Conditional Waiver No. 3 – Discharges from Animal Operations

Conditional Waiver No. 3 is for discharges from animal operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from animal operations include discharges resulting from animal activities and wastes, and storm water runoff which can also transport pollutants from animal operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under WDRs may be eligible for Conditional Waiver No. 3:

- Discharges from small animal feeding operations (less than 300 animal units, where 1 animal unit is equivalent to 1 cow or 1,000 animal pounds)
- Discharges from medium animal feeding operations (300 to 999 animal units)
- Discharges of storm water runoff
- Discharge/application of manure to soil as an amendment or mulch
- Discharges from grazing lands

Discharges from animal operations can be significant sources of sediment, nutrients, and pathogens (i.e., bacteria, viruses, protozoa), which can adversely affect the quality of waters of the state if the animals, animal activities, and animal wastes are not properly managed. Discharges from these types of operations can originate from one land owner/operator, and have similar discharge sources, environmental settings, and waiver conditions. Therefore, these types of discharge were grouped together into one discharge classification. Animal operations that comply with the waiver conditions are not expected to pose a threat to the quality of waters of the state.

Animals maintained at any of these operations generate wastes (i.e., manure, urine, soiled bedding) and may cause erosion. Wastes generated by the animals may be disposed of off site, or stockpiled and/or composted on site by the property/facility owner/operator. Animal wastes may also be allowed to decompose on site at the point of discharge by an animal. Fresh, uncomposted manure and/or dried, processed or composted manure may be used as a fertilizer, soil amendment, or mulch.

Animal wastes that remain on site can be a significant source for several pollutants that can adversely affect water quality. Animals that are allowed to roam and/or graze freely may cause significant erosion, which can result in destruction of wildlife habitat, increased runoff, in addition to adversely affecting water quality.

Animal activities and wastes, if not properly managed, can have a significant adverse impact on the quality of waters of the state. Additionally, storm water and surface runoff that is allowed to come in contact with these wastes can leach pollutants to underlying groundwater, or transport pollutants to surface waters. Storm water runoff from pastures and range lands on animal operations not designated as concentrated animal

feeding operations (CAFOs) is exempt from federal NPDES regulations.[1] However, storm water runoff from pasture and range lands is subject to regulations in the state Water Code and may be regulated with WDRs, unless a waiver is issued. Animal operations that properly manage their animal activities and wastes are not expected to pose a threat to the quality of waters of the state. Therefore, waiver conditions must require proper management and other measures to minimize or eliminate discharges of pollutants from animal operations to waters of the state.

The number of facilities and/or properties that may be eligible for a conditional waiver for discharges from animal operations is not known. According to the United States Department of Agriculture, there are over 700 horse farms in San Diego County. If animal operations with other types of animals are included, the number is likely to be in the thousands. Current San Diego Water Board resources would not be sufficient to issue WDRs to all the animal operations in the Region. However, cumulative discharges from these types of facilities can potentially have a significant impact on the quality of the waters in the Region. This, in turn, can increase the efforts required by cities and counties to comply with NPDES storm water and/or TMDL requirements.

A medium sized animal feeding operation (AFO), which manages 300 to 999 animal units (where 1 animal unit is equivalent to 1 cow or approximately 1,000 animal pounds), could, by itself, potentially be a significant source of pollutants due to the number of animals maintained. Depending on the design and management of a medium AFO, the facility may be designated as a CAFO. If an animal operation is designated as a CAFO, it is subject to NPDES regulations and would require regulation under WDRs that conform to NPDES requirements. Knowledge of the design and operation of a medium AFO is required to ensure MMs/BMPs are implemented and effective, and determine whether or not the facility should be designated as a CAFO. Therefore, medium AFOs should require enrollment as required in the existing conditional waivers.

Small AFOs and grazing lands, on the other hand, may only potentially be significant sources of pollutants if MMs/BMPs for animal wastes and activities are not properly implemented. Small AFOs and grazing lands should be eligible for a conditional waiver without enrollment as long as animal wastes and activities are properly managed. However, owners/operators of small AFOs and grazing lands that violate waiver conditions by not implementing MMs/BMPs and allow the degradation of water quality should be notified of their responsibilities and required to comply with waiver conditions. Enforcement actions can be taken against facilities that fail to comply with waiver conditions. Additionally, a small AFO may also be designated as a CAFO and be subject to NPDES regulations, requiring regulation under WDRs that conform to NPDES requirements.

Because the San Diego Water Board resources are limited, enforcing waiver conditions for animal operations that do not require enrollment is often limited to violators that are brought to the attention San Diego Water Board. Therefore, the San Diego Water

[1] Code of Federal Regulations Title 40 section 122.3(e)

Board must rely upon the assistance of the municipalities, government agencies, non-governmental organizations, and members of the public to identify animal operations that are not in compliance with waiver conditions.

Waiver conditions should be developed in order for members of the public, cities, counties, local agencies and organizations, as well as the San Diego Water Board to determine if an animal operation is adequately managing its discharges and meeting its responsibilities. If owners/operators of animal operations are not in compliance with waiver conditions, they can be issued a Notice of Violation, be required to file Notice of Intent with the San Diego Water Board, and required to comply with waiver conditions in order to be eligible for Conditional Waiver No. 3. Sufficient information demonstrating compliance with the waiver conditions would have to be submitted to avoid regulating an animal operation with WDRs. However, if the owner/operator of an animal operation violates any waiver conditions, the San Diego Water Board has the option to terminate the conditional waiver for the operation and begin regulating the animal operation with individual WDRs and/or take other enforcement actions.

