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.

**B. Exclusion of Coverage**

For coverage under this Board Order, a Discharger shall submit a completed NOI together with other information as described in section A above (General Permit Application and Coverage), and receive a discharge authorization from the Executive Officer. If the proposed discharge meets the requirements of this Board Order, the

Executive Officer will provide the Discharger with a written authorization to initiate the discharge. If not, individual waste discharge requirements will be developed for consideration by the Regional Water Board.

The Executive Officer of the Regional Water Board or the Regional Administrator of the United States Environmental Protection Agency (USEPA) may require any person authorized to discharge wastes by this Board Order to subsequently apply for and obtain individual waste discharge requirements. Any interested person may petition the Executive Officer or the Regional Administrator to take action in accordance with this finding. Cases where individual waste discharge requirements may be required include the following:

1. The Discharger is not in compliance with the conditions of this Board Order or the discharge authorization letter from the Executive Officer;
2. Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;
3. Changes to the Basin Plan containing requirements applicable to such point sources are approved;
4. The requirements of section 122.28(a) , title 40 of the Code of Federal Regulations[1] are not met; or
5. The discharge may adversely affect the water quality objectives of the receiving water.

### C. Termination of Discharges

Upon ceasing operation at the facility, the Discharger should ensure that the facility has been cleaned out and so that there will be no remaining potential for a discharge of manure, litter or process wastewater. The standard procedures may include, but are not limited to, scraping all the manure off the corral areas, and filling in the containment pond(s) with clean dirt. The Discharger should then submit a written request to terminate enrollment under the Permit to the Regional Water Board for termination. Once the Regional Water Board staff determines that the facility no longer poses a threat to water quality, the Executive Officer will issue a Notice of Termination (NOT) to the Discharger.

### D. Transferring Ownership

In the event of any change in operational control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Board Order by letter, and a copy of which shall be immediately forwarded to the Regional Water Board. The succeeding owner or operator shall then submit a new NOI to the Regional Water Board.

## III. FINDINGS

The Regional Water Board finds that:

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

## A. Background

1. On September 27, 1995, Board Order No. 95-700, General NPDES Permit and General WDRs for Confined Animal Feeding Operations was first adopted.

2. Board Order No. 95-700 consolidated all requirements for CAFOs, including those for storm water runoff, into a single permit. For all CAFOs, once enrollment is granted under this Board Order, other Permits issued by this Regional Water Board and enrollment under State Water Resources Control Board (State Water Board) General Industrial Storm Water Permit (State Water Board Order No. 91-13-DWQ) were terminated.

3. On March 14, 2001, Board Order No. 01-800 was adopted and superceded Board Order No. 95-700.

4. Board Order No. 01-800 satisfied the criteria cited in section 122.28 and, as such, served as a General NPDES Permit. Section 122.28 pertains to the issuance of general permits to regulate discharges of waste that meets 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.

5. On February 12, 2003, USEPA published revisions to its CWA regulations for CAFOs. The references to Parts 122, 123, and 412 below incorporate the revisions that are part of the final rule.

6. Section 122.23(b) defines AFOs as those facilities where the following conditions are met:

   a. Animals (other than aquatic 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
   b. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

7. An AFO is a CAFO if it meets the regulatory definition of a Large CAFO at section 122.23(b)(4) or a Medium CAFO at section 122.23(b)(6) (see Attachment A) or if it has been designated as a CAFO by the Regional Water Board in accordance with procedures and requirements for designating an AFO as a CAFO, which are detailed at section 122.23(c). Two or more AFOs under common ownership are considered to be a single AFO for purposes of determining the number of animals at an operation if they adjoin each other or if they use a common area or system for the disposal of wastes. Pursuant to the Clean Water Act (CWA), all CAFOs are point sources and are subject to NPDES permitting requirements. The Board has determined that all feedlots, dairies, heifer ranches, calf nurseries and other similar facilities in the

Colorado River Basin Region (Region) shall be designated as CAFOs. CAFOs that discharge or propose to discharge wastes to waters of the U.S. are subject to the requirements of this Board Order.

8. Board Order No. 01-800 has expedited the preparation of WDRs and has allowed the Board to better utilize staff resources. To date, approximately 30 CAFOs have been enrolled under Board Order No. 01-800. Board Order No. 01-800 expired on March 14, 2006. The CAFOs currently enrolled under Board Order No. 01-800, or in the process of enrolling, want to continue to discharge wastes. Therefore, it is necessary to renew the WDRs contained in Board Order No. 01-800 to continue this expedited permitting process. This proposed Board Order supercedes Board Order No. 01-800.

9. On April 17, 1997, the State Water Board adopted the General Industrial Storm Water Permit, State Water Board Order No. 97-03-DWQ, NPDES No. CAS000001. State Water Board Order No. 97-03-DWQ implements the final federal regulation (Parts 122, 123, and 124) for storm water runoff published on November 16, 1990, by the USEPA in compliance with section 402(p) of the CWA. This Board Order includes those provisions of the General Industrial Storm Water Permit that pertain to CAFOs and CAFOs that conduct composting activities classified under Standard Industrial Classification category 287X[2]. Once a Discharger is authorized to discharge under Board Order No. R7-2008-0800, coverage under the State Water Board's General Industrial Storm Water Permit (State Water Board Order No. 97-03-DWQ) will be terminated. In the event that the permitted facility has storm water discharges associated with non-CAFO or non-composting industrial activities regulated under State Water Board Order No. 97-03-DWQ, the Discharger shall submit a NOI and/or maintain coverage under the State Water Board Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities.

## B. Discharge Description

1. The wastes generated by CAFOs include manure that the animals excrete in the corrals, process wastewater (primarily wash water from the milk barn) and storm water runoff from manured areas. For example, about 10 percent of the manure that a milking cow excretes each day is excreted while in the milk barn, and about 90 percent of the manure excreted from the animals is deposited in the corrals. CAFOs scrape and remove manure from the corrals about twice per year.

2. Wastes from CAFOs contain high concentrations of salts (primarily total dissolved solids) and nitrates. Previous studies conducted by the Santa Ana Regional Water Quality Control Board have shown that cow manure produced in the Santa Ana Region contains about 160 pounds of salt per dry ton of manure. The application of manure or the discharge of process wastewater to land results in the discharge of salts that has the potential to adversely impact the quality of groundwater and surface water in this Region. This is particularly so if the CAFO facilities (e.g., waste ponds) are within the influence of a tilewater drainage system, there is insufficient separation between the bottom of ponds and first encountered groundwater, or the wastes are applied to land at rates that exceed crop demand or soil needs.

[2] Industry Group 287: Agricultural Chemicals

3. For purposes of this Board Order, waste includes process wastewater resulting from water directly or indirectly use in the management of a CAFO or resulting from any of the following: spillage or overflow from animal watering systems (except where such spillage or overflow does not contact manure and animals do not contact the water in any way that would cause manure or other wastes to be added to the water); washing, cleaning of flushing pens, barns, manure pits or other feedlot facilities; direct contact swimming, washing or spray cooling of animals; and dust manure and any precipitation which comes in contact with any manure, litter, bedding; or with any other raw material, intermediate or final material, product used in or resulting from the CAFO, or products generated by the CAFO (e.g., milk).

4. Discharges from CAFOs can occur from the production area or from the land application area. As defined at section 122.23(b)(8), the production area generally includes animal confinement areas and all areas used for storing manure, litter, wastewater, or raw materials such as feed, silage, and bedding materials. Discharges from these areas include spills or overflows from wastewater storage facilities and runoff of stormwater that has come into contact with manure, litter, wastewater, or raw materials. As defined at section 122.23(b)(3), the land application area is any area under the control of the CAFO owner or operator where manure, litter, or process wastewater from the production area is applied. Regulated discharges from the land application area include any dry weather discharge and any precipitation-related discharge where land application has not been conducted in accordance with the facility's nutrient management plan.

5. Discharges can occur from composting activities at CAFOs. Discharges from these activities may include runoff of stormwater that has come into contact with compost or compost feedstock or spills or overflows from storage facilities for compost, compost feedstock, or contaminated runoff.

## C. Legal Authorities

On June 8, 1989, pursuant to section 122.28, the State Water Board applied to the USEPA for revisions of its NPDES Permit program in accordance with sections 123.62 and 403.10. The application included a request to add general permit authority to its approved NPDES Permit program. On September 22, 1989, USEPA, Region IX, approved the State Water Board's request and granted authorization for the State's issuance of general NPDES permits.

This Board Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a general NPDES permit for point source discharges from CAFOs to surface waters.

On September 22, 1989, a Memorandum of Agreement[3] executed by USEPA and the State Water Board authorized and established procedures for the State Water Board to issue general NPDES permits pursuant to NPDES regulations at sections 122.28 and 122.44.

[3] Link to Memorandum of Agreement – http://www.waterboards.ca.gov/water_issues/programs/npdes/docs/aquatic/moa.pdf

Revised regulations governing discharges from CAFOs, including dairies, are contained in division 2, title 27 of the Combined State Water 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.

This Board Order shall serve as a NPDES permit for point source discharges from CAFOs. This Board Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with Section 13260).

Regulations published by the USEPA on February 12, 2003 (Parts 122 as revised February 10, 2006,, 123 and 124), require an NPDES permit for pollutant discharges from CAFOs. The USEPA's Effluent Limitation Guidelines and Standards (ELGs) for CAFOs are contained in Part 412 (revised February 10, 2006).

## D. Background and Rationale for Requirements

The Regional Water Board developed the requirements in this Board Order based on the previous Board Order (No. 01-800), revised federal regulatory requirements, information obtained during public workshops on the revised Board Order, and other available information. The technical standards for nutrient management (Attachment C) are based on technical standards developed for the Central Valley Regional Water Quality Control Board's Waste Discharge Requirements for Existing Milk Cow Dairies (Board Order No. R5-2007-0035) as well as recommendations from the University of California Cooperative Extension. The Fact Sheet (Attachment F), which contains background information and rationale for Board Order requirements, is hereby incorporated into this Board Order and constitutes part of the Findings for this Board Order. Attachments A through E and G through J are also incorporated into this Board Order.

## E. California Environmental Quality Act (CEQA)

Pursuant to Water Code section 13389, this action to adopt an NPDES permit is exempt from the CEQA provisions of chapter 3 (commencing with section 21100) of division 13 of the Public Resources Code.

## F. Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Board Order must meet minimum federal technology-based requirements based on Effluent Limitation Guidelines and Standards for the Concentrated Animal Feeding Operation (CAFO) Point Source Category in Part 412 and Best Professional Judgment (BPJ) in accordance with section 125.3. This Board Order includes technology-based effluent limitations based on best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT) as specified in Part 412 and BPJ. The Regional Water

Board has considered the factors listed in California Water Code section 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.

## G. Water Quality-Based Effluent Limitations

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

## H. Water Quality Control Plans

The Regional Water Board adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (includes amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses of any water body specifically identified in the Basin Plan generally apply to its tributary streams. Applicable beneficial uses of surface waters for the Colorado River Basin Region are listed below.

- Agricultural supply (AGR)
- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

The Basin Plan establishes the following beneficial uses for ground waters throughout the Colorado River Basin Region.

- Agricultural supply (AGR)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)[4]

Requirements of this Board Order implement the Basin Plan.

## I. Compliance Schedules and Interim Requirements

USEPA promulgated regulations for CAFOs in February 2003. The revised regulations expanded the number of operations covered by the CAFO regulations to an estimated 15,500 and included requirements to address the land application of manure from CAFOs.

USEPA has modified the 2003 CAFO Rule to extend two compliance deadlines for operators of CAFOs. Under a final rule, facilities newly defined as CAFOs will have until February 27, 2009, to seek NPDES permit coverage, while all CAFOs will have until that date to implement nutrient management plans (NMPs).

## J. Alaska Rule

On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

## K. Antidegradation Policy

Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

## L. Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions

[4] At such time as the need arises to know whether a particular aquifer which has no known existing MUN use should be considered as a source of drinking water, the Regional Water Board will make such determination based on criteria listed in the "Sources of Drinking Water Policy" in Chapter 2 of the Basin Plan. An "X" placed under the MUN in Table 2-5 of the Basin Plan for a particular hydrologic unit indicates only that at least one of the aquifers in that unit currently supports a MUN beneficial use. The actual MUN usage of the Imperial hydrologic unit is limited only to a small portion of that ground water unit.

require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in detail in the Fact Sheet, all effluent limitations in this Board Order are at least as stringent as the effluent limitations in the previous Board Order. As a result, this Board Order is in compliance with the anti-backsliding requirement.

### M. Endangered Species Act

This Board Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Board Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

### N. Monitoring and Reporting

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

### O. Standard and Special Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger shall comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Board Order special provisions applicable to Dischargers covered by this Board Order. A rationale for the special provisions contained in this Board Order is provided in the attached Fact Sheet.

### P. Provisions Implementing State Law

The provisions in sections IV.C, VI, VII.C.2.c, VII.C.2.d and VII.C.3.c of the Board Order and IV, V.E, V.F, VI.H, VI.I, VI.J, VI.K and VII.E of the MRP are included to implement state law only. These provisions are not required or authorized under the federal CWA; consequently, violations of these provisions are not subject to the enforcement remedies that are available for NPDES violations.

### Q. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Board Order.

**R. Consideration of Public Comment**

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Board Order.

THEREFORE, IT IS HEREBY ORDERED, that this Board Order supercedes Board Order No. 01-800 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Board Order.

## IV. DISCHARGE PROHIBITIONS

**A.** The discharge of wastes shall not cause degradation of any water supply.

**B.** The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

**C.** The direct and indirect discharge of waste to any surface water bodies or tributaries thereof is prohibited, except as specifically provided for in the Effluent Limitations (section V) of this Board Order. This prohibition includes the prohibition of discharge of wastes into surface waters via tile drainage lines. This prohibition does not include, however, the prohibition of discharge of overflow water from animal watering facilities where the overflow is collected and diverted from manured areas in a closed system that prevents the overflow from contacting manure, feed, or other raw materials or other process wastewater prior to discharge and animals do not contact the water in any way that would cause manure or other wastes to be added to the water.

**D.** All animals within a CAFO facility shall be prohibited from having direct contact with waters of the United States. The Discharger shall develop and implement appropriate controls to prohibit all animals at the CAFO from entering any surface water within the production area.

**E.** The disposal of any mortality in any process wastewater system that is not specifically designed to treat animal mortalities is prohibited. Mortalities shall be handled and disposed of in such a way as to prevent the discharge of pollutants to waters of the state. Dead animals shall be disposed of in accordance with local laws, regulations, and ordinances.

**F.** The land application of manure, compost, or process wastewater for other than nutrient recycling is prohibited.

**G.** The following prohibitions are applicable to Dischargers with composting operations on-site at the permitted facility that are not covered under individual waste discharge requirements for composting:

1. Transporting, stockpiling, composting, and processing operations shall not cause, or threaten to cause pollution, as defined in section 13050, subdivisions (l) and (m), respectively, of the California Water Code.

2. Composting, stockpiling or otherwise accepting the following materials is prohibited: demolition wastes (except demolition wood waste), mixed construction debris, contaminated/uncontaminated soil, ash, sewage sludge, septic tank pumpings, radioactive waste, industrial sludge, water treatment sludge, liquid wastes (except CAFO-generated process wastewater), animal carcasses, mammalian flesh, unprocessed/processed hide, bone marrow, hazardous waste and designated waste. These prohibitions do not include any agricultural material, food material, or green material.

## V. EFFLUENT LIMITATIONS

The following effluent limitations apply to facilities covered under this permit.

### A. Effluent Limitations Applicable to the Production Area at CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves

1. There may be no discharge of manure, litter, or process wastewater pollutants into waters of the United States from the production area except as provided below in section V.A.2.

2. Whenever precipitation causes an overflow of manure, litter, or process wastewater, pollutants in the overflow may be discharged into waters of the United States provided all provisions of an EWMP, approved by the Executive Officer, are fully implemented and:

   a. For all CAFOs that confine dairy cows or cattle other than veal calves, the production area is properly, designed, constructed, operated and maintained to contain all manure, litter, process wastewater and the runoff and direct precipitation from the 25-year, 24-hour storm event for the location of the CAFO.

   b. For CAFOs that confine swine, poultry, or veal calves, 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 100-year, 24-hour storm event for the location of the CAFO.

   c. The design storage volume shall reflect the following:

      i. all wastes accumulated during the storage period;
      ii. normal precipitation less evaporation during the storage period;
      iii. normal runoff during the storage period;
      iv. the direct precipitation from a 25-year, 24-hour storm event or 100-year, 24-hour storm event, as required in section V.A.2.a and b above;
      v. the runoff from the 25-year, 24-hour storm event or 100-year, 24-hour storm event from the production area, as required in section V.A.2.a and b above;
      vi. residual solids after liquid has been removed;
      vii. necessary freeboard to maintain structural integrity; and

viii. in the case of treatment lagoons, a minimum treatment volume.

d. The production area is operated in accordance with the additional measures and records specified in section V.B.1 of this permit, "Additional Measures Applicable to the Production Area at CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves".

**B. Additional Measures Applicable to CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves**

In addition to the requirements in section V.A of this Board Order, the Discharger shall implement the following additional measures.

1. Additional Measures Applicable to the Production Area [40 CFR 412.37(a)].

   a. Weekly visual inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure.

   b. Daily visual inspections of all water lines, including drinking water or cooling water lines.

   c. Weekly inspections of the manure, litter, and process wastewater impoundments noting the level as indicated by a depth marker installed in all open surface liquid impoundments. Each depth marker shall clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event for the location of the permitted CAFO.

   d. Timely correction of any deficiencies that are identified in daily and weekly inspections.

   e. The maintenance of complete on-site records documenting implementation of all required additional measures for a period of 5 years.

2. Additional Measures Applicable to the Land Application Area

   a. The Discharger shall develop, prepare and implement a NMP in accordance with the requirements specified below and in section VII.C.2.b of this Board Order, and in compliance with the Technical Standards for Nutrient Management specified in Attachment C of this Board Order.

   b. The Discharger shall comply with the following requirements based on a field-specific assessment of the potential for nitrogen and phosphorus transport from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters. These requirements shall be incorporated into the Discharger's NMP.

      i. Determination of application rates. Application rates for manure, litter, or process wastewater are to be developed that minimize phosphorus and

nitrogen transport from the field to surface waters in compliance with the Technical Standards for Nutrient Management (Attachment C).

ii. Manure and soil sampling. Manure, litter, and process wastewater shall be analyzed a minimum of once annually for nitrogen and phosphorus content and soil analyzed a minimum of once every 5 years for phosphorus content. The Discharger shall use the results of these analyses in determining application rates. Manure and soil sampling shall be conducted in compliance with the Technical Standards for Nutrient Management (Attachment C).

iii. Inspect land application equipment for leaks. The Discharger shall periodically inspect equipment used for land application of manure, litter, or process wastewater.

iv. Setback requirements [40 CFR 412.4(c)(5)]. Unless the Discharger exercises one of the compliance alternatives provided for in paragraphs (I) and (II), below, of this section V.B.2, manure, litter, and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters.

(I) Vegetated buffer compliance alternative. The Discharger may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited.

(II) Alternative practices compliance alternative. As a compliance alternative, the Discharger may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot setback. Any alternative practice implemented to comply with this section shall be submitted in writing for approval to the Executive Officer in writing prior to implementation.

**C. Effluent Limitations Applicable to the Production Area at CAFOs that Confine Horses, Sheep, and Ducks**

1. For Horse and Duck CAFOs established as of February 14, 1974. There shall be no discharge of process wastewater pollutants into waters of the United States except when all provisions of an EWMP, approved by the Executive Officer, are fully implemented and whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the CAFO.

2. Pretreatment Standards for Duck CAFOs. Duck CAFOs shall achieve the following performance standards:

a. There shall be no introduction of process wastewater pollutants to a publicly owned treatment works (POTW).

b. Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the Discharger, any process wastewater pollutants in the overflow may be discharged to a POTW.

## VI. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

The discharge shall not cause surface receiving waters to be degraded, exceed water quality objectives, adversely affect beneficial uses, or cause a condition of pollution or nuisance.

### B. Groundwater Limitations

The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

## VII. PROVISIONS

### A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Board Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

   a. The Discharger shall comply with all conditions of this Board Order and all terms, conditions, and limitations specified in the Discharge Authorization Letter issued by the Executive Officer. Noncompliance constitutes a violation of the federal CWA and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification of waste discharge requirements; or denial of a permit renewal application.

   b. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

   c. The Discharger shall report orally to the Regional Water Board office (760) 346-7491 and the Governor's Office of Emergency Services (800) 852-7550 any noncompliance that may endanger human health or the environment within 24 hours of the time the Discharger becomes aware of the noncompliance. During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall also be provided within 2 weeks of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills

or overflows of manure, litter, or process wastewater resulting in a discharge to waters of the U.S. to the Regional Water Board office in accordance with the above time limits.

d. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.

e. Prior to any modifications in this facility, which would result in material change in the quality or quantity of manure, litter, or process wastewater generated or applied to land under the operational control of the Discharger, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.

f. This Board Order does not authorize violation of any federal, State, or local laws or regulations.

## B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto as specified by the Regional Water Board's Executive Officer, found in Attachment E of this Board Order.

## C. Special Provisions

### 1. Reopener Provisions

a. This Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of disposal practices of collected screenings or other solids removed from the liquid aquaculture wastewater, or adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.

b. TMDLs for pathogens, nutrients, salt, dissolved oxygen, VOCs, trash, pesticides, and selenium are to be developed by the Regional Water Board. The permit may be reopened and modified in the future to include appropriate requirements necessary to fully implement the approved TMDLs if needed.

| | | |
|---|---|---|
| i. | Alamo River: | Chlorpyrifos, DDT, Dieldrin, PCBs, Selenium, Toxaphene |
| ii. | Coachella Valley Storm Water Channel: | Pathogens, Toxaphene |
| iii. | Colorado River (Imperial Reservoir to California-Mexico Border): | Selenium |
| iv. | Imperial Valley Drains: | DDT (Barbara Worth Drain, Peach Drain, and Rice Drain), Dieldrin (Barbara Worth |

| | | |
|---|---|---|
| | | Drain and Fig Drain), Endosulfan (Peach Drain), PCBs (Central Drain from Meloland Road to the outlet into the Alamo River), Selenium (Upper Basin Portion of Colorado River), Toxaphene (Barbara Worth Drain, Peach Drain, and Rice Drain) |
| v. | New River (Imperial County): | 1,2,4-Trimethylbenzene, Chlordane, Chloroform, Chlorpyrifos, Copper, DDT, Diazinon, Dieldrin, Mercury, meta-para Xylenes, Nutrients, Organic Enrichment/Low Dissolved Oxygen, o-Xylenes, PCBs, p-Cymene, p-Dichlorobenzene/DCB, Pesticides, Selenium, Toluene, Toxaphene, Toxicity, Trash |
| vi. | Palo Verde Outfall Drain and Lagoon: | DDT, Pathogens |
| vii. | Salton Sea: | Nutrients, Salinity, Selenium |

c. The USEPA has proposed revised federal regulations for CAFOs in response to the order issued by the Second Circuit Court of Appeals in *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005). This permit may be reopened and modified in the future to include appropriate requirements necessary to implement the revised regulations when promulgated.

**2. Best Management Practices and Pollution Prevention**

a. Best Management Practices

i. The Discharger shall ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities. The Discharger shall develop and implement specific practices and associated structures to ensure adequate storage capacity to achieve permit limitations including:

(I) Maintain sufficient capacity in liquid manure, wastewater, or storm water storage structures to ensure compliance with all permit requirements, including:

- A minimum freeboard of two (2) feet shall be maintained at all times in the ponds.
- Following a storm event, the Discharger shall restore the wastewater holding capacity of retention ponds in a timely manner.

(II) Store raw manure in production buildings or in storage facilities or otherwise store it in such a way as to prevent polluted runoff, unless runoff is collected in the retention ponds and the volume of runoff from raw manure storage areas is accounted for in the design, construction, operation, and maintenance of the retention ponds receiving the runoff.

(III) Remove manure and compostable material from the facility or land apply manure or compostable material in accordance with the facility's NMP within 180 days. Any manure or compostable material remaining at the facility after 180 days of being removed from the corrals is considered to be disposal[5] of manure or compostable material and is prohibited in accordance with section IV.F and Title 14 of the California Code of Regulations and by Imperial County Ordinance, Title 9.

- Large CAFOs shall prepare a manifest of the manure hauled away for each hauling event (Attachment H). The annual report prepared accordance with Monitoring and Reporting Program No. R7-2008-0800 shall include a certification that a Manure Tracking Manifest was prepared for each manure hauling event.
- The Discharger shall be responsible for appropriate disposal of manure from the property over the 180-day period following removal of the manure from corrals. This means that disposal shall be coordinated with periods of rainfall such that manure can be removed from the facility within 180 days of being scraped from corrals.
- The Discharger may submit a written request to the Executive Officer for approval to authorize a longer storage time of manure or compostable material in the event that unforeseen circumstances justify a longer storage time.

(IV) Provide adequate storage capacity to ensure compliance with the Technical Standards for Nutrient Management (Attachment C), if applicable.

(V) Ensure proper operation and maintenance of all manure, litter, and storm water storage facilities.

ii. The Discharger shall ensure that clean water is diverted, as appropriate, from the production area. Clean water includes rain falling on roofs of facilities, runoff from adjacent land, and other sources.

(I) If clean water is not diverted from coming into contact with manure or process wastewater, it shall be contained in accordance with permit requirements.

(II) All new roofs, buildings, and non-manured areas located on the CAFO shall be constructed or otherwise designed so that clean rainwater is diverted away from the sources of animal manure and waste containment facilities.

iii. The Discharger shall ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals or contaminants. The Discharger shall develop and implement controls to prevent the inappropriate introduction of chemicals into the manure, wastewater, and storm water storage and handling system. Examples include

[5] Disposal is defined in Section 17852 of Title 14, CCR

pesticides, hazardous and toxic chemicals, and petroleum products and by-products.

iv. The Discharger shall identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices to control runoff of pollutants to waters of the United States.

b. Nutrient Management Plan (NMP)

Dischargers who apply manure, litter, or process wastewater to croplands under their ownership or operational control shall develop, prepare, and fully implement an approved, site-specific Nutrient Management Plan (NMP) in addition to the EWMP. The NMP shall be prepared in accordance with section V.B.2 of this Board Order, and shall follow the guidelines included in Attachment C, Technical Standards for Nutrient Management. The Discharger shall also comply with the recordkeeping requirements as described in section VI.F of the MRP.

i. There shall be no discharge of manure, litter, or process wastewater to a water of the United States from a CAFO as a result of the application of manure, litter, or process wastewater to land areas under the control of the CAFO, except where it is an agricultural storm water discharge. Where manure, litter, or process wastewater has been applied in accordance with a site-specific NMP, as specified in section 122.42(e), a precipitation related discharge of manure, litter, or process wastewater from land application areas under the control of the CAFO is considered to be an agricultural storm water discharge.

ii. The Discharger shall develop and implement practices that are sufficient to minimize the discharge of pollutants to waters of the United States. These practices many include, but are not limited to residue management, conservation crop rotation, grassed waterways, strip cropping, vegetated buffers, riparian buffers, setbacks, terracing, and diversions. The following specific measures shall be implemented:

(I) Manure applied to cultivated cropland shall be incorporated into soil soon after application or appropriate containment (based on the specific crop grown) shall be provided.

(II) Land application areas that receive dry manure shall be managed through implementation of erosion control measures to minimize erosion and shall be consistent with a Nutrient Management Plan.

(III) All process wastewater applied to land application areas shall infiltrate completely within 72 hours after application.

(IV) Process wastewater shall not be applied to land application areas during periods when the soil is at or above field moisture capacity unless consistent with the Nutrient Management Plan.

(V) For irrigated land application areas, there shall be no runoff from the field from the first irrigation after manure application and before planting.

iii. The Discharger shall identify protocols for appropriate testing of manure, litter, process wastewater, and soil.

(I) The Discharger shall identify and implement specific manure, wastewater, and soil sample collection and analysis protocols to be used in developing and implementing the NMP required in sections V.B.2 and VII.C.2.b of this Board Order.

(II) At a minimum, the protocol shall specify the collection and analysis of manure, litter, process wastewater and soil as follows, in accordance with sections V.C and V.D of the MRP:

| Material Analyzed | Parameter(s) | Minimum Frequency |
|---|---|---|
| Manure, litter, process wastewater | • Ammonium nitrogen<br>• Total Kjeldahl nitrogen<br>• Total phosphorus<br>• pH | Annually |
| Soil | • Soluble phosphorus<br>• pH | Once every 5 years for all fields under the control of the Discharger where manure, litter and process wastewater may be applied |

(III) In all cases the sampling protocols for manure, litter, process wastewater, and soil shall be consistent with the Technical Standards for Nutrient Management (Attachment C).

iv. The Discharger shall develop and implement protocols to land apply manure, litter, and process wastewater in accordance with the Technical Standards for Nutrient Management (Attachment C). Land application rates shall be consistent with the following:

(I) Land application of wastes for nutrient recycling from existing CAFOs shall not cause the underlying groundwater to contain any waste constituent, degradation product, or any constituent of soil mobilized by the interactions between applied wastes and soil or soil biota, to exceed the groundwater limitations set forth in this Board Order.

(II) The application of waste to cropland shall be at rates that preclude development of vectors or other nuisance conditions and meet the conditions of the Nutrient Management Plan.

(III) Discharge of wastewater to disposal lands shall not result in surface runoff from disposal lands and shall be managed to minimize percolation to the groundwater.

v. The Discharger shall identify specific records that will be maintained to document the development, implementation, and management of the NMP and compliance with the minimum practices described in this section VII.C.2.b.i – iv and consistent with the record keeping requirements in section VI.F of the MRP.

vi. The NMP shall be prepared and submitted according to the following schedule:

(I) Existing CAFOs and new CAFOs constructed prior to September 30, 2008: as soon as possible, but no later than September 30, 2008. This provision constitutes a Compliance Schedule subject to the reporting requirements contained in section V.D of Attachment D of this Board Order, "Compliance Schedules."

(II) New CAFOs constructed on or after September 30, 2008: with the Discharger's NOI in accordance with section II.A., General Permit Application and Coverage.

(III) Existing CAFOs that do not currently apply, or new CAFOs that do not plan at the time of construction to apply, manure, litter, or process wastewater to croplands under their ownership or operational control, but that decide on or after September 30, 2008 to commence land application of manure, litter, or process wastewater, must be submit an NMP at least 90 days prior to the date the Discharger begins applying manure, litter or process wastewater to croplands under their ownership or operational control.

vii. The NMP shall be signed in accordance with section V.B of Attachment D of this Board Order, "Signatory and Certification Requirements."

viii. Upon approval by the Executive Officer, the NMP will be made available for public review and comment for 30 days.

a. If there is no objection after the public review and comment period, the Executive Officer will issue an authorization letter to the Discharger making the approved NMP an enforceable part of the Board Order.

b. If a written request for a hearing on the NMP is received within the 30-day public review and comment period, which includes the reason(s) the hearing is being requested (e.g., why the NMP is inadequate), the item will be placed on the next available Regional Water Board meeting agenda. Because of the need to comply with certain minimum noticing requirements, placement of this item on the agenda will be at least 30 days from the date when a hearing is requested plus the additional time necessary to follow the administrative procedures involved in preparing for the meeting.

c. If possible, the Regional Water Board staff will attempt to resolve the issues of concern by arranging a meeting with the applicant and the interested person(s) requesting the hearing. If an agreement is reached in the meeting, a hearing may not be required. If the agreement reached requires significant changes to be made to the NMP, however, a new public notice and comment period will be required. If an agreement is not reached with the interested person(s) requesting the hearing, the hearing will proceed as scheduled. After testimony is taken at the hearing, the Regional Water Board will decide whether permit coverage shall commence or whether the NMP needs to be revised.

ix. The approved NMP shall be fully implemented by February 27, 2009. Dischargers who seek to obtain coverage under this Board Order after February 27, 2009 shall have an approved NMP implemented on the date of permit coverage.

x. A current copy of the NMP shall be retained on site in accordance with section IV of Attachment D of this permit, "Standard Provisions – Records," and shall be provided to the Regional Water Board upon request.

xi. The Discharger shall amend the NMP a minimum of once every 5 years. In addition, the Discharger shall amend the NMP more frequently, as necessary, whenever the facility makes a substantive change in how it manages its operation, including the location, method, timing or frequency of land application so the NMP reflects the current operational characteristics and practices of the CAFO.

c. Engineered Waste Management Plan (EWMP)

i. The Discharger shall develop and fully implement an EWMP approved by the Executive Officer in accordance with Attachment B. The EWMP shall be submitted to the Regional Water Board's Executive Officer for approval and implemented as follows:

(I) For new CAFOs, after the adoption date of this Board Order, the EWMP shall be submitted within 120 days from the date the CAFO begins operation and implemented within 180 days following plan approval by the Executive Officer.

(II) For existing CAFOs that did not submit the EWMP required by Board Order No. 01-800, the EWMP shall be submitted within 120 days from the date this Board Order is adopted and fully implemented within 180 days following plan approval by the Executive Officer.

(III) The Discharger may submit a written request to the Executive Officer for approval to authorize a longer time to submit or implement the EWMP in the event that unforeseen circumstances justify a longer time.

ii. The EWMP shall be prepared by a registered professional engineer in the State of California, or other qualified individual, in accordance with the guidelines specified in Attachment B of this Board Order. The Executive Officer is hereby authorized to make necessary revisions to the guidelines for the preparation of an EWMP outlined in Attachment B.

iii. Upon receiving the EWMP, the Regional Water Board's Executive Officer shall determine the need to prepare a groundwater monitoring program on a case by case basis. Such a monitoring program would require the installation of monitoring wells at the facility.

d. Management Practices and Specifications for Composting Sites Not Covered by Individual Waste Discharge Requirements for Composting

Dischargers that include composting operations on-site at the permitted facility shall implement appropriate management practices to prevent the discharge of pollutants from all composting facilities, unless the composting operations are regulated under other waste discharge requirements.

i. Public contact with waste shall be precluded through such means as fences, signs and other alternatives approved by the Executive Officer.

ii. Stockpiling and composting areas shall be at least:

(I) 50 feet from property lines;

(II) 500 feet from domestic supply wells;

(III) 100 feet from non-domestic supply wells;

(IV) 100 feet from any surface water bodies, including ephemeral streams but excluding Imperial Valley Drains; and

(V) 50 feet from Imperial Valley Drains.

(VI) Alternative practices compliance alternative. As a compliance alternative, the Discharger may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot setback. Any alternative practice implemented to comply with this section shall be submitted in writing for approval to the Executive Officer in writing prior to implementation

iii. Within 180 days of issuance of this Board Order, the Discharger shall conduct a survey of the composting site and submit the results of this survey to the Executive Officer, to assure that the site has been properly graded and is adequately designed and constructed to retain all runoff from the composting operations and precipitation from a 100-year, 24-hour storm. Survey results shall be included in an updated topographical map of the site, extending one-quarter mile beyond the property boundary. In accordance with the requirements for storm water pollution prevention under Parts 122, 123, and 124, the map shall show, at a minimum, the following:

(I) The property boundary and all adjacent surface water bodies, including ephemeral streams;

(II) Specific areas of the site used for on-loading and off-loading, stockpiling and composting, and curing or storage of compost;

(III) Site access road and all on-site roads;

(IV) Grades and elevations; and

(V) Berms and/or water storage basins.

In addition to the above, the survey shall include a statement from a California-registered civil engineer certifying that the site is adequately graded and constructed to retain all runoff from the composting operations and precipitation from a 100-year, 24-hour storm. If the features listed in (I)

through (V) above are identified in a map included in the facility's approved EWMP, the map need not be recreated to satisfy this requirement.

The Discharger may submit a written request to the Executive Officer for approval to authorize a longer time to submit survey plan in the event that unforeseen circumstances justify a longer time.

iv. Annually, prior to the first day of November, any necessary erosion control measures shall be implemented and any necessary construction, maintenance, and/or repairs of drainage control facilities shall be completed to prevent erosion or flooding of the site.

v. The Discharger shall take adequate steps to maintain the facility to prevent ponding of water at the site and to ensure that raw materials and/or compost are confined to storage and treatment areas.

vi. The Discharger shall immediately notify Regional Water Board staff of any flooding, slope failure or other change in site conditions which result in a discharge from the waste containment facility.

vii. The Discharger shall immediately remove and relocate any wastes which are discharged at this site in violation of these requirements.

viii. The Discharger shall maintain trucking manifests on-site in accordance with the requirements in section VI.J of the MRP.

ix. Within 180 days of the issuance of this Board Order the Discharger shall sever and plug any existing subsurface tile drainage system in the composting operation, treatment and storage areas. The Discharger may submit a written request to the Executive Officer for approval to authorize a longer time to sever and plug any existing subsurface tile drainage system in the event that unforeseen circumstances justify a longer time

x. One hundred eighty (180) days prior to cessation of the composting operations at the facility, the Discharger shall submit a closure plan. The closure plan will include plans to return the site to its original condition including plans for appropriate remediation and /or disposal of contaminated soil. The closure plan shall be implemented within 90 days of Executive Officer approval.

xi. The Discharger shall conduct monitoring in accordance with sections V.E and V.F of the MRP.

**3. Construction, Operation and Maintenance Specifications**

a. Operation of CAFOs and the treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in section 13050 of Division 7 of the California Water Code.

b. Retention ponds and manured areas at CAFOs in operation since 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 which are protected against 100-year peak stream flows shall continue to provide such protection. Facilities built after November 27, 1984 shall be protected from any washout or erosion of wastes or covering material, and from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.

c. Retention ponds shall be lined with or underlain by soil that contains at least ten (10) percent clay and not more than ten (10) percent gravel or artificial materials or materials with equivalent impermeability. These ponds shall also be sited, designed, constructed and operated to ensure that wastes will be a minimum of 5 feet above the highest anticipated elevation of underlying groundwater.

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

e. Ponds shall be managed to prevent breeding of mosquitoes, in particular:

   i. An erosion control program shall ensure that small coves and irregularities are not created around the perimeter of the water surface.

   ii. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

   iii. Dead algae, vegetation, and debris shall not accumulate on the water surface.

f. All composting operations at this facility shall comply with the laws of municipalities, counties, drainage districts, air quality control board, and other local agencies, including compliance with the applicable regulatory and permitting requirements of the County of Imperial Public Health Department for Compostable Materials Handling Operations.

**4. Other Special Provisions**

a. Transfer of Manure, Litter, and Process Wastewater – Applicable to Large CAFOs

   In cases where CAFO-generated manure, litter, or process wastewater is sold, given away or otherwise transferred, the Discharger shall comply with the following conditions:

   i. Provide the recipient(s) with representative information on the nutrient content of the manure, litter, and/or process wastewater.

      (I) Manure, litter, and process wastewater must be tested for nitrogen and phosphorus at least annually; and

      (II) Sampling and analysis must be conducted in accordance with the requirements of section V.C of the MRP and the specifications in the Technical Standards for Nutrient Management (Attachment C).

   ii. Retain the applicable records specified in section VI.A of the MRP, Manure Transfer Records, for transfer of manure, litter and process wastewater. In

accordance with section IV of Attachment D, "Standard Provisions – Records," these records shall be maintained on-site for a period of 5 years and submitted to the Regional Water Board upon request.

b. Compliance with Applicable Storm Water Requirements

Upon issuance of a discharge authorization letter from the Executive Officer to discharge wastes under this Board Order, the Discharger's authorization to discharge waste under the State Water Board's General Industrial Storm Water Permit (State Water Board Order No. 97-03-DWQ) is hereby terminated, unless the Discharger has storm water discharges associated with non-CAFO or non-composting industrial activities subject to the requirements of State Water Board Order No. 97-03-DWQ. In the event that there are storm water discharges associated with regulated, non-CAFO or non-composting, industrial activities, the Discharger shall submit a NOI and/or maintain coverage under the State Water Board Order No. 97-03-DWQ, NPDES General Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities.

i. All storm water discharges from this facility shall comply with the laws of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.

ii. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.

iii. Storm water discharges associated with industrial activity from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in Part 117 and/or Part 302.

**5. Required Submittals, Reports, and Compliance Time Schedules**

a. The Discharger shall comply with the following compliance time schedules as presented in Table 1:

**Table 1. Deliverables and Due Dates**

| Deliverable | Description (Permit Reference) | Due Date |
|---|---|---|
| Notice of Intent (NOI) | Existing Enrollees (under Board Order 01-800) are automatically covered under this Board Order. (II.A.2) | N/A |
| | New Enrollees must submit a completed NOI form (USEPA Form 2B) and the appropriate filing fee to enroll into Permit. (II.A.1) | *New CAFOs:* At least 30 days before the start of any new discharge |
| Engineered Waste Management Plan (EWMP) | Existing Enrollees have submitted an EWMP to the Regional Water Board. | N/A |
| | New Enrollees must submit an EWMP for the Facility. (II.A.1, VII.C.2.c, Attachment B) | *New CAFOs:* At least 30 days before the start of any new discharge |
| Nutrient Management Plan (NMP) | All Enrollees that land apply manure, litter, or process wastewater must develop a NMP and submit to Regional Water Board. (II.A.1, V.B.2.a, VII.C.2.b, Attachment C) | *Existing CAFOs:* By September 30, 2008<br>*New CAFOs:* With the NOI<br>*Existing CAFOs that do not currently land apply or new CAFOs that do not* |

| Deliverable | Description (Permit Reference) | Due Date |
|---|---|---|
| | | *plan to land apply at the time of construction:* at least 90 days prior to commencing land application |
| Nutrient Management Plan (NMP) | All Enrollees that land apply manure, litter, or process wastewater must implement requirements of approved NMP. (VII.C.2.b.ix) | By the later of February 27, 2009 or on the date of permit coverage |
| Discharge Notification Report | The Discharger shall report any discharges of manure, litter, and/or process wastewater (VII.A.2.d) | Orally: Within 24 hours of the discharge event<br>Written: Within 2 weeks of the oral notification |
| Annual Report | Each Enrollee shall submit an Annual Report (Attachment E, VII.C; Attachment G) that includes, if applicable:<br>• Annual Report of Animal Waste Discharge<br>• Composting Inventory<br>• Land Application of Manure, Litter, and Process Wastewater Report<br>• Certification | January 15th of each year |
| Noncompliance Report | The Discharger shall report any noncompliance that may endanger health or the environment. (Attachment D, V.E; Attachment E, VII.C and D) | • Oral report within 24 hours from the time the discharger becomes aware of the circumstances.<br>• Written submission within 2 weeks of the time the discharger becomes aware of the circumstances<br>• Include with Annual Report |

## VIII. COMPLIANCE DETERMINATION

Compliance determination with the terms of this Board Order shall be based on the following:

**A.** Periodic inspections by Regional Water Board staff;

**B.** Evaluation of the annual report submitted according to the Monitoring and Reporting Program of this Board Order; and

**C.** Any other information deemed necessary by the Executive Officer.

**Attachment A – Definitions**

**Agricultural material** means material of plant or animal origin, which result from the production and processing of farm, ranch, agricultural, horticultural, aquacultural, silvicultural, floricultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues.

**Animal Feeding Operation (AFO)** means a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (i) animals (other than aquatic 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 (ii) crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

**Application** means the EPA standard national application forms for seeking coverage under an NPDES permit, including any additions, revisions or modifications to the forms; or forms approved by EPA for use in "approved States," including any approved modifications or revisions [e.g. for NPDES general permits, a written "notice of intent" pursuant to 40 CFR section122.28; for NPDES individual permits, Forms 1 and 2B pursuant to 40 CFR section 122.1(d)].

**Compost** means compost feedstock that is in the process of being rapidly decomposed and is unstable. Active compost is generating temperatures of at least 50 degrees Celsius (122 degrees Fahrenheit) during decomposition; or is releasing carbon dioxide at a rate of at least 15 milligrams per gram of compost per day, or the equivalent of oxygen uptake.

**Compostable material** is defined as any organic material that when accumulated will become active compost as defined in section 178952(a)(1) of Title 14, CCR.

**Concentrated Animal Feeding Operation (CAFO)** means an AFO which is defined as a Large CAFO or Medium CAFO by 40 CFR section 122.23 (b)(4) and (6), or that is designated as a CAFO.

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

**Finished compost** is defined as a stablilized compost in which any organic material that has undergone the Process to Further Reduce Pathogens (PFRP), as described in section 17868.3 of Title 14, CCR, and has reached a stage of reduced biological activity, as indicated by reduced temperature and rate of respiration below that of active compost..

**Food material** means any material that was acquired for animal or human consumption, is separated from the municipal solid waste stream, and that does not meet the definition of "agricultural material." Food material may include material from food facilities as defined in California Health and Safety Code section 113785, grocery stores, institutional cafeterias (such as, prisons, schools and hospitals) or residential food scrap collection.

**Grab sample** means a sample which is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of time.

**Green material** means any plant material that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by weight, and meets the requirements of section 17868.5 of Title 14, CCR. Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.

**Green waste** consists of or contains waste from plants, including leaves, clippings, cuttings, grass trimmings, weeds, shrubbery, bushes, trees, residential or community garden wastes, and untreated wood wastes.

**Instantaneous Maximum Effluent Limitation** means the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

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

**Land application area** means land under the operational control of an CAFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied.

**Large CAFO** means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories: (i) 700 mature dairy cattle, whether milked or dry; (ii)1,000 veal calves; (iii)1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs; (iv) 2,500 swine each weighing 55 pounds or more; (v)10,000 swine each weighing less than 55 pounds; (vi) 500 horses; (vii) 10,000 sheep or lambs; (viii) 55,000 turkeys; (ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system; (x)125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; (xi) 82,000 laying hens, if the AFO uses other than a liquid manure handling system; (xii) 30,000 ducks (if the AFO uses other than a liquid manure handling system); or (xiii) 5,000 ducks (if the AFO uses a liquid manure handling system).

**Liquid manure handling system** means 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** is defined to include manure, litter, bedding, compost and raw materials or other materials commingled with manure or set aside for land application or other use.

**Medium CAFO** means any AFO that stables or confines as many or more than the numbers of animals specified in any of the following categories: (i) 200 to 699 mature dairy cattle, whether milked or dry cows; (ii) 300 to 999 veal calves; (iii) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs; (iv) 750 to 2,499 swine each weighing 55 pounds or more; (v) 3,000 to 9,999 swine each

weighing less than 55 pounds; (vi)150 to 499 horses, (vii) 3,000 to 9,999 sheep or lambs, (viii) 16,500 to 54,999 turkeys, (ix) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system; (x) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; (xi) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system; (xii) 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); or (xiii) 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system) and either one of the following conditions are met (a) pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or (b) pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

**Method Detection Limit (MDL)** is 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.

**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). [(40 CFR §128.28(b)(2)(ii)].

**Process wastewater** 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 AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with or is a constituent of raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

**Production area** means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. 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, 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 raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

**Setback** means 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 storm event** means 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.

**Small CAFO** means an AFO that is designated as a CAFO and is not a Medium or Large CAFO.

**Source of Drinking Water** is any water designated or potentially suitable as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan[1].

**The Act** means Federal Water Pollution Control Act as amended, also known as the Clean Water Act as amended, which is set forth at 33 USC 1251 et seq.

**Vegetated buffer** means 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.

**Waters of the United States** means: (1) all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (2) all interstate waters, including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, and 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: (a) which are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or, which are or could be used for industrial purposes by industries in interstate commerce; (4) all impoundments of waters otherwise defined as waters of the United States; (5) tributaries of waters identified in (1) through (4) of this definition; (6) the territorial sea; and (7) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items (1) through (6) of this definition.

[1] Link to State Policy on Sources of Drinking Water – http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1988/rs1988_0063.pdf

## ATTACHMENT B – REQUIREMENTS FOR AN ENGINEERED WASTE MANAGEMENT PLAN

The Engineered Waste Management Plan shall be prepared by a registered professional engineer in the State of California, or other qualified individual, and shall address Item Nos. 1 through 7, below.

1. A site plan that specifies:

    a. The address and legal description of the property (i.e., Assessor's Parcel Number and Township, Range, Section(s) and Baseline Meridian);

    b. The name, address, and telephone number of the owner and operator of the property;

    c. 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.;

    d. Present and proposed animal population (numbers of each: milk cows, dry cows, calves, heifers, etc.) and volume of washwater generated; and

    e. Overall site dimensions, contours, a vicinity map, north arrow, and the date the plan was prepared. The plan should be drawn on a standard blue print format using an appropriate scale that shows sufficient details of all facilities.

2. Engineering calculations showing that containment structures are able to retain all wastewater generated from the facility, including all of the precipitation on and drainage through waste areas (e.g., manured areas) resulting from storms of up to and including the 25-year, 24-hour storm as required by the effluent limitations in Part IV.A of the permit.

3. Engineering data showing that:

    a. Containment structures are lined with or underlain by soil that contains at least 10 percent clay and not more than 10 percent gravel or artificial materials of equivalent permeability; and

    b. Containment structures are sited, designed, constructed, and operated to ensure that bottoms are at a minimum of five feet above the highest anticipated elevation of underlying ground water.

    For existing CAFOs whose structures fail to meet the soil and siting criteria, the EWMP shall also include proposed measures to ensure the structures meet the soil and siting criteria. The measures shall include a description of the proposed construction materials and compaction method to be used to build berms/levees and other containment facilities.

4. An engineering report (with a map to scale, calculations, and specifications as necessary), showing whether the retention ponds and manured areas at the site are either:

a. Protected from inundation or washout by overflow from any stream channel during 25-year peak storm flow if the site has been in operation on or before November 27, 1984; or

b. Protected from inundation or washout by overflow from any stream channel during 100-year peak storm flow if the site has been in operation after November 27, 1984.

For existing CAFOs whose ponds and manure areas fail to meet the appropriate flood protection criteria based on when the facility started operations, the report shall also include proposed measures to protect the ponds and manured areas against the corresponding flood event.

5. An operational and maintenance plan to ensure that:

   a. All precipitation and surface drainage from outside manured areas, including that collected from roofed areas resulting from up to and including a 25-year, 24-hour storm, shall be diverted away from the manured areas; unless such drainage is fully contained.

   b. Ponds shall be managed to prevent breeding of mosquitoes, erosion, and excess weeds, algae, and vegetation;

   c. Ponds provide maximum pond capacity prior to winter storms; periodic dredging, etc.

   d. Animals at the facility shall be prevented from entering surface waters within the confined areas; and

   e. There shall be no discharge to surface waters from containment structures, unless chronic, catastrophic or cumulative rainfall causes overflow from a storage facility designed, constructed, maintained, operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour storm.

## ATTACHMENT C – TECHNICAL STANDARDS FOR NUTRIENT MANAGEMENT

Dischargers that land apply manure, litter, or process wastewater shall comply with the following technical standards for nutrient management.

Sampling Requirements

The Discharger shall use sample containers and sample handling, storage, and preservation methods that are accepted or recommended by the selected analytical laboratory or, as appropriate, in accordance with approved USEPA analytical methods. The following sampling procedures are standards currently recognized by the Regional Water Board. When special procedures appear to be necessary at an individual facility, the Discharger may request approval of alternative sampling procedures for nutrient management. The Executive Officer will review such requests and if adequate justification is provided, may approve the requested alternative sampling procedures.

*Soil Sampling and Analysis*

1. At least once every 5 years, commencing with the first full calendar year regulated by the Board Order, the Discharger shall collect and analyze representative soil samples from all land application areas under the Discharger's control where process wastewater and/or manure is applied. Soil samples shall be collected following harvest of a crop and before nutrients are added for the following crop.

2. Soil samples shall be collected as follows:

    a. Samples shall be collected from each land application area receiving manure and/or process wastewater. A single sample shall represent no more than 10 acres; samples shall be composited for every 80 acres. Samples shall be composited by:

        i. Placing equal volumes of soil from each 10-acre sample site for each land application area and sample depth, in a clean plastic bucket. Moist soils may be air dried until they can be mixed easily.

        ii. Thoroughly mixing the sample and placing at least one pint of the composite sample in a clean plastic container to be shipped to the laboratory. The laboratory should be consulted for the exact amount of sample and the sample container needed.

    b. All samples from the same depth interval for all sites within each land application area shall be composited for analyses.

        i. For land application areas to be planted in vegetables, samples shall be collected from a depth of 0 to 12 inches.

        ii. For land application areas to be planted in field crops, subsamples shall be collected from 0 to 12 inches. Samples from 12 to 24 inches are recommended but not required.

c. Soil samples shall be collected with soil probes or augers from a minimum of 10 sites in each land application area and composited as described below.

   i. At least three of the 10 samples shall be from the upper third of the land application area.

   ii. In fields where soil texture, crop yield, or other soil-related factors vary, at least 10 samples shall be collected from each different area and composites from each area shall be analyzed separately.

   iii. Sample locations in each land application area shall be recorded on a sketch for future sampling consistency.

   iv. Soil probes or augers shall be cleaned thoroughly between samples by wiping clean with a damp cloth.

*Manure Sampling*

Manure samples shall be collected as follows:

1. At least 3 equal-size samples of manure shall be collected from various portions of the manure pile, with most samples from the center.

2. The 3 samples shall be placed in a container and mixed well before a subsample is placed in a clean container provided by or approved by the analytical laboratory that will receive the samples.

3. Sample containers that are reused shall be washed with soap and thoroughly rinsed with clean (tap) water.

*Process Wastewater Sampling*

Process wastewater composite samples shall be collected as follows:

1. A representative composite grab sample of process wastewater shall be prepared. Containers that are reused shall be cleaned between sampling events.

2. The samples shall be collected at a point that is prior to any dilution or blending with irrigation water and shall be representative of the process wastewater applied to the land application area.

<u>Analytical Requirements</u>

1. Analyses of soil samples shall be conducted following protocols for agricultural samples defined by the University of California Analytical Laboratory (available on the Internet at http://groups.ucanr.org/danranlab/Soil_Analysis_2/). This shall include analysis for nitrate-nitrogen and ammonium-nitrogen using Method 312 and for phosphorus using Method 340.

2. Analyses of manure shall be conducted by: methods utilized by the Manure Analyses Proficiency (MAP) Testing Program or accepted by the University of California; and laboratories participating in the MAP Testing Program or other programs whose tests are accepted by the University of California.

3. Analyses of process wastewater samples shall be conducted by a laboratory certified for such analyses by the California Department of Public Health. These laboratory analyses shall be conducted in accordance with the Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants) or other test methods approved by the Executive Officer.

Crop Nutrient Requirements

1. Realistic yield goals shall be established based on soil productivity information, historical yield data, climatic conditions, level of management and/or local research on similar soil, cropping systems, and soil, tissue, and manure/organic by-products tests. For new crops or varieties, industry yield recommendations may be used until documented yield information is available.

2. Each crop's nutrient requirements for nitrogen and phosphorus shall be determined based on recommendations from the University of California Cooperative Extension's Guidelines for Vegetable Crops – Bulletin 104-V (available on the Internet at http://ceimperial.ucdavis.edu/files/36581.pdf) or Guidelines for Field Crops – Bulletin 104-F (available on the internet at http://ceimperial.ucdavis.edu/files/36580.pdf), or from historic crop nutrient removal.

Available Nutrients

1. A nutrient budget for nitrogen shall be prepared that considers all potential sources of nutrients including, but not limited to animal manure and organic byproducts, waste water, commercial fertilizer, crop residues, legume credits, and irrigation water. A nutrient budget for phosphorus is required for fields rated "HIgher" or higher risk using the Phosphorus Index.

2. Nutrient values of soil, manure, process wastewater, and irrigation water shall be determined based on laboratory analysis. "Book values" for manure and process wastewater may be used for planning of first year application(s) during initial development of the NMP if necessary. Acceptable book values are those values recognized by American Society of Agricultural and Biological Engineers (ASABE), the NRCS, and/or the University of California that accurately estimate the nutrient content of the material. The nutrient content of commercial fertilizers shall be derived from the published values certified by the California Department of Food and Agriculture.

3. Nutrient credit from previous legume crops shall be determined by methods acceptable to the University of California Cooperative Extension, the Natural Resources Conservation Service (NRCS), or a specialist certified in preparing nutrient management plans.

Nutrient Application Rates

*General*

1. NMPs shall specify the form, source, amount, timing, and method of application of nutrients on each field to minimize nitrogen and/or phosphorus movement to surface and/or ground waters to the extent necessary to meet the provisions of the Board Order.

2. Where crop material is not removed from the field, waste applications are not allowed. For example, if a pasture is not grazed or mowed (and cuttings removed from the field), waste shall not be applied to the pasture.

3. Manure and/or process wastewater will be applied to the field for use by the first crop covered by the NMP only to the extent that soil tests indicate a need for nitrogen application.

4. Nutrient application rates shall not attempt to approach a site's maximum ability to contain one or more nutrients through soil adsorption. Excess applications or applications that cause soil imbalances should be avoided. Excess manure nutrients generated by the Discharger shall be handled by export to a good steward of the manure, or the development of alternative uses.

5. Planned rates of nutrient application shall be determined based on soil test results, nutrient credits, manure and process wastewater analysis, crop requirements and growth stage, seasonal and climatic conditions, and use and timing of irrigation water.

    a. For purposes of calculating nutrient credits, mineralization rates for prior manure applications may be determined using acceptable book values recognized by American Society of Agricultural and Biological Engineers (ASABE), the NRCS, and/or the University of California.

    b. Realistic yield goals for the crop(s) to be grown shall be used in determining crop nutrient requirements. Realistic yield goals may be based on average yields published by the Imperial County Agriculture Commissioner or on site-specific, historic yield data for the crop(s) to be grown.

    Actual applications of nitrogen and phosphorus to any crop shall be limited to the amounts specified below.

*Nitrogen*

1. Total plant available nitrogen from all sources including residual nitrogen in the soil and nitrogen applied in the form of manure, process wastewater, commercial fertilizer, compost, and other amendments for each field shall not exceed the total nitrogen expected to be removed from the field through the harvest and removal of the crop to be grown. Additional applications of nitrogen are allowable if the following conditions are met:

    a. Plant tissue testing has been conducted and it indicates that additional nitrogen is required to obtain a crop yield typical for the soils and other local conditions;

b. The amount of additional nitrogen applied is based on the plant tissue testing and is consistent with University of California Cooperative Extension written guidelines or written recommendations from a professional agronomist;

c. The form, timing, and method of application make the nitrogen available to the crop; and

d. Records are maintained documenting the need for additional applications.

2. At no time will application rates result in total nitrogen available to the crop to be grown exceeding 1.65 times the total nitrogen removed from the field through the harvest and removal of the crop.

*Phosphorus*

1. The California Phosphorus Index, located in Section I of the NRCS Field Office Technical Guide, shall be used to evaluate the risk of phosphorus transport. Phosphorus applications shall be made to each field based on the Phosphorus Index Risk Rating as follows:

   a. Low Risk: If the field is found to be in the Low Risk category, manure or process wastewater may be applied based on the nitrogen requirement of the crop and the nitrogen content of the manure or process wastewater.

   b. Medium Risk: If the field is found to be in the Medium Risk category, manure or process wastewater may be applied based on the nitrogen requirement of the crop and the nitrogen content of the manure or process wastewater. Fields in the Medium Risk category should be periodically reviewed using the Phosphorus Index since they may move into the High Risk category when no management changes are made.

   c. High Risk: If the field is found to be in the High Risk category then manure or process wastewater may be applied at a phosphorus-based rate for crop removal. A phosphorus budget shall be prepared for High and higher risk fields. The Discharger shall prepare a conservation plan that will lower the risk category to at least Medium when implemented. After implementation of the conservation plan has lowered the risk level, the actions required at the lower risk levels will apply.

   d. Very High: If the field is in the Very High Risk category no manure, process wastewater or other organic sources of phosphorus may be applied. A phosphorus budget shall be prepared for Medium and higher risk fields. The Discharger shall prepare a conservation plan that will lower the risk category to at least High when implemented. After implementation of the conservation plan has lowered the risk level, the actions required at the lower risk levels will apply.

2. A single application of phosphorus applied as manure may be made at a rate equal to the recommended phosphorus application or estimated phosphorus removal in harvested plant biomass for the crop rotation or multiple years in the crop sequence. When such applications are made, the application rate shall:

   - not exceed the recommended nitrogen application rate during the year of application, or

- not exceed the estimated nitrogen removal in harvested plant biomass during the year of application when there is no recommended nitrogen application.

- be consistent with the P Index risk category of the field.

## Attachment D –Standard Provisions

# I. STANDARD PROVISIONS – PERMIT COMPLIANCE

## A. Duty to Comply

1. The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Board Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

## B. Need to Halt or Reduce Activity Not a Defense

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 Board Order. (40 C.F.R. § 122.41(c).)

## C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Board Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

## D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Board Order. (40 C.F.R. § 122.41(e).)

## E. Property Rights

1. This Board Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Board Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

## F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Board Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Board Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Board Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

## G. Bypass

1. Definitions

   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal

periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

**H. Upset**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).).

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. 3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

This Board Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. (40 C.F.R. § 122.41(f).)

### B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Board Order after the expiration date of this Board Order, the Discharger shall apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

### C. Transfers

This Board Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Board Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

## III. STANDARD PROVISIONS – MONITORING

**A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

**B.** Monitoring results shall be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Board Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

## IV. STANDARD PROVISIONS – RECORDS

**A.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

**B.** Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

**C.** Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

## V. STANDARD PROVISIONS – REPORTING

### A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Board Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Board Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

### B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. Applications shall be signed as follows:

   a. For a corporation: All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental

compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

b. For a partnership or sole proprietorship: All permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

c. For a municipality, State, federal, or other public agency: All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).).

3. All reports required by this Board Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

   c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3))

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above shall be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c))

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware

that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

## C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Board Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Board Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Board Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Board Order. (40 C.F.R. § 122.41(l)(4)(iii).)

## D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Board Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

## E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in this Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

### F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Board Order. (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

### G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Board Order requirements. (40 C.F.R. § 122.41(l)(2).)

### H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

### I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

## VI. STANDARD PROVISIONS – ENFORCEMENT

**A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

### A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Board Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

    a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

    b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

    c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

    d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

    a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

    b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

    c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

    d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

# ATTACHMENT E – MONITORING AND REPORTING PROGRAM

## Contents

## List of Tables

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Title 40 of the Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

## I. GENERAL MONITORING PROVISIONS

**A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.

**B.** Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.

**C.** The collection, preservation, and holding times of all samples shall be in accordance with the test procedures under Part 136 (revised as of May 14, 1999) “Guidelines Establishing Test Procedures for the Analysis of Pollutants,” promulgated by the USEPA, unless otherwise specified in this MPR. In addition, the Regional Water Board and/or USEPA, at their discretion, may specify test methods that are more sensitive than those specified in Part 136.

**D.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

**E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.

**F.** 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 the United States Environmental Protection Agency. 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.

## II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Board Order:

### Table E-1. Monitoring Station Locations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|---|---|---|
| Production Area Discharge Point 001 | EFF-001 | Discharges from the production area, after exiting the production area and before contact with the receiving water and/or dilution by any other water or waste. If more than one production area discharge point is authorized by the General Permit, monitoring locations shall be named EFF-001A, EFF-001B, etc. |
| Land Application Area Discharge Point 002 | EFF-002 | Discharges from the land application area(s), including discharges from tile drainage systems, after exiting the land application area and before contact with the receiving water and/or dilution by any other water or waste. If more than one land application area discharge point is authorized by the General Permit, monitoring locations shall be named EFF-002A, EFF-002B, etc. |
| Receiving Ground Water[1] | RGW-001 | Ground water monitoring wells installed to implement a ground water monitoring program, as required by the Executive Officer. If more than one ground water monitoring well is installed, monitoring locations shall be named RGW-001, RGW-002, etc. |

[1] Applies to Dischargers required by the Executive Officer, upon review of the EWMP, to prepare a ground water monitoring program.

## III. EFFLUENT MONITORING REQUIREMENTS – APPLICABLE TO ALL CAFOS

### A. Monitoring Locations EFF-001 and EFF-002

1. The Discharger shall monitor production area and land application area discharges at EFF-001 and EFF-002 (including EFF-001A, EFF-001B, etc. and EFF-002A, EFF-002B, etc., as applicable) as follows:

### Table E-2. Effluent Monitoring

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Volume | Gallons or Acre-inches | Estimate | 1x/Discharge Event | See Section I.C of the MRP |
| Nitrate-Nitrogen | mg/L | Composite[1] | | |
| Total Kjeldahl Nitrogen | mg/L | Composite[1] | | |
| Phosphorus, Total (as P) | mg/L | Composite[1] | | |
| Total Dissolved Solids | mg/L | Composite[1] | | |
| Biochemical Oxygen Demand ($BOD_5$), 5-Day @ 20ºC | mg/L | Composite[1] | | |
| Total Suspended Solids (TSS) | mg/L | Composite[1] | | |
| Total Coliform | MPN/100 mL | Composite[1] | | |
| Fecal Coliform | MPN/100 mL | Composite[1] | | |

[1] A representative composite sample of wastewater shall be prepared based on a minimum of three time-series samples collected during a discharge event that are representative of the beginning, middle, and end of the wastewater discharge. These samples shall be combined in a single container, mixed, and poured into a clean container provided by or approved by the laboratory that will receive the samples. Containers that are reused shall be washed with soap and thoroughly rinsed with clean (tap) water.

2. The Discharger shall orally report to the Governor's Office of Emergency Services (800) 852-7550 and Regional Water Board (760) 346-7491, the discharge event within 24 hours of the discharge, followed by a written report to be provided within 2 weeks of the initial oral notification, in accordance with section VII.A.2.d of this Board Order.

3. Monitoring results shall be recorded and submitted in accordance with section VI.G and VII.B.3 of the MRP.

## IV. GROUND WATER MONITORING – APPLICABLE TO ALL CAFOS

**A.** Upon receiving the EWMP, the Regional Water Board's Executive Officer shall determine the need to prepare a ground water monitoring program on a case-by-case basis. Such a monitoring program would require the installation of monitoring wells at the facility. Dischargers that are required by the Executive Officer to prepare a ground water monitoring program shall monitor all monitoring locations RGW-001, RGW-002, etc. as follows:

**Table E-3. Ground Water Monitoring Requirements**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Total Dissolved Solids | mg/L | Grab | 1x/Quarter[1] | See Section I.C of the MRP |
| Nitrate-Nitrogen | mg/L | Grab | | |
| pH | pH units | Grab | | |
| Total Coliform | MPN/100 mL | Grab | | |
| [1] Quarterly sampling shall be conducted in January, April, July, and October | | | | |

**B.** Ground water elevation and gradient shall be determined when quarterly monitoring is conducted.

**C.** Ground water monitoring results shall be recorded in accordance with section VI.H of the MRP and submitted in accordance with the Discharger's Ground Water Monitoring Program.

## V. OTHER MONITORING REQUIREMENTS

### A. Production Area Visual Inspections – Applicable To Cafos That Confine Dairy Cows, Cattle, Swine, Poultry And Veal Calves

1. The Discharger shall conduct visual inspections of the production area as follows, in accordance with the requirements of section V.B.1 of this Board Order.

**Table E-4. Production Area Visual Inspections**

| Inspection Type | Minimum Monitoring Frequency |
|---|---|
| All stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to wastewater storage and containment structures | 1x/Week |
| All water lines, including drinking water and cooling water lines | 1x/Day |
| Manure, litter, and process wastewater impoundments, noting the level of all open surface liquid impoundments as indicated by the depth marker installed in accordance with section V.B.1.c of this Board Order. | 1x/Week |

2. The Discharger shall maintain complete on-site records in accordance with section VI.E of the MRP. The Discharger shall certify in the annual report that production area visual inspections have been documented as required.

## B. Production Area Visual Inspections – Applicable to All CAFOs

1. The Discharger shall conduct visual inspections of the production area as follows:

**Table E-5. Production Area Visual Inspections**

| Inspection Type | Minimum Monitoring Frequency |
|---|---|
| All storm water containment structures | During each significant storm event |
| Manure and wastewater storage areas and land application areas, noting any discharges from the property that is under control of the Discharger | 1x/Day during land application events |

2. The Discharger shall record the approximate time of each storm-related discharge that results in off-property discharges of stormwater commingled with wastewater or manure, and its approximate duration.

3. The results of all inspections required by this section V.B shall be recorded in accordance with section VI.E of the MRP. Records shall be maintained on site at the permitted facility for a period of 5 years, in accordance with section IV of Attachment D, Standard Provisions – Records and shall be submitted with the annual report.

## C. Manure, Litter, and Process Wastewater Monitoring – Applicable to CAFOs that Apply Manure, Litter, or Process Wastewater to Land Under the CAFO's Ownership or Operational Control or to Large CAFOs that Transfer Manure, Litter, or Process Wastewater to Other Persons

1. The Discharger shall conduct sampling and analysis as follows, in accordance with the requirements of sections V.B.2.b.ii and VII.C.2.b.iii of this Board Order. This monitoring is for nutrient management and is expected to be part of the Nutrient Management Plan for Dischargers that land apply manure, litter, or process wastewater. All Dischargers are expected to provide the results of the required monitoring to recipients of any manure, litter, or process wastewater transferred to other persons, in accordance with section VII.C.4.a.i of this Board Order. Monitoring

shall be performed to determine the nutrient and salt content of process wastewater and manure separately.

**Table E-6. Manure, Litter, and Process Wastewater Monitoring**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Ammonium-Nitrogen | mg/L<br>mg/kg | Consistent with Technical Standards for Nutrient Management (Attachment C) | 1x/Year | Consistent with Technical Standards for Nutrient Management (Attachment C) |
| Total Kjeldahl Nitrogen | mg/L<br>mg/kg | | | |
| Phosphorus, Total | mg/L<br>mg/kg | | | |
| pH | pH units | | | |

2. Dischargers that apply manure, litter, or process wastewater to land under the CAFO's ownership or operational control shall periodically inspect land application equipment for leaks.

3. Monitoring results shall be recorded in accordance with section VI.C of the MRP.

## D. Soil Monitoring – Applicable to CAFOs that Apply Manure, Litter, or Process Wastewater to Land Under the CAFO's Ownership or Operational Control

1. Dischargers that land apply manure, litter, or process wastewater shall conduct soil sampling and analysis as follows, in accordance with the requirements of sections V.B.2.b.ii and VII.C.2.b.iii of this Board Order. This monitoring is for nutrient management and is expected to be part of the Nutrient Management Plan.

**Table E-7. Soil Monitoring**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Soluble Phosphorus | mg/kg | Consistent with Technical Standards for Nutrient Management (Attachment C) | 1x/5 Years | Consistent with Technical Standards for Nutrient Management (Attachment C) |
| pH | pH units | | | |

2. Monitoring results shall be recorded in accordance with section VI.D of the MRP.

## E. Materials Monitoring – Applicable to CAFOs with On-site Composting Operations

1. The Discharger shall monitor the quantities of manure, greenwaste and fertilizer received from each source, the quantity of composted material shipped off site, and the estimated quantities of raw materials, in-process inventory and finished compost on site, monthly.

2. Monitoring results shall be recorded in accordance with section VI.I of the MRP and submitted with the annual report.

### F. Flood Protection and Storm Water Monitoring – Applicable to CAFOs with On-site Composting Operations

1. The Discharger shall inspect all internal and external flood protection facilities at least quarterly and following each storm which generates any storm water flow through the drainage system.

2. The Discharger shall monitor collect and analyze samples of stormwater discharges from composting operations as specified in table E-8.

**Table E-8. Storm Water Discharge Monitoring**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Total Suspended Solids | mg/L | Grab | 1x/Discharge Event | See Section I.C of the MRP |
| pH | pH units | Grab | | |
| Specific Conductance | µmhos/cm | Grab | | |
| Total Organic Carbon[1] | mg/L | Grab | | |
| Iron[2] | mg/L | Grab | | |
| Nitrate+Nitrite Nitrogen[2] | mg/L | Grab | | |
| Lead[2] | µg/L | Grab | | |
| Hardness (measured as $CaCO_3$) | mg/L | Grab | | |
| Zinc[2] | µg/L | Grab | | |
| Phosphorus[2] | mg/L | Grab | | |

[1] Oil and grease may be substituted for total organic carbon.
[2] Additional analytical parameters required under State Water Board Industrial Storm Water Permit 97-03-DWQ (NPDES CAS000001) for activities only under SIC 287X.

3. Flood Protection Monitoring results shall be reported in accordance with section VII.E of the MRP.

4. Storm water discharge monitoring results shall be reported in accordance with section VII.B.3 of the MRP.

## VI. RECORD KEEPING REQUIREMENTS

All records shall be retained on site at the permitted operation for a period of five (5) years from the date they are created and made available to the Regional Water Board or its designee upon request.

### A. Manure Transfer Records – Applicable to Large CAFOs

1. The Discharger shall record each manure-hauling event on a manure tracking manifest form (Attachment H). These records shall include the following:

a. Date of transfer;
b. Amount of manure, litter, and/or process wastewater that leaves the permitted operation; and
c. Name and address of the recipient

2. The Discharger shall certify in the annual report that manure tracking manifests have been prepared as required.

**B. Nutrient Management Plan – Applicable to CAFOs that Apply Manure, Litter, or Process Wastewater to Land Under the CAFO's Ownership or Operational Control**

1. The Discharger shall maintain on-site a current site-specific NMP that reflects existing operational characteristics.

2. The Discharger shall maintain on-site all necessary records to document that the NMP is being implemented in accordance with the applicable nutrient management practices defined in sections V.B.2 and VII.C.2.b of this Board Order.

3. These records shall be submitted in accordance with the MRP or otherwise made available to the Regional Water Board upon request.

**C. Manure, Litter, and Process Wastewater Nutrient Analysis Records – Applicable to CAFOs that Apply Manure, Litter, or Process Wastewater to Land Under the CAFO's Ownership or Operational Control or Large CAFOs that Transfer Manure, Litter, or Process Wastewater to Other Persons**

The Discharger shall maintain the records described in Table E-9.

**Table E-9. Manure, Litter, and Process Wastewater Nutrient Analysis Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Results of manure, litter, and process wastewater analyses to determine nitrogen and phosphorus content. | mg/L or mg/kg | 1x/Year |

**D. Soil Nutrient Analysis Records – Applicable to CAFOs that Apply Manure, Litter, or Process Wastewater to Land Under the CAFO's Ownership or Operational Control**

The Discharger shall maintain the records described in Table E-10.

**Table E-10. Soil Nutrient Analysis Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Results of soil analyses in all fields where land application activities are conducted to determine phosphorus content | mg/kg | 1x/5 Years |

**E. Operation and Maintenance Records – Applicable to All CAFOs**

1. The Discharger shall maintain the records described in Table E-11.

**Table E-11. Operation and Maintenance Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| **Applicable to CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves** | | |
| Documentation of visual inspection of all water lines | N/A | 1x/Day[1] |
| Documentation of depth of manure and process wastewater in all liquid impoundments | feet | 1x/Week |
| Documentation of all actions taken to correct deficiencies identified as a result of the production area visual inspections. Deficiencies not corrected within 30 days shall be accompanied by an explanation of the factors preventing immediate correction. | N/A | As necessary |
| Documentation of animal mortality handling practices | N/A | As necessary |
| **Design documentation for all manure, litter, and wastewater storage structures including the following information:** | | |
| a. Volume for solids accumulation | Cubic yards or gallons | Once in the permit term unless revised |
| b. Design treatment volume | | |
| c. Total design storage volume[2] | | |
| d. Days of storage capacity | Days | |
| **Applicable to All CAFOs** | | |
| Documentation of visual inspections of all storm water containment structures | N/A | During each significant storm event |
| Documentation of visual inspections of manure, litter, and process wastewater impoundments, including records of any discharges from the property that is under control of the Discharger | N/A | 1x/Week |
| Documentation of visual inspections of manure and wastewater storage areas and land application areas, including records of any discharges from the property that is under control of the Discharger | N/A | 1x/Day during land application events |

[1] Visual inspections shall take place daily. The completion of such inspections may be documented in a manner appropriate to the operation, either by maintaining a daily log or by making a weekly entry, when updating other weekly records, that required daily inspections have been completed.

[2] Total design volume includes normal precipitation less evaporation on the surface of the structure for the storage period, normal runoff from the production area for the storage period, 25-year, 24-hour runoff from the production area, and residual solids.

2. Records of visual inspections of storm water management structures and water lines shall be maintained using the Weekly Storm Water Management Structure Log Sheet provided as Attachment I.

## F. Land Application Records – Applicable to CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves

Dischargers who land apply manure, litter, or process wastewater shall maintain the records described in Table E-12.

**Table E-12. Land Application Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Documentation of the crop and expected yield for each field | bushel/acre | Seasonally |
| Documentation of the test methods and sampling protocols used to sample and analyze manure, litter, and wastewater and soil | N/A | Once in the permit term unless |

| Parameter | Units | Frequency |
|---|---|---|
| Documentation of the basis for determining the application rates used for each field where manure, litter, or wastewater is applied | N/A | revised |
| Documentation showing the total nitrogen and phosphorus to be applied to each field including nutrients from the application of manure, litter, and wastewater and other sources | pounds/acre | |
| **For each land application event where manure, litter, or process wastewater is applied, documentation of the following by field:** | | |
| a. Date of application | Month/day/year | 1x/Day |
| b. Method of application | N/A | |
| c. Weather conditions at the time of application and for 24 hours prior to and following application | N/A | |
| d. Total amount of nitrogen and phosphorus applied including quantity/volume of manure, litter, or process wastewater applied including calculations | pounds/acre | |
| Documentation of dates of manure application equipment inspection | Month/day/year | Periodically |

## G. Records of Discharges – Applicable to All CAFOs

1. The Discharger shall maintain the records described in Table E-13 for all discharges from the production area or land application area(s) under the ownership or operational control of the Discharge (except agricultural stormwater discharges).

**Table E-13. Effluent Monitoring Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Date and time of discharge | Month/day/year | 1x/Discharge Event |
| Approximate duration of discharge | Hours or Days | |
| Estimated volume of discharge | Gallons | |
| Effluent monitoring results: | | |
| • Volume | Gallons or Acre-inches | |
| • Nitrate-Nitrogen | mg/L | |
| • Total Kjeldahl Nitrogen | mg/L | |
| • Total Phosphorus | mg/L | |
| • Total Dissolved Solids | mg/L | |
| • Five-Day Biochemical Oxygen Demand ($BOD_5$) | mg/L | |
| • Total Suspended Solids | mg/L | |
| • Total Coliform | MPN/100 mL | |
| • Fecal Coliform | MPN/100 mL | |

2. Records of discharge shall be maintained using the Discharge Notification Form provided as Attachment J.

3. Records shall be reported in accordance with sections VII.B.3 of the MRP.

## H. Records of Ground Water Monitoring – Applicable to CAFOs Required to Conduct Ground Water Monitoring

1. If required by the Executive Officer to prepare a ground water monitoring program n accordance with section VII.C.2.c.iii of this Board Order, the Discharger shall maintain the records described in Table E-14 for monitoring conducted in accordance with its required ground water monitoring program, if applicable.

**Table E-14. Ground Water Monitoring Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Total dissolved solids | mg/L | 1x/Quarter |
| Nitrate-nitrogen | mg/L | |
| pH | pH units | |
| Total coliform | MPN/100 mL | |

2. Records shall be submitted or otherwise made available to the Regional Water Board in accordance with the Discharger's ground water monitoring program.

## I. Materials Monitoring Records – Applicable to CAFOs with On-site Composting Operations

1. The Discharger shall maintain the records described in Table E-15 for all on-site composting operations.

**Table E-15. Materials Monitoring Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Quantity and description of manure received from each source | tons | 1x/Month |
| Quantity and description of greenwaste received from each source | | |
| Quantity and description of fertilizer received from each source | | |
| Quantity of composted material shipped off site | | |
| Estimated quantities of raw materials, in-process-inventory and finished compost on site | | |

2. Monitoring results shall be submitted with the annual report.

## J. Trucking Manifests – Applicable to CAFOs with On-site Composting Operations

1. The Discharger shall maintain on-site, in an orderly manner, trucking manifests (or its equivalent). These should clearly indicate the amounts, dates and sources/destinations of all incoming/outgoing material.

2. These documents shall be available for Regional Water Board staff review.

## K. Flood Protection and Storm Water Monitoring and Operation and Maintenance Records – Applicable to CAFOs with On-site Composting Operations

1. The Discharger shall document flood protection monitoring activities required under section V.F of the MRP.

2. The Discharger shall document any erosion control or drainage problems and/or related maintenance.

3. The Discharger shall maintain the records described in Table E-16 for all on-site composting operations.

**Table E-16. Storm Water Discharge Monitoring Record Keeping Requirements**

| Parameter | Units | Frequency |
|---|---|---|
| Total Suspended Solids | mg/L | 1x/Discharge Event |
| pH | pH units | |
| Specific Conductance | µmhos/cm | |
| Total Organic Carbon[1] | mg/L | |
| Iron[2] | mg/L | |
| Nitrate+Nitrite Nitrogen[2] | mg/L | |
| Hardness (measured as $CaCO_3$) | mg/L | |
| Lead[2] | µg/L | |
| Zinc[2] | µg/L | |
| Phosphorus[2] | µg/L | |
| [1] Oil and grease may be substituted for total organic carbon. [2,]Additional analytical parameters required under State Water Board Industrial Storm Water Permit 97-03-DWQ (NPDES CAS000001) for activities only under SIC 287X. | | |

4. Monitoring results shall be submitted with the annual report.

## VII. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

2. The results of any analysis taken more frequently than required using analytical methods, monitoring procedures and performed at the locations specified in this MRP shall be reported to the Regional Water Board.

3. The Discharger shall report promptly in writing to the Regional Water Board of any changes or proposed changes in the size of the animal population, if it increases beyond the design capacity of the facility specified in the EWMP.

### B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through V. The Discharger shall submit annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Board Order. If the Discharger monitors any pollutant more frequently than required by this Board Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-17. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On… | Monitoring Period | SMR Due Date |
|---|---|---|---|
| 1x/Day | June 25, 2008 | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | Submit with Annual Report |
| 1x/Week | June 29, 2008 | Sunday through Saturday | Submit with Annual Report |
| 1x/Month | July 1, 2008 | 1st day of calendar month through last day of calendar month | Submit with Annual Report |
| 1x/Quarter | July 1, 2008 | January 1 through January 31<br>April 1 through April 30<br>July 1 through July 31<br>October 1 through October 31 | Submit with Annual Report |
| 1x/Discharge Event | June 25, 2008 | January 1 through December 31 | Oral: Within 24 hours of the discharge<br>Written: Within 2 weeks of the oral notification |

4. Reporting Protocols. The Discharger shall report with each sample result the current Method Detection Limit (MDL), as determined by the procedure in Part 136. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

5. The Discharger shall submit SMRs in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations shall include a description of the requirement that was violated and a description of the violation.

c. SMRs shall be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

## C. Annual Reports

1. By January 15 of each year, the Discharger shall submit an Annual Report (Attachment G) for the previous calendar year.

2. The Discharger shall attach a cover letter to the Annual Report. The information contained in the cover letter shall clearly identify violations of the WDRs and report any noncompliance that occurred during the year. Further, the cover letter shall discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations shall include a description of the requirement that was violated and a description of the violation.

## D. Unauthorized Discharges

The Discharger shall notify the Office of Emergency Services (800) 852-7550 and the Regional Water Board (760) 346-7491, by telephone within 24 hours of any unauthorized discharge of wastes. This notification shall be followed by a written report that shall be submitted to the Regional Water Board within two weeks of the discharge. The written report shall contain:

1. The approximate date and time of the discharge;
2. The flow rate and duration of the discharge;
3. The specific type and source of the waste discharges (e.g., overflow from holding pond, rainfall runoff from the manure storage areas, etc.); and
4. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of the discharge.

## E. Flood Protection Monitoring Reports – Applicable to CAFOs with On-site Composting Operations

If significant damage to the flood protection facilities is found, the Discharger shall report this information to the Regional Water Board immediately by telephone, and transmit by letter within 2 weeks of its occurrence the following information:

1. Location and extent of damage;

2. Interim measures to be taken to assure that no wastes are discharged from the facility; and

3. Time schedule for repairs.

## VIII. SUMMARY OF MONITORING, RECORD-KEEPING, AND REPORTING REQUIREMENTS

Table E-18 provides a summary of monitoring, record keeping, and reporting requirements contained in the MRP.This table is provided as a tool to facilitate compliance with the monitoring, reporting and record keeping requirements of this Board Order. This table is not comprehensive. Dischargers must read sections referenced in the "Permit Reference" columns for the details of each requirement summarized in the table.

**Table E-18. Summary of Monitoring, Record Keeping, and Reporting Requirements**

| Permit Reference | | | | Requirement | Monitoring Frequency | Report Due |
|---|---|---|---|---|---|---|
| Board Order | MRP | | | | | |
| | Monitoring | Records | Reports | | | |
| ***Note: This table is provided as a tool to facilitate compliance with the monitoring, reporting, and record keeping requirements of this Board Order. This table is not comprehensive. Dischargers must read sections referenced in the "Permit Reference" columns for the details of each requirement summarized below.*** | | | | | | |
| **I. Monitoring Requirements for All CAFOs** | | | | | | |
| | | | | Production Area Visual Inspections: | | |
| | V.A.1 | VI.E | VII.C, Att. G | 1) Manure, litter, and process wastewater impoundments | Weekly | Annual Report (certification) |
| | V.B.1 | VI.E | | 2) Storm water containment structures | During each significant storm event | N/A |
| | V.B.1 | VI.E | | 3) Manure and wastewater storage areas and land application areas (note any discharges from the property) | Daily during land application events | N/A |
| VII.A.2.c | III.A | VI.G | VII.B.3, Att. J | Effluent Monitoring - Sample and analyze discharges from the production and land application area (except agricultural stormwater discharges) | Every discharge | 1) Oral report within 24 hours 2) Written report within 2 weeks |
| VII.A.2.d | | | | Report changes in ownership or management | As necessary | Prior to change |
| VII.A.2.e | | | | Report modifications which would result in a change in the quality or quantity of manure, litter, or land applied. | As necessary | Prior to change |
| VII.C.2.c.iii | IV | VI.H | | Ground Water Monitoring (only Dischargers required by the Executive Officer to prepare a ground water monitoring program):<br>1) Sample and analyze ground water according to the approved monitoring program<br>2) Determine ground water elevation and gradient | Quarterly | In accordance with Discharger's Ground Water Monitoring Program |
| **II. Monitoring Requirements for Dairy, Cattle, Swine, Poultry and Veal Calf CAFOs** (Items listed under section I, and the following:) | | | | | | |
| | | | | Production Area Visual Inspections: | | |

| Permit Reference | | | | Requirement | Monitoring Frequency | Report Due |
|---|---|---|---|---|---|---|
| Board Order | MRP | | | | | |
| | Monitoring | Records | Reports | | | |
| ***Note: This table is provided as a tool to facilitate compliance with the monitoring, reporting, and record keeping requirements of this Board Order. This table is not comprehensive. Dischargers must read sections referenced in the "Permit Reference" columns for the details of each requirement summarized below.*** | | | | | | |
| V.B.1 | V.A.1 | VI.E, Att. I | VII.C, Att. G | 1) All water lines, including drinking water or cooling water lines | Daily | Annual Report (certification) |
| | V.A.1 | VI.E, Att. I | VII.C, Att. G | 2) Storm water diversion devices,<br>3) Runoff diversion structures<br>4) Devices channeling contaminated storm water to storage/containment structures<br>5) Document level in all open surface liquid impoundments | Weekly | Annual Report (certification) |
| | | VI.E | | 6) Document corrective actions | As necessary | N/A |
| | | VI.E | | Design documentation for manure, litter, and wastewater storage structures | Once during permit term | N/A |
| IV.E | | VI.E | | Document animal mortality handling practices | As necessary | N/A |
| **III. Monitoring Requirements for Large CAFOs that Transfer Manure, Litter or Process Wastewater to Other Persons** (Items listed under section I, items listed under section II if applicable, and the following:) | | | | | | |
| VII.C.2.a.i(III) | V.C.3 | VI.A, Att. H | VII.C | Prepare manure tracking manifest | Every manure or process wastewater hauling event | Annual Report (certification) |
| VII.B.2.b.ii, VII.C.2.b.iii, VII.C.4.a.i | V.C.1 | VI.C | | Sample and analyze manure, litter, and process wastewater | Annually | N/A |
| **IV. Dischargers that Apply Manure, Litter, or Process Wastewater to Land Under the CAFOs Ownership or Operational Control** (Items listed under section I, items listed under sections II and III if applicable, and the following:) | | | | | | |
| VII.B.2.b.ii, VII.C.2.b.iii, VII.C.4.a.i | V.C.1 | VI.C | | Sample and analyze manure, litter, and process wastewater | Annually | N/A |
| V.B.2.a.iii | V.C.2 | VI.F | | Inspect land application equipment for leaks | Periodically | N/A |
| V.B.2.b.ii, VII.C.2.b.iii | V.D | VI.D | | Soil Monitoring - Sample and analyze soil in the croplands to be used for land application of manure, litter, or process wastewater | Once every 5 years | N/A |
| V.B.2, VII.C.2.b.v and x | | VI.B | | Nutrient Management Plan (NMP):<br>1) Maintain on-site a current site-specific NMP<br>2) Maintain on-site documentation of NMP implementation | N/A | NMP submitted by 12/31/2008 or 90 days prior to land application |

| Permit Reference | | | | Requirement | Monitoring Frequency | Report Due |
|---|---|---|---|---|---|---|
| Board Order | MRP | | | | | |
| | Monitoring | Records | Reports | | | |
| ***Note: This table is provided as a tool to facilitate compliance with the monitoring, reporting, and record keeping requirements of this Board Order. This table is not comprehensive. Dischargers must read sections referenced in the "Permit Reference" columns for the details of each requirement summarized below.*** | | | | | | |
| | | | | Land Application Records: | | |
| VII.C.2.b.v | | VI.F | | 1) Document crop and expected yield for each field | Seasonally | N/A |
| VII.C.2.b.v | | VI.F | | 2) Document test methods and sampling protocols used for manure, litter, wastewater, and soil monitoring<br>3) Document basis for determining application rates used for each field<br>4) Document total N and P to be applied to each field | 1x/Permit Term unless revised | N/A |
| VII.C.2.b.v | | VI.F | | 5) Date of application<br>6) Method of application<br>7) Weather conditions at the time of, and for 24 hours before and after application<br>8) Total amount of N and P and total volume of manure actually applied to each field | Every land application event | N/A |
| **V. Dischargers with On-Site Composting Operations (unless covered under separate WDRs)**<br>(Items listed under section I, items listed under sections II, III and IV if applicable, and the following:) | | | | | | |
| VII.C.2.d.xi | V.E | VI.I | VII.C, Att. G | Materials Monitoring:<br>1) Monitor quantities of manure, greenwaste and fertilizer received from each source.<br>2) Monitor Quantity of composted material shipped off-site.<br>3) Estimate quantities of raw materials, in-process inventory and finished compost on-site | Monthly | Annual Report |
| VII.C.2.d.xi | | VI.J | | Maintain trucking manifests indicating amounts, dates, and sources/destinations of all incoming/outgoing material | Every hauling event | N/A |
| VII.C.2.d.xi | V.F | VI.K | VII.E, Att. G | Flood Protection Monitoring:<br>1) Inspect all internal and external flood protection facilities associated with composting operations<br>2) Document erosion control or drainage problems and/or related maintenance | At least quarterly and following each storm generating storm water flow | Report significant damage:<br>1) immediately by telephone<br>2) by letter within 2 weeks |
| VII.C.2.d.xi | V.F | VI.K | VII.B.3, Att. J | Storm Water Monitoring:<br>Analyze storm water discharges from composting operations | Every discharge | 1) Oral report within 24 hours<br>2) Written report within 2 weeks |

# ATTACHMENT F – FACT SHEET

## Table of Contents

# ATTACHMENT F – FACT SHEET

As described in section II of this Board Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Board Order.

## I. PERMIT INFORMATION

A. On September 27, 1995, the Board adopted Board Order No. 95-700, General Waste Discharge Requirements for CAFOs including dairies, within the Colorado River Basin Region (NPDES No. CAG017001). On March 14, 2001 the Regional Water Board adopted Board Order No. 01-800, superseding Board Order No. 95-700. To date, approximately 30 CAFOs have been enrolled under Board Order No. 01-800. Board Order No. 01-800 expired on March 14, 2006. The CAFOs currently enrolled under Board Order No. 01-800 or in the process of enrolling under Board Order No. 01-800 want to continue to discharge wastes. Therefore, it is necessary to renew the Waste Discharge Requirements contained in Board Order No. 01-800. The proposed Board Order replaces Board Order No. 01-800.

B. For the purposes of this Board Order, references to the "Discharger" "Enrollee" or "Permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

## II. BACKGROUND

### A. Definition of CAFOs

On February 12, 2003, USEPA published revisions to its CWA regulations for CAFOs. The references to Parts 122, 123, and 412, title 40 of the Code of Federal Regulations[1] below incorporate the revisions that are part of the final rule.

Section 122.23 defines an animal feeding operation (AFO) as an operation where animals have been, are, or will be confined and fed for a total of 45 days or more in any 12-month period, and where vegetation is not sustained in the confinement area. An AFO is considered a CAFO based on either a facility's animal population or regardless of population, if it is determined to be a significant contributor of pollutants to waters of the United States by the appropriate authority.

Section 122.23 defines a CAFO as any AFO that either meets a certain animal population threshold, or, regardless of population, is determined to be a significant contributor of pollutants to waters of the United States by the appropriate authority. The CWA states that all CAFOs are point sources, and thus are subject to NPDES permitting requirements. When considering the designation of an AFO as a CAFO as a result of being a significant contributor of pollutants, the appropriate authority (the Regional Water Board is an appropriate authority) must consider certain factors. These factors 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 discharged from multiple AFOs in the same geographic area. The Regional Water Board has determined that all animal feeding

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

operations in the Region meet one or more of these criteria, and, therefore, should be designated as CAFOs under the CWA. Consistent with the previous Board Order No. 01-800, this Board Order designates all AFOs, including all feedlots, dairies, heifer ranches, calf nurseries, and other similar facilities in the Region as CAFOs, and makes them subject to NPDES requirements, except as noted in section I.D, Limitations on Coverage, 1. Therefore, the acronym "CAFO" will be used to describe all facilities addressed by this Board Order.

Criteria cited in section 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 CAFOs in the Region can be adequately and appropriately regulated by coverage under the terms of a general waste discharge permit.

Since 1995, the Regional Water Board has adopted a general Board Order in 1995 and 2001, adoption of Board Order No. R7-2008-0800 is necessary to continue oversight of the CAFOs within the Region.

## B. General Permit Application and Coverage

The purpose of this Board Order is to facilitate regulation of discharges from CAFOs. To obtain coverage under this Board Order, the Discharger shall submit the first annual fee and any of the following that have not already been submitted under Board Order No. 01-800: a Notice of Intent (NOI), an Engineered Waste Management Plan (EWMP), and, after September 30, 2008, a Nutrient Management Plan (NMP) .Signing the certification on the NOI signifies the Discharger intends to comply with the provisions of this Board Order. An NOI must be signed to be valid.

## C. Description of Discharge

Dairies, feedlots, and other operations that concentrate animals in a confinement area are high profile operations that generate large volumes of wastes that can impact both ground and surface water if not managed properly. Examples of CAFO wastes include manure, washwater[2] containing manure, stormwater runoff from manured areas, and other runoff from manured areas such as overflow from waterers in the animal confinement areas (where overflow from waterers is captured and conveyed away from the confinement areas in an enclosed system such that the overflow does not come into contact with manure, feed or other raw materials or other process wastewater, and the water has not come into contact with animals in the production area other than contact necessary for drinking (i.e., animals did not contact the water in any way that would cause manure or other wastes to be added to the water) it is not considered to be a process waste stream). During the previous permit term, the Regional Water Board issued a letter dated July 11, 2001, to the enrollees that stated, "It has been determined that a facility that has overflow pipes in its drinkers which take the water through an

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

underground piping system and discharges this water off-site, is not in violation of Board Order No. 01-800, given this water continues to have no contact with the pens themselves." The Regional Water Board has considered such discharges to be low-threat discharges, in other words, they are liquid wastes containing pollutant concentrations that are not expected to adversely impact the quality of waters of the State under ambient conditions.

CAFO wastes are typically high in ammonia, bacteria and organic matter. Stormwater runoff from manured areas also contains high concentrations of organic materials, salt and nitrates. In surface waters the ammonia and nitrate are highly toxic to aquatic organisms, decay of the organic matter reduces the oxygen content of the water, and the bacteria poses a threat to the beneficial uses of the water. Stormwater runoff from composting operations can contain constituents similar to those found in stormwater runoff from manured areas at CAFOs. Stormwater runoff from composting operations at CAFOs can also contain other constituents depending on the amendments and additives used in the operation, which may include lime, rock phosphate, gypsum, or sulfur. Proper management of these waste streams is essential to protect the ground and the surface water resources of the Region. Section 402(p) of the CWA, as amended by the Water Quality Act of 1987 and the related regulations published by the USEPA on November 16, 1990 (Parts 122 [revised on February 12, 2003], 123 and 124), requires an NPDES permit for pollutant discharges from CAFOs. The USEPA's Effluent Guidelines and Standards for Feedlots are contained in Part 412 (revised February 12, 2003 and February 10, 2006). At present, Colorado River Basin Region has 30 CAFOs within the Region. Most of these facilities are feedlots, with the exception of four dairies.

## D. Description of Discharge Location

Most of the CAFOs in the Region are located in the Imperial Valley. The climate of the Imperial Valley is typical of a desert area and is characterized by hot, dry summers, occasional thunderstorms, and gusty high winds with sandstorms. It is one of the most arid areas in the United States, has an average annual rainfall of less than three (3) inches, and temperatures in excess of 100ºF for more than 100 days per year. The average January temperature is 54ºF, and the average July temperature is 92ºF. Evapotranspiration rates for Imperial Valley can exceed 7 ft/yr, and in hot summer months can be one-third of an inch per day.

All of the major soil associations within the Imperial Valley are within the "wet" series of poorly drained soils due to their low permeabilities (less than 0.5 inches per hour). The following three general soil associations dominate Imperial Valley:

- Imperial (nearly level, moderately well drained silty clay);
- Imperial-Holtville-Glenbar (nearly level, moderately well drained and well drained silty clay, silty clay loam, and clay loam); and
- Meloland-Vint-Indio (nearly level, well-drained fine sand, loamy very fine sand, fine sandy loam, very fine sandy loam, loam and silt loam).

Approximately 480,000 acres in the Imperial Valley are considered farmable. First encountered groundwater in the Imperial Valley typically has a relatively high salinity (i.e., TDS of about 3,000 to 5,000 mg/l) and can be as shallow as a few feet below ground surface. Certain farm areas within the Imperial Valley are serviced by a system of underground drain lines ("tile lines") to manage soil salinity and water content. Irrigation water that has percolated through the soil, known as tilewater, is collected in the tile lines beneath the fields, and is discharged to surface drainage canals by gravity flow or a sump system. The surface drains discharge their flow mainly into the Alamo River or the New River, which are the two main tributaries of the Salton Sea. Some drains also discharge their flow directly into the Salton Sea. The drains, Alamo and New Rivers, and the Salton Sea are waters of the United States.

Wastes from CAFOs contain high concentrations of salts (primarily total dissolved solids) and nitrates. Previous studies conducted by the Santa Ana Regional Water Quality Control Board have shown that cow manure produced in that Region contains about 160 pounds of salt per dry ton of manure (110 pounds of salt per ton of manure at 33% moisture). The application of manure or the discharge of process wastewater to land results in the discharge of salts that has the potential to adversely impact the quality of groundwater and surface water in this Region. This is particularly so if the CAFO facilities (e.g., waste ponds) are within the influence of a tilewater drainage system, there is insufficient separation between the bottom of ponds and first encountered groundwater, or the wastes are applied to land at rates that exceed crop demand or soil needs.

## E. Receiving Waters

The Regional Water Board adopted the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) on November 17, 1993. The Basin Plan designates the beneficial uses of groundwater and surface waters of the Region and water quality objectives to protect those uses. This Board Order specifies requirements necessary to meet the water quality objectives and protect beneficial uses specified in the Basin Plan.

## F. Eligible Discharges

The following types of CAFOs located within the Colorado River Basin Region are eligible for coverage under this permit:

- Horse, sheep, and duck CAFOs established after February 14, 1974.
- New and existing CAFOs that confine dairy cows and cattle other than veal calves.
- New and existing CAFOs that confine swine, poultry, and veal calves.

## G. Ineligible Discharges

Consistent with the previous Board Order No. 01-800, the following types of facilities are not required to obtain authorization under this Board Order:

- Dairies where the animal population is less than 20 (dry or milking cows)

- Heifer or calf ranches where the herd size is less than 50.

Duck, Horse, and Sheep CAFOs established prior to February 14, 1974 are not eligible for coverage under this Board Order because the effluent limitations guidelines applicable to these facilities are different than the effluent limitations established in this Board Order. Therefore, according to NPDES regulations at section 122.28 that provide for the issuance of general permits and Section 13263 of the California Water Code that authorizes the Regional Water Board to prescribe general waste discharge requirements, it is not appropriate to regulate these facilities under this Board Order. The Regional Water Board is not aware of the existence of any Duck, Horse, or Sheep CAFOs established prior to 1974 in the Region.

### H. Summary of Existing Requirements Under Board Order No. 01-800

Board Order No. 01-800, which this Board Order replaces, prohibited discharges to surface waters other than from facilities designed, constructed and maintained to contain process wastewater, including runoff and direct precipitation resulting from a 25-year, 24-hour storm event. In addition, Board Order No. 01-800 required the Dischargers to develop, prepare, and implement an EWMP and included specific requirements with regard to pond construction and maintenance, dead animal disposal, and land application rates. Board Order No. 01-800 also required the Dischargers to submit an annual self-monitoring report. These requirements are continued in Board Order No. R7-2008-0800.

## III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Board Order are based on the requirements and authorities described in this section.

### A. Legal Authorities

This Board Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a general NPDES permit for point source discharges from CAFOs to surface waters. This Board Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

### B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, commencing with Section 21100 of the Public Resources Code.

### C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and

policies to achieve those objectives for all waters addressed through the plan (includes amendments adopted by the Regional Water Board to date). In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The existing and potential beneficial uses of the various surface waters that could be impacted by the discharge of CAFO wastes in the Colorado River Basin Region include one or more of the following:

- Agricultural supply (AGR)
- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

The existing and potential beneficial uses of groundwater that could be impacted by the discharge of CAFO wastes within the Colorado River Basin Region include one or more of the following:

- Agricultural supply (AGR)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)[3]

Requirements of this Board Order implement the Basin Plan.

2. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (California Fish and Game Code section 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

3. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for

[3] At such time as the need arises to know whether a particular aquifer which has no known existing MUN use should be considered as a source of drinking water, the Regional Water Board will make such determination based on criteria listed in the "Sources of Drinking Water Policy" in Chapter 2 of the Basin Plan. An "X" placed under the MUN in Table 2-5 of the Basin Plan for a particular hydrologic unit indicates only that at least one of the aquifers in that unit currently supports a MUN beneficial use. The actual MUN usage of the Imperial hydrologic unit is limited only to a small portion of that ground water unit.

CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

4. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

5. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

## D. Impaired Water Bodies on CWA 303(d) List

The 2006 USEPA 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Imperial Valley Drains as impaired by dieldrin, DDT, endosulfan, PCBs, toxaphene, and selenium. Further, sedimentation/silt had previously been listed as a pollutant impairing Imperial Valley Drains; a sedimentation/siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains has been approved by USEPA. The sedimentation/siltation TMDL does not establish a WLA for discharges from CAFOs. However, monitoring for TSS is required during each discharge event. Imperial Valley Drains discharge to two (2) major waterbodies, the New River and the Alamo River.

The New River is listed as impaired by 1,2,4-trimethylbenzene, chlordane, chloroform, chlorpyrifos, DDT, diazinon, dieldrin, mercury, meta-para xylenes, nutrients, dissolved oxygen, o-xylenes, PCBs, p-cymene, p-dichlorobenzene, pesticides, selenium, toluene, toxaphene, toxicity, copper and trash. A pathogen and sedimentation/siltation TMDL have been approved by USEPA for the New River and are implemented in this Order. The pathogen and sedimentation/siltation TMDL's established WLAs for fecal coliform, E. coli, enterococci and sediment. The established fecal coliform, E. coli, enterococci and total suspended solids effluent limitations in this Board Order comply with the WLAs established in the New River pathogen and sedimentation/siltation TMDLs. Further, there are two TMDLs under development for dissolved oxygen and VOCs for the New River. A Trash TMDL for the New River has been approved by the Regional Water Board and State Water Board and is in the process of being approved by the Office of Administrative Law and the USEPA. Further, the Alamo River is listed as impaired by

chlorpyrifos, DDT, dieldrin, PCBs (polychlorinated biphenyls), selenium and toxaphene. There is an EPA-approved Total Maximum Daily Load (TMDL) for sedimentation/siltation for the Alamo River.

Also, the 2006 USEPA 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Coachella Valley Storm Water Channel as impaired by pathogens and toxaphene. No Total Maximum Daily Loads (TMDLs) have been developed to date, although a pathogen TMDL is being developed for the Coachella Valley Storm Water Channel.

In addition, the 303(d) List classifies the Salton Sea as impaired by nutrients, salt, and selenium. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel and Imperial Valley Drains, may be affected by future TMDLs. No TMDLs have been developed to date for the Salton Sea, although a nutrient TMDL is under development for the Salton Sea that may impact the permitted discharges to tributaries to the Salton Sea (Coachella Valley Storm Water Channel). This TMDL is tentatively scheduled for completion in 2009.

## IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Wastes from CAFOs contain high concentrations of salts (total dissolved solids and nitrates) and nutrients, and may contain pathogens, heavy metals and other pollutants. These wastes originate from the excretion of manure in corrals, milk barns and other areas where animals are concentrated. Wash water that is discharged from milk barns as a result of milk barn and cow cleaning contains approximately 10 percent of the daily manure excreted from a cow. Wash water is flushed from milk barns, generally into on-site wastewater containment ponds. Also, rainfall runoff that comes into contact with manure in corrals and other confinement areas carries manure from the corrals into the wastewater containment ponds.

Farming practices on lands that receive CAFO waste contribute salts, nutrients, pesticides, trace elements, sediments and other by-products that can affect the quality of surface water and groundwater. Evaporation and crop transpiration remove water from soils, which can result in an accumulation of salts in the root zone of the soils at levels that retard or inhibit plant growth. Additional amounts of water often are applied to leach the salts below the root zones. The leached salts can reach groundwater or surface water. Even using the most efficient irrigation systems and appropriate fertilizer application rates and timing to correspond to crop needs, irrigation of cropland will have some measurable impact on existing high quality groundwater as a result of the leaching required to protect the crops from salt buildup in the root zone.

In land applications areas where groundwater is shallow, some Dischargers have installed subsurface (tile) drainage systems to maintain the groundwater level below the crop's root zone. Drainage from these systems may be discharged directly to surface water bodies or to drainage ditches that discharge to surface water bodies. Some of these systems discharge to evaporation basins that are subject to waste discharge requirements. Discharges from these systems have elevated concentrations of salts, including nitrates and other nutrients. This Board Order requires Dischargers who have these systems to identify their location and discharge point and to monitor discharges from these systems.

To ensure that wastes and associated pollutants from CAFOs are managed appropriately, it is vital to make sure that discharges of these wastes and all application of manure and process wastewater to land are regulated so they will not adversely impact the quality of groundwater and surface water in the Region. When the requirements specified in this Board Order are met, water quality of the Region is not expected to degrade as a result of discharges authorized under this Board Order.

The Board Order prohibits the discharge of pollutants from production areas except where precipitation causes a discharge from a facility designed, constructed, operated, and maintained to contain all manure and process wastewater and the runoff and direct precipitation from a 25-year, 24-hour storm event for new and existing CAFOs that confine dairy cows and cattle other than veal calves (40 C.F.R. § 412.31), for existing CAFOs that confine swine, poultry and veal calves (40 C.F.R. § 412.43), and for horse, sheep, and duck CAFOs established after February 14, 1974 (40 C.F.R. §§ 412.13 and 412.25) and from a 100-year, 24-hour storm event for new swine, poultry, and veal calf CAFOs (40 C.F.R. § 412.46). To comply with these effluent limitations, the Discharger must also comply with additional measures including production area visual inspections, installation of a depth marker in all open surface liquid impoundments, and correcting any deficiencies found as a result of the visual inspections in addition to keeping specific records for the production area and land application (40 C.F.R. § 412.37). (Note that the Additional Measures specified at section 412.37 also include requirements for properly handling mortalities. These requirements are included in this Board Order as a Prohibition rather than an effluent limitation.) Further, the Board Order requires that the facilities be protected from inundation from a 100-year frequency storm (Title 27, California Code of Regulations).

To ensure that compliance with the effluent limitations in this Board Order is achieved, and consistent with the previous Board Order No. 01-800, each Discharger has been required to develop, prepare and implement an Engineered Waste Management Plan (EWMP). The requirements of the EWMP are included in Attachment B of this Board Order. All of the facilities that were authorized to discharge under Board Order No. 01-800 and will, therefore, automatically be authorized under this Board Order have already submitted EWMPs to the Regional Water Board. All of these EWMPs have been approved. New dischargers under this Board Order will be required to submit an EWMP at least 30 days prior to any new discharge.

Consistent with Board Order No. 01-800, this Board Order requires the EWMP to be prepared by a registered professional engineer or other qualified individual. The Regional Water Board is aware of software programs such as the Natural Resource Conservation Service's (NRCS) Animal Waste Management (AWM) program that can be used to determine the necessary size of manure and wastewater storage facilities. Such programs may be used in the development of EWMPs as long as the resulting plan is consistent with the EWMP requirements in Attachment B of this Board Order. Furthermore, the Regional Water Board is aware that such programs are designed so that they may be used by CAFO operators to design storage facilities. CAFO operators may use AWM or similar software to assist in the development of an EWMP; however, a registered professional engineer or other qualified individual must certify that the resulting EWMP meets the requirements in Attachment B of this Board Order. Other qualified individuals may include University of

California Extension specialists or employees of NRCS, subject to the approval of the Regional Water Board.

This Board Order also prohibits discharges from land application areas under the ownership or operational control of the CAFO, except agricultural stormwater discharges. Precipitation-caused discharges from a land application area where the manure, litter, or process wastewater has been applied in accordance with the provisions in the Discharger's Nutrient Management Plan (NMP) are considered to be agricultural stormwater discharges (40 C.F.R. § 122.23(e)). Each Discharger that applies manure, litter, or process wastewater to croplands under the CAFO's ownership or operational control must develop, prepare and implement a NMP that includes specific elements specified at sections 122.42(e)(1)(vi) – (ix) (section VII.C.2.b of this Board Order) and 412.4(c) (section V.B.2 of this Board Order). Section 122.42(e)(1) also includes requirements not related to nutrient management as minimum elements of a CAFO's NMP. Because most of the CAFOs in the Region do not land apply manure, litter, or process wastewater to croplands, this Board Order includes the requirements from sections 122.42(e)(1)(i) – (v) as stand-alone provisions so that only those CAFOs that do land apply manure, litter, or process wastewater are required to prepare NMPs.

Dischargers are not required to use certified planners to prepare NMPs, but the Regional Water Board does encourage Dischargers to work with experts such as USDA's NRCS and Cooperative Extension who can help make sure that NMPs meet all regulatory requirements and promote sustainable agriculture.

The technical standards for nutrient management as specified in this Board Order are based on technical standards established in WDRs for similar facilities in the state, on guidelines in NRCS Conservation Practices Standard Code 590 (Nutrient Management), and on recommendations from the University of California Cooperative Extension. The technical standards are consistent with the USEPA best practicable control technology and the best management practices required by section 122.42(e)(1)(vi)-(ix) and the large CAFO best practicable control technology. Therefore, precipitation-related discharges from land application areas at facilities operating in compliance with this Board Order are agricultural storm water discharges. And since they are consistent with USEPA best practicable control technology, the technical standards for nutrient management represent best practicable treatment or control for the purposes of State Water Resources Control Board Resolution No. 68-16.

A number of the CAFOs within the Region compost, or have expressed interested in composting, manure generated at the CAFO. The Regional Water Board routinely issues individual Waste Discharge Requirements (WDRs) to composting operations. This Board Order includes requirements that apply to CAFOs with on-site composting operations to relieve these facilities of the need to maintain separate permits for the composting activities. Dischargers that choose to maintain separate WDRs for on-site composting operations are not subject to the requirements of this Board Order that apply to on-site composting operations. The requirements for on-site composting operations are consistent with the surface water protection provisions of individual WDRs issued to composting operations in the Region and with the requirements of Title 14, Chapter 3.1 of the California Code of Regulations.

This Board Order requires the implementation of a manure tracking manifest system by all CAFOs in operation within the region. CAFO manure contains much more salt per unit of nitrogen than other kind of fertilizers. For this reason, the use of manure to meet the nutrient needs of crops results in excessive application of salts which are not utilized by plants and which can migrate to groundwater. The manure tracking manifest system data may be used if necessary to identify croplands where manure is routinely applied at rates that exceed crop needs. Consistent with individual WDRs issued to composting facilities, this Board Order also requires CAFOs with on-site composting operations not covered by separate WDRs to maintain trucking manifests documenting the amounts, dates, and sources or destinations of all incoming and outgoing material.

The following table clarifies the manifest requirements for Dischargers with on-site composting operations covered under this Board Order.

| **Description** | **Manifest Requirements of this Board Order** |
|---|---|
| Third party composts manure on-site and compost is transferred off-site. Third party composting operation is covered under separate WDRs | Discharger maintains manifest of manure transferred to on-site, third party composter. |
| Third party composts all manure on-site and all compost is spread on land owned/operated by the Discharger, **or**<br><br>Discharger composts manure on-site and then applies all compost to land owned/operated by the Discharger (no manure or compost is transferred off site). | No manifest requirements. |
| Discharger composts manure on site and transfers compost to third party (off-site), or<br><br>Third party composts manure on-site and compost is transferred off site. Composting operation is covered under this Board Order. | Discharger maintains manifest of compost transferred off site |

The groundwater salinity within Imperial Valley is naturally high. For that reason the application of manure is not expected to impact the quality of the groundwater. However, a study is highly recommended to determine the acceptable salt loading rate in this area.

Dairies are known to be a major contributor of groundwater contamination in other areas of the state, namely Chino Basin. Upon the submittal of the EWMP, the Executive Officer shall determine the need to prepare groundwater monitoring program on a case-by-case basis. This is a BPJ-based requirement for protection of groundwater.

This Board Order also includes the requirement that dairy operations and other confined animal facilities comply with the Basin Plan and Title 27 of the California Code of Regulations.

In conclusion, the overall CAFOs management strategy includes permitting, manure disposal tracking, groundwater monitoring (where appropriate), and storm water management and enforcement.

While developing effluent and receiving water limitations, monitoring requirements, and special conditions for the draft Board Order, the following information sources were used:

- Code of Federal Regulations – Title 40.
- Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date.
- Board Order 01-800.
- Central Valley Regional Water Quality Control Board's Waste Discharge Requirements for Existing Milk Cow Dairies (Board Order No. R5-2007-0035).
- Santa Ana Regional Water Quality Control Board's General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Regulated Facilities) Within the Santa Ana Region (Board Order No. R8-2007-0001).

## A. Consistency with the Decision of the Second Circuit Court's Decision in *Waterkeeper Alliance, Inc. v. EPA*

On February 28, 2005, The U.S. Court of Appeals for the Second Circuit ruled on petitions filed by CAFO industry organizations and environmental groups for judicial review of certain aspects of USEPA's 2003 CAFO rule (*Waterkeeper Alliance Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005)). As part of this decision, the court found that the terms of NMPs constitute effluent limitations and, as such, the 2003 CAFO rule failed to provide for adequate permitting authority and public review of those effluent limitations. USEPA is in the process of revising the CAFO regulations to address this and other elements of the court's decision. This Board Order addresses the court's position as follows:

- The minimum required elements of an NMP that do not address nutrient management have been included as stand-alone, enforceable provisions of the Board Order (section VII.C.2.a). The Regional Water Board encourages public review of these requirements through participation in the WDR adoption process.
- All CAFOs that apply manure, litter, or process wastewater to croplands under their ownership or operational control are required to develop, prepare and implement NMPs (sections IV.B.2.a and VII.C.2.b). NMPs must be submitted to and approved by the Regional Water Board (section VII.C.2.b.vi). The Regional Water Board will make NMPs available for public review (section VII.C.2.b.viii).
- The approved, site-specific NMP in its entirety will be an enforceable part of the Board Order (section VII.C.2.b.viii). As such, the Regional Water Board has not defined individual "terms" to be included as part of the permit as discussed in USEPA's June 2006 and March 2008 notices of proposed rulemaking to address the *Waterkeeper* decision.
- Facility-specific information, including NMPs and data related to crops, manure production and application, and manure transfers are required to be submitted to the Regional Water Board and are publicly available in accordance with the California Public Records Act.

## B. Discharge Prohibitions

Effluent and receiving water limitations in this Board Order are based on the Federal CWA, Basin Plan, State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology.

Board Order No. R7-2008-0800 prohibits any discharge of wastes causing degradation of any water supply. This Board Order also prohibits the discharge of wastes except as provided for in the effluent limitations and discharge specifications of this Board Order. This Board Order also prohibits pollution caused by certain activities associated with composting operations as well as the use of certain materials in composting operations, consistent with individual WDRs issued by the Regional Water Board to composting facilities in the region.

## C. Technology-Based Effluent Limitations

### 1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Board Order must meet minimum federal technology-based requirements based on Effluent Limitations Guidelines and Standards (ELGs) for Concentrated Animal Feeding Operations in Part 412 and Best Professional Judgment (BPJ) in accordance with section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

**2. Applicable Technology-Based Effluent Limitations**

The provisions of this Board Order establish production area design standards and operational procedures and require the development and implementation of EWMPs and NMPs to control and abate the discharge of pollutants to surface waters and to achieve compliance with applicable water quality standards utilizing BPT requirements established in the effluent limitations guidelines (ELGs) at Part 412. These ELGs apply to Large CAFOs. Given the similarity in the operational characteristics of CAFOs, the Regional Water Board finds that it is appropriate to develop BPJ-based effluent limitations for Medium CAFOs and AFOs that have been designated as CAFOs that are the same as the effluent limitations established in the ELG for Large CAFOs.

The effluent limitations for most CAFOs that will be authorized to discharge under this Board Order require that the Discharger's production area be designed, constructed, operated, and maintained to contain all process wastewater plus the direct precipitation and runoff from a 25-year, 24-hour storm event. The storm event design standard for new CAFOs is the 100-year, 24-hour storm. Requirements for on-site composting operations also require storage capacity for a 100-year, 24-hour storm. Some CAFOs in the Region have inquired whether containment berms around the entire facility or entire composting area would be an acceptable alternative to constructing containment ponds or impoundments. Specific to composting operations, Title 14 composting requlations and existing WDRs for composting operations in the Region do not specifically address this situation. For CAFOs in general, existing CAFO requirements including federal regulations and Board Order No. 01-800 also do not provide clear guidance. The Regional Water Board has determined that berms around the entire facility or composting area would be approved as long as the area that would act as an impoundment meets all requirements of the EWMP, particularly with respect to storage capacity and the permeability of underlying soils.

**3. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Board Order are at least as stringent as the effluent limitations in the previous Board Order. Therefore, this Board Order is in compliance with the anti-backsliding requirements.

**4. Satisfaction of Antidegradation Policy**

The Regional Water Board has considered antidegradation pursuant to section 131.12 and State Water Board Resolution No. 68-16 and finds that:

a. Appropriate salt and nutrient offset programs must be implemented to protect water quality;
b. The discharge conditions and effluent limitations established in this Board Order ensure that the existing beneficial uses and quality of waters in the Region will be maintained and protected;
c. Discharges regulated by this Board Order should not lower water quality if the terms and conditions of this Board Order are met.

Therefore, this Board Order is in compliance with the state anti-degradation policy.

## D. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The designated beneficial uses of surface waters throughout the Colorado River Basin Region include agricultural supply, aquaculture, cold freshwater habitat, freshwater replenishment, ground water recharge, hydropower generation, industrial service supply, municipal and domestic supply, non-contact water recreation, preservation of rare, threatened, or endangered species, warm freshwater habitat, water contact recreation, and wildlife habitat. The designated beneficial uses for ground waters throughout the Region include agricultural supply, industrial service supply, and municipal and domestic supply.

### 3. Determining the Need for WQBELs

NPDES permits for discharges to waters of the United States must meet all applicable provisions of sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutants and any more stringent controls necessary to meet water quality standards.

CAFOs may have multiple discharges from production areas and land application areas. Establishment of generally-applicable WQBELs for land application areas is not feasible because discharges from land application areas are either subject to the technology-based effluent limitations in the ELG or exempt under the CWA agricultural stormwater exemption. To define the scope of the NPDES CAFO regulations, section 122.23(e) defines agricultural stormwater discharges exempt from NPDES regulation as precipitation-related discharges 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 sections 122.42(e)(1)(vi)-(ix), which are the land application provisions of the NPDES NMP requirements. In other words, CAFOs must develop, prepare and implement NMPs in accordance with the NPDES regulations and technology-based effluent limitations applicable to land application areas. As long as the CAFO is in compliance with these requirements, any precipitation-related discharge from the land application area is exempt from regulation.

For production areas, establishment of generally-applicable numeric effluent limitations is not feasible because (1) the only discharges to surface waterbodies, or tributaries thereof, that are permitted are those from rainfall events that cause an overflow from facilities designed, constructed, operated and maintained to contain all process wastewater plus the runoff and the direct precipitation (that have been commingled with manure) from a 25-year, 24-hour rainfall event (or 100-year, 24-hour rainfall event for new source swine, poultry, and veal calf CAFOs), (2) due to the significant volume of runoff involved from such events treatment of these discharges to meet numeric effluent limitations would be impractical, and (3) if the requirements specified in this Board Order are met, water quality of the Region is not expected to degrade as a result of discharges authorized under this Board Order.

Therefore, the effluent limitations contained in this Board Order are narrative and include the requirement to develop, prepare and implement an EWMP and NMP, which is equivalent to Best Management Practices (BMPs). Section 122.44 (k)(3) allows the use of BMPs to control and abate the discharge of pollutants when "numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." It is not feasible to establish WQBELs for pollutants in discharges from CAFOs; therefore, in lieu of WQBELs, this Board Order requires Dischargers to develop, prepare and implement an EWMP and NMP.

A WQBEL is designed to protect the quality of the receiving water by ensuring that Basin Plan water quality objectives are met. Federal regulations at section 122.44(d) require permit effluent limitations to control all pollutants that may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard. If the Regional Water Board determines that additional requirements (e.g., additional effluent limitations, monitoring requirements, etc.) are necessary for a specific Discharger to comply with applicable water quality standards or wasteload allocations established in an approved TMDL, those requirements will be specified in either the written notice of authorization or a subsequent letter from the Regional Water Board to the Discharger. Such additional requirements may be necessary, for example, to protect water quality in surface waters that have been placed on the state's 303(d) list of impaired waters. An additional public notice will not be required to impose those requirements.

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the proposed Board Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed Board Order.

### A. Surface Water

The surface water receiving water limitations in the proposed Board Order are based upon the water quality objectives contained in the Basin Plan and are carried forward from the previous Board Order. As such, they are a required part of the proposed Board Order.

### B. Groundwater

The groundwater receiving water limitations in the proposed Board Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed Board Order.

## VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Board Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for facilities covered by this Board Order.

### A. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the MRP, and is based on sections 122.44(i), 122.62, 122.63 and 124.5. The MRP is a standard requirement in

almost all NPDES permits (including the proposed Board Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The MRP also contains a sampling program specific for the permitted discharges. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements.

The Discharger must monitor all discharges or overflows from manure and/or wastewater storage structures, whether or not the discharge or overflow is authorized by the permit. The Discharger must monitor all discharges from croplands under the CAFO's ownership or operational control where manure, litter, or process wastewater have been applied, except for agricultural stormwater discharges. The monitoring parameters required are consistent with those required for similar discharges by the Central Valley Regional Water Quality Control Board (Order No. R5-2007-0035). The Discharger must analyze all discharges for the parameters specified in the permit in accordance with EPA-approved methods at Part 136.

## B. Ground Water Monitoring

The ground water monitoring requirements are based on and consistent with the requirements contained in the existing Board Order No. 01-800. The requirements apply only to those Dischargers who have been required by the Executive Officer, upon review of the Discharger's EWMP, to prepare a ground water monitoring program. None of the existing CAFOs enrolled under Board Order No. 01-800 have been required to prepare a ground water monitoring program.

## C. Other Monitoring Requirements

### 1. Production Area Visual Inspections Applicable to CAFOs that Confine Dairy Cows, Cattle, Swine, Poultry, and Veal Calves

The Discharger must conduct daily visual inspections of all water lines (including drinking and overflow water lines) and weekly visual inspections of stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to wastewater storage and containment structures and all manure, litter, process wastewater impoundments pursuant to the effluent limitations established at section 412.37(a).

### 2. Production Area Visual Inspections Applicable to All CAFOs

All Dischargers must conduct visual inspections and record keeping as described in the MRP to ensure any discharges from the facility are detected in a timely manner. These requirements are consistent with the monitoring requirements in the existing Board Order No. 01-800.

**3. Manure, Litter, and Process Wastewater Monitoring – Applicable to CAFOs that Land Apply Manure, Litter, or Process Wastewater and to Large CAFOs that Transfer Manure, Litter or Process Wastewater to Other Persons**

Dischargers that land apply manure, litter, or process wastewater must monitor manure, litter, and process wastewater for the constituents specified in the MRP, pursuant to requirements established at section 122.42(e)(i)(vii). Large CAFOs are expected to use the results of the required analyses to provide information on nutrient content to recipients of manure, litter, or process wastewater transferred to third parties pursuant to the requirements established at section 122.42(e)(3). Dischargers that land apply manure, litter, or process wastewater are expected to use the results of the required analyses for nutrient management. The monitoring parameters required are consistent with those required for similar discharges by the Central Valley Regional Water Quality Control Board (Order No. R5-2007-0035).

**4. Soil Monitoring – Applicable to CAFOs that Land Apply Manure, Litter, or Process Wastewater**

Dischargers that land apply manure, litter, or process wastewater shall monitor soils in the land application area(s) for the constituents specified in the MRP, pursuant to requirements established at section 122.42(e)(i)(vii). Dischargers are expected to use the results of the required analyses for nutrient management. The monitoring parameters required are consistent with those required for similar discharges by the Central Valley Regional Water Quality Control Board (Order No. R5-2007-0035).

**5. Materials Monitoring – Applicable to CAFOs with On-site Composting Operations**

These requirements are consistent with the surface water protection provisions of individual WDRs issued to composting operations in the Region and with the requirements of Title 14, Chapter 3.1 of the California Code of Regulations.

**6. Flood Protection and Storm Water Monitoring – Applicable to CAFOs with On-site Composting Operations**

These requirements are consistent with the surface water protection provisions of individual WDRs issued to composting operations in the Region, with the State Water Board's General Industrial Storm Water Permit (State Water Board Order No. 97-03-DWQ), and with the requirements of Title 14, Chapter 3.1 of the California Code of Regulations regarding composting operations.

## D. Recordkeeping Requirements

The MRP specifies the records that must be kept to document implementation of the required monitoring and management practices specified in the Board Order. Record keeping requirements for manure transfers are based on requirements established at section 122.42(e)(3) and are consistent with the CAFO regulatory strategy described in the Fact Sheet. Specific record keeping requirements applicable to the production area and land application area at CAFOs that confine dairy cows, cattle, swine, poultry and

veal calves are based on requirements established at section 412.37. The allowance for recording daily visual inspections of water lines on a weekly basis is based on guidance from USEPA in its *NPDES Permit Writers' Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations* (EPA-833-B-04-001).

## VII. RATIONALE FOR PROVISIONS

### A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Board Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Board Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Board Order incorporates by reference Water Code section 13387(e).

### B. Special Provisions

#### 1. Reopener Provisions

This provision is based on Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

#### 2. Best Management Practices and Pollution Prevention

To insure that compliance with the effluent limitations and discharge specifications of this Board Order is achieved, all CAFOs are required to develop, prepare and implement an EWMP and NMP. EWMPs and NMPs are to be prepared in accordance with this Board Order.

In March 1999, the United States Department of Agriculture (USDA) and USEPA finalized their unified national strategy for AFOs. In general, the national strategy recommended the development of comprehensive nutrient management plans (CNMPs) that were intended to bring each CAFO into compliance with the requirements of the CWA and to minimize the impacts to groundwater and surface water from dairy wastes by the implementation of best management practices. In general, a CNMP would assure that appropriate dairy wastewater facilities were

developed, constructed and maintained to comply with the requirements of the CWA, and that the use and application of wastewater and manure (i.e., nutrient management) was managed to minimize impacts to groundwater and surface water. The most recent revisions to the NPDES and ELGs for CAFO regulations, published on February 12, 2003, support this national strategy by requiring the largest CAFOs to develop, prepare and implement NMPs. Board Order No. R7-2008-0800 requires the development and implementation of NMPs.

This Board Order requires the development and implementation of engineered waste management plans (EWMPs) for all CAFOs in the Colorado River Basin Region to insure professional design, construction and operation of facility process wastewater and runoff containment systems to prevent prohibited process wastewater discharges to surface waters. The Board Order authorizes the Executive Officer to make necessary revisions to the guidelines for the preparation of an EWMP. Dischargers with approved EWMPs are advised that the guidelines for the preparation of an EWMP included in Attachment B have been revised to be consistent with the requirements of this Board Order.

This Board Order includes requirements that apply to CAFOs with on-site composting operations to relieve these facilities of the need to maintain separate permits for the composting activities. The requirements for on-site composting operations are consistent with the surface water protection provisions of individual WDRs issued to composting operations in the Region and with the requirements of Title 14, Chapter 3.1 of the California Code of Regulations.

This Board Order requires annual reporting of manure production and the destination of all manure that is generated, submittal of animal population statistics, and process wastewater containment system monitoring are required.

**3. Construction, Operation, and Maintenance Specifications**

These provisions are consistent with the requirements of Board Order No. 01-800 and are included to implement the requirements of section 22562 of title 27, chapter 7, subchapter 2, article 1 of the California Code of Regulations.

**4. Other Special Provisions**

This Board Order establishes required procedures for facility closure to ensure that there is no potential for discharge of CAFO-generated manure, litter, or process wastewater from a facility that has closed or otherwise modified its operation such that coverage under this Board Order is no longer required. These requirements are included in this Board Order pursuant to the Duty to Maintain Permit Coverage established at section 122.23(h).

Consistent with the CAFO regulatory management strategy described in this Fact Sheet, the Board Order includes special provisions for tracking manure transfers and compliance with applicable storm water requirements.

## VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for CAFOs. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following newspapers: Desert Sun and Imperial Valley Press.

### B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Board Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. May 23, 2008.

### C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

| | |
|---|---|
| Date: | June 25, 2008 |
| Time: | 10:00 a.m. |
| Location: | City of Indio<br>City Council Chambers<br>150 Civic Center Mall<br>Indio, CA 92201 |

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/coloradoriver/ where you can access the current agenda for changes in dates and locations.

## D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

## E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

## F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

## G. Additional Information

Requests for additional information or questions regarding this Board Order should be directed to José Figueroa-Acevedo at (760) 776-8967.

**California Regional Water Quality Control Board**
**Colorado River Basin Region (R-7)**
**73-720 Fred Waring Drive, Suite 100**
**Palm Desert, CA 92260**
**(760) 346-7491**

**Reporting Period:** January 1, 20_____ to December 31, 20_____
**Report Due Date:** January 15, 20_____

## PART A – ANNUAL REPORT OF ANIMAL WASTE DISCHARGE

| **I. Facility Information** (Please make corrections directly on this form.) |
|---|
| Operator's Name: |
| Facility Name: |
| Facility Address: |
| Mailing Address: |
| Telephone Number: |

Does the information provided apply only to the facility address indicated above?
☐ Yes ☐No
If No, please provide the name and address of the other facilities in the comment section of this report.
**Note:** Submit a separate report for each of your facilities including dry cow, heifer, and calf ranches.

### II. Type And Number Of Animals

Report the maximum number of each type of animal confined at this facility at any one time (and, for dairies, the number of milkings per day).

| Type | Number in Open Confinement | Number Housed Under Roof |
|---|---|---|
| Mature Dairy Cows | | |
| Number of milkings per day (dairies only) ☐ One ☐ Two ☐ Three | | |
| Dairy Heifers | | |
| Veal Calves | | |
| Other Cattle | | |
| Swine (55 lb. or more) | | |
| Swine (under 55 lb.) | | |
| Horses | | |
| Sheep or Lambs | | |
| Turkeys | | |
| Chickens (broilers) | | |
| Chickens (layers) | | |
| Ducks | | |
| Other: (specify): _____ | | |

## III. Manure, Litter, And Process Wastewater Production

Report the estimated amount of manure, litter, and process wastewater that were generated at this facility during the 12-month reporting period identified at the top of this report.

| |
|---|
| A. Amount of manure generated during the reporting period: _____ tons. |
| B. Amount of manure generated during the reporting period that is stockpiled on site as of 12/31/20____: _____ tons |
| C. Amount of litter generated during the reporting period: _____ tons. |
| D. Amount of process wastewater generated during the reporting period: _____ gallons. |

Were the production factors provided below used to estimate your manure information?

| Provided Production Factors | Productions Factors Used | | Provide Other Production Factor, if used |
|---|---|---|---|
| Beef cattle produce approximately 1.5 tons per animal per year of manure. | ☐Yes | ☐No | |
| 1 Milking cow produces approximately 4.1 tons per year of manure. | ☐Yes | ☐No | |
| 1 Dry cow produces approximately 4.1 tons per year of manure. | ☐Yes | ☐No | |
| 1 Heifer produces approximately 1.5 tons per year of manure. | ☐Yes | ☐No | |
| 1 Calf produces 0.6 tons per year of manure. | ☐Yes | ☐No | |
| 1 ton of corral manure equals 2.32 cubic yards. | ☐Yes | ☐No | |
| 1 cubic yard of corral manure equals 0.43 tons. | ☐Yes | ☐No | |

## IV. Manure, Litter, and Process Wastewater Transferred to Other Persons

Report the estimated amount of manure, litter, and process wastewater that were transferred to other persons during the 12-month reporting period identified at the top of this report.

| |
|---|
| A. Amount of manure transferred during the reporting period: _____ tons. |
| B. Amount of litter transferred during the reporting period: _____ tons. |
| C. Amount of process wastewater transferred during the reporting period: _____ gallons. |

## V. Instances of Noncompliance Not Previously Reported

During the reporting period were there any instances of noncompliance, which have not been reported to the permitting authority? _____ Yes _____ No

If yes, please provide the information requested below.

- ☐ Description of the noncompliance and its cause.
- ☐ The period that the operation was in noncompliance with permit conditions, including exact dates and times.
- ☐ In those cases where noncompliance has not been corrected, the anticipated time it is expected to continue.
- ☐ Description of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

## VI. Certification of Preparation of Inspection Logs And Manifests

- ☐ I certify that a CAFO Stormwater Management Structure Inspections Log has been prepared for and is maintained at this facility.
- ☐ I certify that a Water Line Inspections Log has been prepared for and is maintained at this facility.
- ☐ I certify that a Manure Tracking Manifest has been prepared for each manure hauling event that have occurred at this facility (Large CAFOs only).

## PART B – COMPOSTING INVENTORY

☐ **I certify that no composting occurs at this facility.** (If box is checked, skip to Part C.)

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **I. Materials Monitoring** | | | | | | | | | | | | |
| Quantity (tons) and description of manure received from each source | | | | | | | | | | | | |
| Quantity (tons) and description of greenwaste received from each source | | | | | | | | | | | | |
| Quantity (tons) and description of fertilizer received from each source | | | | | | | | | | | | |
| Quantity of composted material (tons) shipped off-site | | | | | | | | | | | | |
| Estimated quantities of raw materials, in-process-inventory and finished | | | | | | | | | | | | |
| **II. Flood Protection Monitoring**[1] | | | | | | | | | | | | |
| The Discharger shall inspect all internal and external flood protection facilities at least quarterly and following each storm which generates any storm water flow through the drainage system. Indicate whether these inspections were conducted for each quarter. | | | | | | | | | | | | |

[1] If significant damage to the flood protection facilities is found, the Discharger shall report this information to the Regional Water Board immediately by telephone, and transmit by letter within five business days of its occurrence the following information:

a. Location and extent of damage;
b. Interim measures to be taken to assure that no wastes are discharged from the facility; and
c. Time schedule for repairs.

**III. Storm Water Monitoring**

1. Did any storm water discharge(s) occur from the composting operations? ☐ Yes ☐ No
2. If yes, attach the results of all storm water discharge analyses to this report and/or explain why any storm water discharges from the composting operations were not analyzed for the required parameters:

   ☐ Check if analysis results are attached.

   If any storm water discharges from the composting operations were not analyzed for the required parameters, explain below:

**IV. Operation and Maintenance**

| Document any erosion control or drainage problems and/or related maintenance: |
|---|
| |

## PART C – LAND APPLICATION OF MANURE, LITTER, AND PROCESS WASTEWATER REPORT

☐ **I certify that no land application of manure, litter, and/or process wastewater occurs at this facility.** (If box is checked, skip to Part D.)

### I. Nutrient Management Plan

Indicate whether the facility's nutrient management plan was either prepared or approved by a certified nutrient management planner. *Note: The Regional Water Board does not require CAFO owners or operators to use a certified nutrient management planner to prepare or approve nutrient management plans.*

| Was the current version of this facility's nutrient management plan prepared or approved by a certified nutrient management planner? _____ Yes _____ No |
|---|

### II. Acres Used for Land Application

Report the total number of acres of land that are covered by this facility's nutrient management plan. Include all land application acres covered by the nutrient management plan, whether or not they were used for land application during the reporting period.

| A. Total number of land application acres covered by the nutrient management plan: _____ acres. |
|---|

Report the total number of acres of land where manure, litter, or process wastewater generated at this facility was spread. Include only land application areas that are under the control of this CAFO facility.

| B. Total number of acres under the control of the CAFO used for land application during the reporting period: _____ acres. |
|---|

### III. Crop Growing Activity

No. of plantings per year (check one): ☐one ☐two ☐three

Type of crop grown (check all that apply):

☐ Sudan grass ☐ Alfalfa ☐ Winter wheat

☐ Barley ☐ Bermuda grass ☐ Corn

☐ Oats ☐Rye Grass ☐ Vegetables

☐Others: _____

**PART D – CERTIFICATION**

*I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Signature: _____ Date: _____

Title: _____

Print Name: _____

Submit by: January 15, 20_____

Submit to: California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA. 92260

**Manure Tracking Manifest**
**Colorado Regional Water Quality Control Board**

Instructions

1. Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2. If there are multiple destinations, complete a separate form for each destination.
3. The operator must obtain the signature of the hauler upon completion of each manure hauling event.
4. The operator shall maintain manure tracking manifests on site at the permitted facility.

**Operator Information**

| |
|---|
| Name of Operator: |
| Name of Facility: |
| Facility Address: |
| Mailing Address: |
| Phone Number: |

**Manure Hauler Information**

| | |
|---|---|
| Name of Hauling Company and Contact Person: | Phone Number: |

**Destination information**

| | |
|---|---|
| Hauled to (please check one):<br>☐ Composting Facility<br>☐ Regional Digester<br>☐ Riverside County<br>☐ San Bernardino County<br>☐ Imperial County<br>☐ San Diego County<br>☐ Other County/State: (Please list below)<br><br>_____<br><br>_____ | Dates Hauled:<br>_____<br>Please give name and location of the composting operation, or, if the manure was hauled to cropland, the owner or tenant, and the destination address, or nearest cross streets.<br><br>_____<br><br>_____<br><br>_____ |

**Please enter the amount in the box below and circle the appropriate units:**

| **Amount removed from Facility** | **Amount Composted** | **Amount to Digester** |
|---|---|---|
| _____<br>Tons or Cubic Yards | _____<br>Tons or Cubic Yards | _____<br>Tons or Cubic Yards |

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator's Signature:_____ Date:_____

Hauler's Signature:_____ Date:_____

**CAFO Weekly Storm Water Management Structure and Daily Water Lines Inspections Log Sheet**

Facility Name: _____ NPDES Permit No.: CAG017001

Instructions: Use this form to keep track of weekly visual inspections of your storm water management structure(s) (including storm water and runoff diversion devices, and devices used to channel contaminated storm water to a wastewater storage or containment structure) and daily water line inspections (including drinking water lines and cooling water lines). List the items that need to be inspected below.

_____ _____

_____ _____

_____ _____

_____ _____

Keep track of your inspections in the following table by filling out one row each week when you inspect your storm water management structures and water lines. Provide the following information:

- ✓ the date of the inspection
- ✓ the initials of the inspector
- ✓ check the "OK" box if no problems were found
- ✓ use the "Notes" column to describe problems, if you find any, and how they might be fixed
- ✓ fill in the "date corrected" column with the date when you correct the problem
- ✓ check the box indicating daily water line inspections were conducted

| | **Date** | **Initials** | **OK** (✓ if no problems found) | **Notes** (Note any problems found and possible solutions.) | **Date Corrected** | **Daily Inspections Conducted? (Yes/No)** |
|---|---|---|---|---|---|---|
| Week 1 | | | | | | |
| Week 2 | | | | | | |
| Week 3 | | | | | | |
| Week 4 | | | | | | |

| | Date | Initials | OK (✓ if no problems found) | Notes (Note any problems found and possible solutions.) | Date Corrected | Daily Inspections Conducted? (Yes/No) |
|---|---|---|---|---|---|---|
| Week 5 | | | | | | |
| Week 6 | | | | | | |
| Week 7 | | | | | | |
| Week 8 | | | | | | |
| Week 9 | | | | | | |
| Week 10 | | | | | | |
| Week 11 | | | | | | |
| Week 12 | | | | | | |
| Week 13 | | | | | | |
| Week 14 | | | | | | |
| Week 15 | | | | | | |
| Week 16 | | | | | | |
| Week 17 | | | | | | |

| | Date | Initials | OK (✓ if no problems found) | Notes (Note any problems found and possible solutions.) | Date Corrected | Daily Inspections Conducted? (Yes/No) |
|---|---|---|---|---|---|---|
| Week 18 | | | | | | |
| Week 19 | | | | | | |
| Week 20 | | | | | | |
| Week 21 | | | | | | |
| Week 22 | | | | | | |
| Week 23 | | | | | | |
| Week 24 | | | | | | |
| Week 25 | | | | | | |
| Week 26 | | | | | | |
| Week 27 | | | | | | |
| Week 28 | | | | | | |
| Week 29 | | | | | | |
| Week 30 | | | | | | |

| | Date | Initials | OK (✓ if no problems found) | Notes (Note any problems found and possible solutions.) | Date Corrected | Daily Inspections Conducted? (Yes/No) |
|---|---|---|---|---|---|---|
| Week 31 | | | | | | |
| Week 32 | | | | | | |
| Week 33 | | | | | | |
| Week 34 | | | | | | |
| Week 35 | | | | | | |
| Week 36 | | | | | | |
| Week 37 | | | | | | |
| Week 38 | | | | | | |
| Week 39 | | | | | | |
| Week 40 | | | | | | |
| Week 41 | | | | | | |
| Week 42 | | | | | | |
| Week 43 | | | | | | |

| | Date | Initials | OK (✓ if no problems found) | Notes (Note any problems found and possible solutions.) | Date Corrected | Daily Inspections Conducted? (Yes/No) |
|---|---|---|---|---|---|---|
| Week 44 | | | | | | |
| Week 45 | | | | | | |
| Week 46 | | | | | | |
| Week 47 | | | | | | |
| Week 48 | | | | | | |
| Week 49 | | | | | | |
| Week 50 | | | | | | |
| Week 51 | | | | | | |
| Week 52 | | | | | | |

**California Regional Water Quality Control Board**
**Colorado River Basin Region (R-7)**
**73-720 Fred Waring Drive, Suite 100**
**Palm Desert, CA 92260**
**(760) 346-7491**

## Discharge Notification Form

Facility Name: _____ NPDES Permit No.: CAG017001

**If you have a discharge from the production area or land application area(s):**

1. Call within 24 hours to the Governor's Office of Emergency Services (800) 852-7550 and the Regional Water Quality Control Board (760) 346-7491.
2. Keep a record of the approximate date, time, duration, location, description, and volume of the discharge.
3. Conduct discharge monitoring as described in the MRP (sections III.A and V.F)
4. Submit this form to the Regional Water Board within 2 weeks of oral notification of the discharge, as required by Regional Water Board Provision VII.A.2.d of this Board Order.

Describe each discharge of manure, litter, and/or process wastewater from the production area or land application area(s) under the ownership or operational control of the Discharger (except agricultural stormwater discharges). Attach additional sheets, if needed.

| Date[a] | Time[b] | Duration[c] | Location[d] | Description[e] | Volume[f] |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

[a] **Date:** The date of the discharge. If the discharge was detected after it happened, give an estimate of the date when the discharge occurred.
[b] **Time:** The time of the discharge. If the discharge was detected after it happened, give an estimate of the time when the discharge occurred.
[c] **Duration:** The duration of the discharge.
[d] **Location:** The location of the discharge to waters of the U.S. Be specific. Include the name of the water body, and a specific description of where the manure, litter, or process wastewater entered the water body. Include landmarks or other points of reference (e.g., Three Mile Creek, at southeast corner of feedlot where creek bends to the west).
[e] **Description:** Provide other relevant information about the discharge, including the source, cause, composition (e.g., emergency overflow of process wastewater from lagoon #2), and impacts observed (e.g., fish kill in waterbody).
[f] **Volume:** Give an estimate of the number of gallons or tons of manure, litter, or process wastewater discharged.

Provide analytical results from each discharge of manure, litter, and/or process wastewater from the production area(s) that occurred during the reporting period. Attach additional sheets, if needed.

| Parameter | Units | Result | Method Detection Level (MDL) |
|---|---|---|---|
| Volume | Gallons or Acre-Inches | | |
| Nitrate-Nitrogen | mg/L | | |
| Total Kjeldahl Nitrogen | mg/L | | |
| Phosphorus, Total | mg/L | | |
| Total Dissolved Solids | mg/L | | |
| Biochemical Oxygen Demand, 5-day @20ºC | mg/L | | |
| Total Suspended Solids | mg/L | | |
| Total Coliform | MPN/100 ml | | |
| Fecal Coliform | MPN/100 ml | | |

**If you have a discharge from the composting operations:**

1. Keep a record of the approximate date, time, duration, location, description, and volume of the discharge.
2. Conduct discharge monitoring as described in the MRP (sections III.A and V.F)
3. Submit this form to the Regional Water Board within 2 weeks of oral notification of the discharge, as required by Regional Water Board Provision VII.A.2.d of this Board Order.

Provide analytical results from each discharge of storm water from composting operations. Attach additional sheets, if needed.

| Parameter | Units | Result | Method Detection Level (MDL) |
|---|---|---|---|
| Total Suspended Solids | mg/L | | |
| pH | pH units | | |
| Specific Conductance | µmhos/cm | | |
| Total Organic Carbon[1] | mg/L | | |
| Iron[2] | mg/L | | |
| Nitrate+Nitrite Nitrogen[2] | mg/L | | |
| Lead[2] | µg/L | | |
| Zinc[2] | µg/L | | |
| Phosphorus, Total[2] | mg/L | | |

[1] Oil and grease may be substituted for total organic carbon.

[2,] Additional analytical parameters required under State Water Board Industrial Storm Water Permit 97-03-DWQ (NPDES CAS000001) for activities only under SIC 287X.