Air Quality Conservation Management Practices Program for San Joaquin Valley

Minimizing Agricultural PM10 from Animal Feeding Operations (AFOs)

Poultry Operations

May 2004

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How to use this booklet:

The agriculture industry prepared this booklet to provide operators with accurate information and practical guidance for implementation of sound conservation and management practices to minimize PM10 emissions from Animal Feeding Operations (AFOs) in the San Joaquin Valley for the Conservation Management Practice Program.

Table of Contents

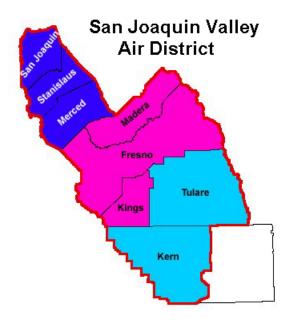
What is the Conservation Management Practice Program and	Page
why it is needed?	4
What is Rule 4550?	4
Who must provide a CMP Plan?	5
What does the AFO operator have to do? Steps Alternative Conservation Management Practices Changes to CMP Applications/Plan Fee	5
What will happen if the AFO operator does not comply with Rule 4550?	6
Conservation Management Practices Applications/Plan	6
Categories and Conservation Management Practices Manure Handling and Storage Feeding Open Areas Unpaved Roads Unpaved Vehicle/Equipment Traffic Areas	7
Blank and Sample Conservation Management Practices Applications	13

What is the Conservation Management Practice Program and why it is needed?

It is a San Joaquin Valley Air Pollution Control District (District) program with the purpose of reducing air pollutants from agricultural sources through Conservation Management Practices (CMPs). CMPs are practices that reduce the emission of air pollutants.

The Conservation Management Practices Program (CMP Program) is scheduled to start on July 1, 2004. Participation in the CMP Program will be mandatory, but the operators will be able to select practices most appropriate for their operation. Operators must submit a CMP Plan and implement a certain number of CMPs. One CMP must be selected for each identified CMP category. Voluntary participation in the CMP Program is also encouraged.

The San Joaquin Valley Basin is an area designated as serious nonattainment for particulate matter smaller than 10 microns in size (PM10) and is required by federal laws to implement Best Available Control Measure (BACM) on all significant sources of emissions. The CMP Program is to implement Best Available Control Measures (BACM) on agricultural sources to achieve PM10 emission reductions to help meet the five percent per year reduction in PM10 emissions starting in 2003 until attainment is reached.



What is Rule 4550?

The CMP Program includes mandatory provisions that are contained in a District Rule 4550. Rule 4550 (Conservation Management Practices) is to ensure that growers and animal feeding operations operators participate with the CMP Program. Operators that fail to comply with the rule will be subject to District enforcement action.

Who must provide a CMP Plan?

Owners/operators of poultry facilities in an agricultural operation site with population equal to or more than the following number of animals must provide a CMP Plan:

- 55,000 turkeys
- 125,000 chicken (other than laying hens)
- 82,000 laying hens

An agricultural operation site is one or more agricultural parcels that are under the same or common ownership or operation and are located on one or more contiguous or adjacent properties. For example, two parcels separated by a road are considered contiguous and therefore one agricultural operation site. The actual definition can be found in District Rule 4550

Please note that operators who also grow field crops on land greater than 100 acres contiguous or adjacent farmland are required to submit CMP applications for their field crops. A guidance handbook to assist producers in reducing PM10 from the growing and harvesting of crops is also available. See page 2 of this handbook for contact information.

What does the AFO operator have to do?

Steps

- Select one CMP for implementation from each of the categories.
- Implement the selected CMPs starting July 1, 2004 and keep a record of the implementation of CMPs to be available upon request by the District representative.
- Complete the applications and submit them to the District by December 31, 2004 for approval. The submitted applications constitute a CMP Plan once approved by the District.
- Keep a copy of each submitted applications and each CMP Plan to be available upon request by the District representative.

Alternative Conservation Management Practices

In the event that there are technical circumstances which prevent the implementation of a CMP, operators can do one of the two things:

- (1) Select a CMP from another category (not applicable for unpaved roads and unpaved equipment/traffic areas categories), or
- (2) Select an alternative practice that is more suitable to the operations for that category. The alternative must provide similar result to the available CMPs. A description of the alternative practice must be submitted to the District for approval.

Changes to CMP Applications/Plan

Any changes to the CMP Plan or applications must be submitted to the District within 60 days.

Fee

The District will be sending an invoice after evaluating the CMP applications. The fee for each CMP Plan is shown in the table below and there's a biennial fee of \$100.

Type of operation	Turkey Operation	Layer Poultry	Poutry Operation (other than	Fee
		Operation	Layer)	
Population	109,999 or less	164,999 or less	249,999 or less	\$62.75
number	110,000 to 219,999	165,000 to 349,999	250,000 to 349,000	\$125.50
	220,000 or greater	350,000 or greater	350,000 or greater	\$251.00

Note: these fees were effective as of May 20, 2004 and can be found in District Rule 3190 (Conservation Management Practices Plan Fee).

An operator may send the completed applications to NRCS/RCD first for their evaluation before submitting them to the District to qualify for a 50% fee reduction.

What will happen if the AFO operator does not comply with Rule 4550?

An AFO operator that does not comply with the rule is subject to District enforcement action.

In addition, the CMP Program will be judged on its effectiveness as a whole and not on a farm by farm basis. The District will be evaluating the CMP Program for its effectiveness and can require in the near future more CMPs to be implemented or to increase the number of operators subject to the CMP Program.

Conservation Management Practices Applications/Plan

Blank applications are attached. They may be reproduced as needed. They are also available at www.valleyair.org/farmpermits.

A sample completed CMP Plan is also provided.

CATEGORIES AND CONSERVATION MANAGEMENT PRACTICES

Category 1: Manure Handling

CMP Option a: Time of manure spreading

Description: To spread the manure at a time that would help reduce the amount of PM10 released in the air.

Example: To spread the manure during cooler times of day such as morning or evening and during times of low wind.

CMP Option b: Cleanout frequency

Description: To adjust the frequency of cleanouts from the houses

Example: To allow bedding materials and manure to remain in the house for multiple flocks or grow out cycles, or to decrease the frequency of house cleanouts to minimize dust emissions.

CMP Option c: Outdoor storage

Description: Use of a structure design to store the bulk materials (e.g.: used poultry litter/manure) or to securely cover the bulk materials if it must be stored outdoors not within any enclosure.

Example: To employ a structure design to store used poultry litter (manure and bedding material) onsite or to cover the bulk materials with tarps, plastics or suitable materials.



Category 2: Feeding

CMP Option: Boot or sock

Description: Feed is loaded into the feed storage bins by employing a sock or boot in the feed delivery truck auger.

Example: Use of a sock or boot on the delivery truck auger.



Category 3: Open Areas

CMP Option a: Vegetation



Description: Maintaining some vegetation, such as native grasses, on vacant land.

Example: Allowing vegetative material to grow on vacant sections of the operation.

CMP Option b: Reduced Tillage

Description: To reduce the number of tillings

Example: Leaving residue on surface after mowing, using pre-emergent or contact herbicides, scorching of weeds instead of tilling, mulch to smother weed competition.

CMP Option c: Windblocks



Description: To establish a perimeter physical barrier to reduce windblown dust.

Example: Use of perimeter physical barriers or vegetation barriers to disrupt wind flow.

CMP Option d: Dust suppressant

Description: Application of any non-toxic chemical or organic dust suppressant wich meets any specification required by any federal, state, or local water agency and is not prohibited for use by any applicable regulations. See District Regulation VIII for additional requirements.

Example: To use a variety of products; water application, hygroscopic suppressants (road salts), petroleum emulsions, adhesives, polymers emulsions, and bituminous materials (road oil), sodium chloride, chippings from farm. Water or chemical dust suppressants will bind soils.

Category 4: Unpaved Roads

CMP Option a: Access Restriction

Description: To restrict public access to private roads.

Example: To install a device which will limit use of road on or surrounding an operation.



CMP Option b: Gravel

Description: Placing a layer of gravel with enough depth to minimize dust generated from vehicle movement and to dislodge any excess debris which can become entrained.

Example: To add a layer of washed gravel, rock, or crushed rock.

CMP Option c: Pavement

Description: To pave currently unpaved areas

Example: To pave unpaved roads to prevent dust from vehicle traffic.



CMP Option d: Dust Suppressants

Description: Application of any non-toxic chemical or organic dust suppressant which meets any specification required by any federal, state, or local water agency and is not prohibited for use by any applicable regulations. See District Regulation VIII for additional requirements.

Example: To use a variety of products; water application, hygroscopic suppressants (road salts) petroleum emulsions adhesives polymers emulsions and hituminous

materials (road oil), sodium chloride, chippings from farm. Water or chemical dust suppressants will bind soils.

CMP Option e: Speed Reduction

Description: Enforcement of speeds that reduces visible dust emissions.

Example: Posting speed limits on or surrounding operation.

CMP Option f: Track Out Control

Description: Minimize any and all material that adheres to and agglomerates on all vehicles and equipment from unpaved roads and falls onto a paved public road or the paved shoulder of a paved public road.

Example: Accomplished by maintaining sufficient length of paved/graveled interior roads to allow mud and dirt to drop off vehicles before exiting the site; or use of a grizzly to dislodge debris from tires and undercarriage of vehicles leaving site.

CMP Option g: Vegetation

Description: To establish or maintain natural vegetation

Example: Allowing vegetative material to grow on vacant sections of the operation.

Category 5: Unpaved Vehicle/Equipment Traffic Areas

CMP Option a: Access Restriction

Description: To restrict public access to private roads.

Example: To install a device which will limit use of road on or surrounding an operation.

CMP Option b: Gravel

Description: Placing a layer of gravel with enough depth to minimize dust generated from vehicle movement and to dislodge any excess debris which can become entrained.

Example: To add a layer of washed gravel, rock, or crushed rock.

CMP Option c: Pavement

Description: To pave currently unpaved areas

Example: To pave unpaved roads to prevent dust from vehicle traffic.

CMP Option d: Dust Suppressants

Description: Application of any non-toxic chemical or organic dust suppressant which meets any specification required by any federal, state, or local water agency and is not prohibited for use by any applicable regulations. See District Regulation VIII for additional requirements.

Example: To use a variety of products; water application, hygroscopic suppressants (road salts), petroleum emulsions, adhesives, polymers emulsions, and bituminous materials (road oil), sodium chloride, chippings from farm. Water or chemical dust suppressants will bind soils.

CMP Option e: Vegetation

Description: To establish or maintain natural vegetation

Example: Allowing vegetative material to grow on vacant sections of the operation.

CMP 15

San Joaquin Valley Air Pollution Control District Supplemental Application Form

Conservation Management Practices: POULTRY

Farm Name:		CMP Plan Years: to
Number of Poultry: Open Acreage:		:
Manure Handling and Storage	Select one of the following CMPs. Cleanout Frequency Multiple CMPs in Another Category Outdoor Storage Please describe the specifics of the practice(s)	☐ Time of Manure Spreading ☐ Other (approved on a case-by-case basis) chosen above:
Feeding	Select one of the following CMPs. Boot or Sock Multiple CMPs in Another Category Please describe the specifics of the practice(s)	Other (approved on a case-by-case basis) chosen above:
Open Areas	Select at least one of the following CMPs. Note: 100% of the open area acreage must be composed in the compos	☐ Vegetation, ac☐ Windblocks, ac☐ Other (approved on a case-by-case basis), ac

CMP 16

San Joaquin Valley Air Pollution Control District Supplemental Application Form

Conservation Management Practices: UNPAVED ROADS AND UNPAVED VEHICLE/ EQUIPMENT AREAS FOR ANIMAL FEEDING OPERATIONS

Farm Name:		CMP Pla	an Years:	to
Unpaved Road	Mileage:	Unpaved Vehicle/Equi	pment Areas Acreage:	
	ICAN AND AND AND AND AND AND AND AND AND A		- 4 C41 - C-11	deals (Dec. VIII according)
Unpaved Roads	If daily vehicle trips are ≥ 75 of Dust Suppressant, Road Mix, Mi Road Oil, Mi Please describe the specifics of Chips/Mulches, Less Than 10 Vehicle T Organic Materials, Paving, Mi Restricted Access, Road Oil, Mi Please describe the specifics of Polymers, Mi Restricted Access, Mi Road Oil, Mi Please describe the specifics of Please describe the specifics of Mi Please describe the specifics Mi Please describe the specific Mi Please describe the	of the practice(s) chosen above on unpaved roads, select at le mi rips on Any Day, mi _ mi _ mi	Washed Gravel, mi Water, mi Other (approved on a gree: ast one of the following con Speed Bumps (Dairie) Speed Limit Posted, _ What Speed? r Track Out Control, _ Water, mi Washed Gravel, Wind Barrier, Other (approved on a	mi case-by-case basis), mi entrols (CMP compliance). es only), mi mi enph (must be \le 25 mph) mi mi mi mi

	If average daily vehicle trips (on an annual basis) are ≥ 50 on unpaved equipment yards, or if average daily trips (on an annual basis) are ≥ 25 by three or more axle vehicles, or if maximum daily trips on any day ≥ 150 during a 30 day period or less, select at least one of the following controls (Reg. VIII compliance). Dust Suppressant, ac
Unpaved Vehicle/ Equipment Areas	If average daily vehicle trips (on an annual basis) are < 50 on unpaved equipment yards, or if average annual daily trips (on an annual basis) are < 25 by three or more axle vehicles, or if maximum daily vehicle trips on any day are < 150 during a 30 day period or less, select at least one of the following controls (CMP compliance). Chips/Mulches, ac