Or, depending on the seriousness of the violation, small and medium AFOs could also be designated as CAFOs and be subject to NPDES regulations, which requires regulation by WDRs that conform with NPDES requirements. Other enforcement actions could also be taken against facilities that fail to comply with waiver conditions, including issuing Notices of Violation, Cease and Desist Orders, or Cleanup and Abatement Orders.

In order to be eligible for Conditional Waiver No. 3, discharges must comply with certain conditions to be protective of water quality. The waiver conditions applicable to discharges from animal operations include the following:

- 3.I.A. General Facility Design and Management Waiver Conditions
- 3.I.B. General Manure Management Waiver Conditions
- 3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil
- 3.I.D. General Inspection and Reporting Waiver Conditions
- 3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations
- 3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations
- 3.II.C. Specific Waiver Conditions for Grazing Operations

Discharges from animal operations that comply with the general and specific waiver conditions in Conditional Waiver No. 3 are not expected to pose a threat to the quality of waters of the state.

3.I.A General Facility Design and Management Waiver Conditions

1. Animal operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
2. Animal operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are provided in *Equestrian-Related Waste Quality Best Management Practices* available from the County of San Diego Department of Agriculture, Weights and Measures, and/or the *Field Office Technical Guide* available from the Natural Resource Conservation Service (NRCS), or other sources.
3. Animal operations must prevent direct contact of animals with surface water bodies. Animals should not be allowed to graze directly adjacent to or within stream banks. Animal operations should maintain a buffer zone or riparian filter strip between the animals and any surface waters of the state. The buffer zone must adequately minimize the discharge of pollutants from an animal operation. There should be no direct exposure of a surface water body to an animal.

3.I.B. General Manure Management Waiver Conditions

1. Animal operations must prevent the direct or indirect discharge of animal wastes (manure, urine, soiled bedding) to any surface waters of the state (including ephemeral streams and vernal pools).
2. Animal operations must properly manage the wastes (i.e., manure, urine, soiled bedding) generated by the animals at the facility in accordance with the following guidelines:
   a) Animal wastes should be collected and disposed of regularly (at least once every two weeks).
   b) Animal wastes can be stored temporarily (no longer than two weeks) on site until disposal, unless animal wastes are composted on site. The amount of animal wastes stored in temporary storage area must not exceed the capacity of the storage area. If animal wastes exceed, or threaten to exceed the capacity of the temporary storage area, the animal wastes should be disposed of immediately.
   c) Areas adjacent to temporary storage area for animal wastes should be graded to prevent storm water and surface runoff from reaching the storage area.
   d) Temporary storage area should be on an impervious surface (e.g., concrete pad or plastic tarp) to prevent leaching of pollutants to groundwater.
   e) Temporary storage area should protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and animal wastes.

f) A buffer zone of at least 100 feet should be maintained between the temporary storage area for animal wastes and any surface water body unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.

g) If animal wastes are used as a fertilizer, soil amendment, or mulch on grazing lands, application of animal wastes to soil must comply with the conditions in 3.I.D.

3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil

1. If fresh and/or uncomposted manure is applied as a fertilizer, amendment, or mulch to soil, manure must be applied to the same property where the manure was generated.
2. Dried, processed, or composted manure may be applied as a fertilizer, amendment, or mulch to soil on sites other than the property where the manure was generated. Dried, processed, or composted manure may also be applied as a fertilizer, amendment, or mulch to soil on the same property where the manure was generated. Use of dried, processed, or composted manure on or off the property where the manure was generated must comply with the waiver conditions in 3.I.D.
3. A buffer zone of at least 100 feet should be maintained between the manure applied to soil and any surface waters of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

3.I.D. General Inspection and Reporting Waiver Conditions

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Animal operations must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations

1. Small animal feeding operations (AFOs) must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to 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.
2. Small AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.

3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations

1. Medium AFOs must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to 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.
2. Medium AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.
3. Medium AFO facility owners or operators must file a Notice of Intent with the San Diego Water Board containing, at a minimum, the following information:
   a) Property owner name and address
   b) AFO owner/operator name and address
   c) Number and types of animals
   d) Map of the AFO facility showing the locations of manure stockpiles, nearby surface water bodies, and/or water wells
   e) Description of existing and planned MMs/BMPs for the prevention of erosion and discharges of animal wastes that could affect the quality of waters of the state.

   Sufficient information demonstrating compliance with general and specific waiver conditions must be submitted in order for the medium AFO facility to be eligible for a conditional waiver.

3.II.C. Specific Waiver Conditions for Grazing Operations

1. Grazing operations must manage grazing fields to allow lands to revegetate and minimize topsoil erosion.
2. Owners of pasture and range lands used for grazing, must implement MMs/BMPs to minimize or eliminate any discharge that could adversely affect the quality or beneficial uses of waters of the state.

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from animal operations.

1. Equestrian-Related Waste Quality Best Management Practices, County of San Diego Department of Agriculture, Weights and Measures http://www.sdcounty.ca.gov/awm/docs/equestrian_bmp.pdf
2. Electronic Field Office Technical Guide (eFOTG), United States Department of Agriculture, Natural Resources Conservation Service http://www.nrcs.usda.gov/technical/efotg/
3. Agricultural Management Measures, State Water Resources Control Board http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf
4. California Nonpoint Source Encyclopedia, State Water Resource Control Board http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf