Application Protocol
Pesticides, Fertilizers, and Herbicides

1.0 Ventura County Municipal NPDES Stormwater Permit

The purpose of this standard operating procedure (SOP) is to define an application protocol for the routine and non-routine application of pesticides, fertilizers, and herbicides (including pre-emergents). This SOP provides a comprehensive policy to comply with the Ventura County Permit (CAS004002), a guidance to provide for consistent implementation countywide for Ventura County Watershed Protection District (VCWPD), the County of Ventura, the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks (referred to separately as Co-permittees), and a method for reducing runoff of pesticides, fertilizers, and herbicides to the storm drain system. This protocol was amended to reflect new requirements in the May 7, 2009 Ventura County Municipal Stormwater Permit, Order No. 09-0057 and further amended February 27, 2014 to fix typographical errors and reference the July 8, 2010 Ventura County Permit, Order 2010-0108 and current California Aquatic Pesticide NPDES Permits

2.0 Scope

The scope of this application protocol is to focus on preventing pesticides, fertilizers, and herbicides from entering the storm drain system and discharging to receiving waters. This protocol is applicable to 1) the outdoor use of pesticides, herbicides, and fertilizers; 2) the use of pesticides and fertilizers where the materials may come into contact with precipitation; 3) the use of pesticides, herbicides, and fertilizers where these materials may come into contact with runoff (natural or induced); and 4) the use of pesticides, herbicides, or fertilizers anywhere where they may be directly or indirectly discharged to a storm drainage system.

This protocol is applicable to any Co-permittee staff and contracted services that apply pesticides, fertilizers, or herbicides. Such staff commonly include, park, public works, purchasing, building/grounds maintenance, hazardous materials, and pesticide application staff.

This protocol is not applicable to the indoor use of pesticides, herbicides or fertilizers, but is applicable to the consequential outdoor handling, mixing, transport, or disposal of materials related to indoor use. This protocol does not apply when other NPDES permits and/or abatement orders are in effect at the selected site.

Furthermore, this protocol is not intended to replace federal or state requirements or provide complete directions for applying, handling, transporting, mixing, or storing pesticides, fertilizers, or herbicides. Consult federal and state requirements for this additional information. Use information for each pesticide, fertilizer, or herbicide can be found on the manufacturer's label. Additional safety information can be found in chemical-specific safety data sheets (SDSs).

3.0 Definitions

Application – means the use of the product as a fumigant, direct surface spray, treatment, drench, injection, incorporation, side-dressing, pre-emergent, furrowed spread, or broadcast agent.

California Department of Pesticide Regulation (CDPR) – The state agency responsible for regulating the use of pesticides in California.

Direct Supervision – A QAC (or QAL, if services contracted) is available, (within the location as specified in the Monthly Summary Pesticide Use Report Form located on the California Department of Pesticide Regulation website: http://www.cdpr.ca.gov/docs/enforce/prenffrm/enf060.pdf) to directly manage and control the application (of any pesticide, herbicide, or fertilizer) by supervising others. The QAC or QAL manages and controls the application of pesticides, herbicides, and fertilizers through available verbal communication to include direct interaction, telephones, cellular phones, 800 MHz phones, and radios.

Feasible – means capable of being accomplished in a successful manner, within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Forecasted Storm Event – A weather event predicted to commence within the next 24-hour time window, where at least 0.25 inches of rain or more is forecasted to fall.

Herbicide – A common pesticide focused on killing weeds and other plants that grow where they are not wanted.

Integrated Pest Management (IPM) – means a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health, and environmental risks.

Manufacturer's Label – The main source of information on how to use the product correctly, safely, and legally. The main sections of a label are: common name and brand name, active ingredient, EPA registration number, signal words, first aid, directions for use, and storage/disposal.

Safety Data Sheets (SDSs) – An information sheet provided by a chemical manufacturer describing chemical qualities, hazards, safety precautions, and emergency procedures to be followed incase of a spill, fire, or other emergency.

Non-Routine Application – A non-scheduled application to include a "one-time" or an "emergency" use of pesticides, herbicides, and fertilizers.

Notice of Intent (NOI) for Pesticide Usage– An oral or written notification submitted prior to the use of a restricted use pesticide, pursuant to a permit.

Pesticide – Defined by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as "…any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, or any other forms of life declared to be pests, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Qualified Applicator Certificate Holder (QAC) – Any person who has successfully passed the California State Pesticide Laws and Regulations exam, and qualified in one or more pest control categories and may therefore apply restricted materials, supervise pesticide application, but who is not entitled to supervise the operations of a pest control business.

Qualified Applicator License Holder (QAL) – Any person who has successfully passed the California State Pesticide Laws and Regulations exam, and qualified in one or more pest control categories and may therefore apply restricted materials and supervise the pesticide application/operations made by a licensed pest control business.

Routine Application – A scheduled (weekly, quarterly, annually, etc.) use of a pesticide, herbicide, or fertilizer to attain a specific goal.

Signal Word – Defines approximately how hazardous a pesticide could be to people by using descriptors such as DANGER, WARNING, CAUTION, or DANGER-POISON.

Storm Event – A weather event that produces more than .25 inch of precipitation.

Use - means any pesticide related activity including:

Pre-application to include arranging for application, mixing, loading, and making necessary preparations for application;

Application of the pesticide; and

Post-application activities – control of the treated area, management of the treated area, transportation, storage, disposal of excess pesticides, equipment wash, containers, and cleaning of equipment.

Use does not include emergency responders, commercial transportation, manufacturing, formulating, or packaging.

4.0 Responsibilities

Co-permittees shall:

a. Designate a QAC or QAL holder, to provide advice and assistance in all matters related to pesticide usage, disposal of products, and safety.

b. Provide pesticide applicators (including contracted businesses) with appropriate record keeping forms to document pesticide use http://www.cdpr.ca.gov/docs/enforce/prenffrm/enf060.pdf) (Attachment A).

c. Annually verify that the purchasing, storing, mixing, loading, and safety tasks for pesticide, fertilizer, and herbicide use are in accordance with this protocol, applicable laws, and regulations including the current and valid QAC/QAL certifications.

d. Verify that no banned or unregistered pesticide is stored or applied.

e. Request landscapers to implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs.

f. Coordinate annual refresher training courses for all pesticide handlers to meet the continuing education requirements.

Pesticide applicators shall:

a. Be certified as or under the direct supervision of, a QAC or QAL holder and be properly trained to start work with pesticides, fertilizers, and/or herbicides.

b. Follow manufacturer's label instructions and this SOP. When such instruction is in conflict with this SOP, the label instructions will be followed.

c. Ensure that no banned or unregistered pesticide is stored or applied.

d. Follow the policies and procedures established in this application protocol.

e. Report any unsafe work practices to their respective supervisors.

4.1 Integrated Pest Management Program (IPM)

Co-Permittees and Pesticide applicators shall implement an IPM program by May 7, 2010 that includes the following:

a. Pesticides are used only if monitoring indicates they are needed according to established guidelines.
b. Treatment is made with the goal of removing only the target organism.
c. Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial, non-target organisms, and the environment.
d. Its use of pesticides, including Organophosphates and Pyrethroids do not threaten water quality.
e. Partner with other agencies and organizations to encourage the use of IPM.
f. Adopt and verifiably implement policies, procedures, and/or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) in the Permittees' overall operations and on municipal property.
g. Policies, procedures, and ordinances shall include commitments and timelines to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
   1. Quantify pesticide use by its staff and hired contractors.
   2. Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
   3. Demonstrate reductions in pesticide use.

5.0 Environmental Conditions

Environmental conditions (weather and site conditions) required for application of pesticides, fertilizers, and herbicides is dependent upon label and Ventura County Stormwater Permit requirements. Site conditions are determined by visually (V) observing the area for situations or by collecting information from recognized weather forecasting (F) organizations. For example, storm events can be tracked on the on National Weather Service's National Oceanic and Atmospheric Administration (NOAA) website. http://www.weather.gov/.

The following table is provided as a guide to applicators where weather or site conditions may impact the application of the pesticide, fertilizer, or herbicide. Weather/Site conditions must be verified for all listed conditions. Forecasting may be used for other weather/site conditions, but is necessary to establish a 24-hour timeframe prior to actual rainfall. A "Yes" indicates the weather/site conditions where application of pesticides, fertilizers, and herbicides may occur. A "No" indicates weather/site conditions where application of pesticides, fertilizers, and herbicides may not occur.

Weather/Site Conditions	**Form of Determining Weather/Site Conditions**	**Routine Application**	**Non-routine Application**
Wind-free (sufficient to avoid spray drift from point of application)	V	Yes	Yes
Storm events (see definition)	V	No	No
Within one day of a forecasted storm event (see definition) > 0.25 inches	V, F	No (except for application of pre-emergents)	No
After a storm event where water is leaching or running	V	No	No
Water is running off-site	V	No	No
Rising groundwater	V	No	No
Ground is saturated	V	No	No

6.0 Pollution Prevention and Spill Control

Irrigation canals, open trenches, surface waters, wetlands, designated 303(d) waterbodies, and groundwater sources should be noted and application shall be made to prevent contamination of these areas.

In the event that pesticides, fertilizers, and/or herbicides not intended for water application are inadvertently sprayed or spilled into the water sources listed above, the following steps are to be taken:

a. Stop all pesticide applications and assess the situation.

b. Prevent further contamination of water sources by using control measures such as storm drain inlet protection, absorbent materials, sandbags, or trenching.

c. Mark the area where the spill or overspray occurred.

d. Contact the environmental coordinator in your jurisdiction.

e. Report the spill to the appropriate department for clean up.

f. Contact governmental agency of reportable quantities.

7.0 Aquatic Pesticide Application

For control of pests and weeds in open water, storm drainage system, and flood control channel areas, only those materials specifically designed and registered for direct water application may be used. Directions on the labels must be followed as well as evaluating the application for the potential to harm the environment. Currently, the following is required prior to applying an aquatic pesticide.

a. Coverage is obtained and compliance is achieved under Water Quality Order No. 2013-0002-DWQ – Aquatic Weed Control NPDES Permit and 2012-0003-DWQ (Vector Control NPDES Permit). For copy of the permits visit the State Water Resources Control Board web site at: http://www.waterboards.ca.gov/water_issues/programs/npdes/pesticides/

b. Directions on the label are followed.

c. The application site is evaluated prior to application for the potential of the pesticide to harm the environment.

8.0 Training and Documentation

8.1 QAC and QAL Requirements

Each Co-permittee will only use staff (including contracted businesses) that are under the direct supervision of a QAC/QAL holder. The QAC/QAL must possess a valid and current certification. The applicator is responsible for following any federal and state requirements as well as all label requirements and reviewing the Safety Data Sheets prior to use.

8.2 Training

Each person who applies pesticides, fertilizers, or herbicides must be trained for the following:

a. Appropriate application of the pesticide, fertilizer, or herbicide.

b. Application laws and regulations

c. Affects application may have on stormwater quality management

d. The type of chemical and the immediate and long term hazards resulting from exposure

e. The Safety Data Sheet information

f. Safety procedures

g. Emergency spill information

h. Use of protective equipment

i. Cleanup procedures

j. Disposal procedures

9.0 Storage Facilities

Co-permittees will adopt a purchase, storage, and disposal policy such that all pesticides, fertilizers, and herbicides are under the control of a QAC/QAL holder. Pesticide storage facilities shall meet regulatory requirements to prevent releases into the surrounding environment, waterbodies, or be exposed to stormwater and protect the safety of personnel working within such facilities. These pesticides storage facilities shall be locked/secured when not in use. All doors/entrances to the facilities shall be posted with appropriate warning signs (as specified in the California Department of Pesticide Regulations, see references). All signs shall be legible at a minimum distance of 25 feet from any direction.

Pesticide containers should not be stored on the floor or bare ground. No floor drains, which empty into storm drains, are permitted within the storage facility. All pesticides in a storage facility shall either be in the original container, or the service container. Secondary containment is recommended, but not mandatory. All containers will have a copy of the product label attached.

Open bags of pesticides must be enclosed in a secondary container (a closed heavy plastic bag, or can with a tight lid), to prevent exposure or spillage. If the original pesticide containers are metal and are in a state of rust or deterioration, properly labeled plastic or metal secondary containers shall be provided to prevent accidental leakage.

10.0 Decontamination/Disposal

Each Co-permittee will adopt a decontamination and disposal procedure that is managed by a QAC/QAL and meets the following minimum requirements. Liquids produced during the decontamination process shall be handled according to federal and state requirements and managed to reduce exposure to stormwater and from entering the storm drain system or surface waters.

10.1 Cleanup

Containers used to apply pesticides, fertilizers, or herbicides of 28 gallons or less must be triple rinsed after each use. Containers sent back to the manufacturer will follow manufacturer's recommendations or State and Federal guidelines for transporting. The triple-rinse procedures will consist of the following:

a. Use ¼ the container volume for containers less than 5 gallons and 1/5 the container volume for containers greater than 5 gallons.

b. Place rinse medium in the container, securely close, agitate.

c. Drain rinse solution into tank mix. Allow draining 30 seconds.

d. Repeat steps b. and c. a minimum of two times; or

e. Invert emptied container over a nozzle located in the opening of the mix tank that is capable of rinsing all inner surfaces of the container.

For further information, please visit the web site for the California Department of Pesticide Regulations listed in Section 10 of this SOP.

10.2 Disposal

Pesticide, fertilizer, and herbicide waste includes leftover chemicals and chemical container rinsates. All pesticide waste shall be treated as hazardous waste. Minimization of pesticide waste is a high priority for the pesticide user. If waste is stored before removal, it should be stored in an area that is not exposed to stormwater, stormwater runoff, or surface water.

10.3 Storage

Storage of pesticides, fertilizers, and herbicides should be in accordance with requirements as specified in the manufacturer's instructions or California Department of Pesticide Regulations (see References) if the instructions from the manufacturer are not provided.

11.0 References

11.1 Regulations

a. Ventura County NPDES Permit CAS004002 (Order No. 2010-0108)
http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml

b. Ventura County NPDES Permit CAS004002 (Order No. 09-0057)

c. Title 3 CCR, Pesticide and Control Operations Section 6674, 6700-6900 (CalEPA)

d. Uniform Fire Code, Pesticide Storage and Display

e. 40 CFR Regulations of Pesticides sections 165.1-180 (www.usepa.gov)

f. State Water Resources Control Board General NPDES Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the US; General Permit No. CAG990005 – Water Quality Order No. 2013-0002-DWQ

g. State Water Resources Control Board General NPDES Permit for Discharges of Aquatic Pesticides to Surface Waters of the United States for Vector Control; General Permit No. CAG990004 – Water Quality Order No. 2012-0003-DWQ.

11.2 Web Sites

a. California Department of Pesticide Regulation - www.cdpr.ca.gov

b. Weather tracking – www.weather.gov

c. California Environmental Protection Agency (CalEPA) – www.calepa.ca.gov

d. State Water Resources Control Board – Aquatic Pesticide Permits -
http://www.waterboards.ca.gov/water_issues/programs/npdes/pesticides/

Attachment A
Monthly Summary Pesticide Use Report
Downloadable at
http://www.cdpr.ca.gov/docs/pur/forms/purforms.htm

STATE OF CALIFORNIA

MONTHLY SUMMARY PESTICIDE USE REPORT

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DEPARTMENT OF PESTICIDE REGULATION
ENFORCEMENT BRANCH

INSTRUCTIONS FOR COMPLETING THIS FORM ARE INDICATED BELOW AND ON THE REVERSE SIDE

OPERATOR (FIRM NAME)	ADDRESS	CITY	ZIP CODE	PHONE NUMBER

OPERATOR ID/PERMIT NUMBER	LICENSE NUMBER	COUNTY WHERE APPLIED	COUNTY NUMBER	MONTH/YEAR OF USE	TOTAL NUMBER OF APPLICATIONS

1. Complete Columns A, B, C, and D for <u>All Users</u>

2. Complete Column E by using one of the following codes:

Code 10 - Structural Pest Control.....*includes any pest control work performed within or on buildings and other structures.*
Code 30 - Landscape Maintenance Pest Control.....*includes any pest control work performed on landscape plantings around residences or other buildings, golf courses, parks, cemeteries, etc.*
Code 40 - Right-of-Way Pest Control.....*includes any pest control work performed along roadsides, power lines, median strips, ditch banks, and similar sites.*
Code 50 - Public Health Pest Control.....*includes any pest control work performed by or under contract with State or local public health or vector control agencies.*
Code 80 - Vertebrate Pest Control.....*includes any vertebrate pest control work performed by public agencies or work under the supervision of the State or county agricultural commissioner.*
Code 91 - Commodity Fumigation (Nonfood/Nonfeed).....*includes fumigation of nonfood/nonfeed commodities such as pallets, dunnage, furniture, burlap bags, etc.*
Code 100 - Regulatory Pest Control.....*includes any pest control work performed by public employees or contractors in the control of regulated pests.*

3. Complete Columns F and G, if use <u>does not</u> fit one of the above codes

A	B	C	D	E	F	G
MANUFACTURER AND NAME OF PRODUCT APPLIED	EPA/CALIFORNIA REGISTRATION NUMBER FROM LABEL INCLUDE ALPHA CODE	TOTAL PRODUCT USED (Check One Unit of Measure)	NUMBER OF APPLICATIONS	CODE	COMMODITY OR SITE TREATED	ACRES/UNITS TREATED
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				
		☐ LB ☐ OZ ☐ PT ☐ QT ☐ GA				

REPORT PREPARED BY _____ DATE _____

Print Form

Distribution: CAC - Two copies; Report preparer - One copy

GENERAL INFORMATION FOR COMPLETING THE MONTHLY SUMMARY PESTICIDE USE REPORT

Reporting Requirements

Reporting of all pesticide applications including spray adjuvants and plant growth regulators, is required by:

1. Landscape maintenance gardener pest control businesses, agricultural pest control businesses performing residential work, and structural pest control businesses.

2. Public agencies, pest control businesses and property operators who apply pesticides for agricultural use other than for the production of an agricultural commodity. These uses include applications for the production of poultry, fish, and apiary. Pest control businesses must report uses for the production of livestock. Also, uses on golf courses, parks, rights-of-way, cemeteries, forests, ditches, fence lines, etc. must be reported.

3. Persons who use restricted materials for uses other than the production of an agricultural commodity.

4. Persons who use a pesticide for industrial post-harvest commodity treatments.

5. Persons who use a Ground Water Protection pesticide, listed in Title 3, California Code of Regulations, section 6800(b) for any outdoor, institutional or industrial use.

Report Filing Deadlines

Submit two (2) copies of this report to the county agricultural commissioner by the 10th of the month, following the month in which the work was performed. Reports may be hand-delivered or mailed, the postmark serving as the date of delivery. Retain a copy for your records.

For each month when no pest control work has been performed, licensed pest control businesses must submit a use report by the 10th day of the following month to the county agricultural commissioner in counties where they are registered. The use report must indicate that no pest control work was performed.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FACE PAGE

The operator/firm information should be filled out completely, including the address, ZIP code, and telephone number.

Identify the Operator Identification/Restricted Material Permit Number, if applicable.

Enter the name of the county where the pesticide(s) was applied.

Indicate the county number where the product(s) was applied. The county number is available from the county agricultural commissioner's office. A separate report must be filed for each county where pesticides were applied.

Enter the month and year in which the applications were made.

Enter the total number of applications (i.e., the total of column D below) made during the month.

In Column A, enter both the manufacturer and brand name of the product.

In Column B, enter the "EPA Registration Number" or "California Registration Number" that appears on the pesticide label, including alpha codes, if any (AA, ZA, ZB, etc.). Do not use the "EPA Establishment Number" (Est. No.).

In Column C, indicate the total amount of product used as formulated and packaged by the manufacturer. Do not report the total mixture after dilution. Check only one unit of measure. If necessary, decimals and fractions may be used.

In Column D, indicate the total number of applications for each pesticide used during the reporting month. Each separate site (home, apartment complex, building, right-of-way, grain silo, etc.) should be counted as one application. For tank mixes, each represented pesticide should be credited with one application.

In Column E, if the use of the product is structural, landscape, right-of-way, vertebrate, public health, commodity fumigation (nonfood/nonfeed) or regulatory, enter the appropriate code number. Leave Columns F and G blank.

In Column F, if use of the product is not included in one of the number coded categories that are identified in column E, such as food/feed commodity fumigations, seed treatment, noncrop fencelines or ditch banks, etc., enter the commodity or site treated. Leave Column E blank.

Do not enter vertebrate pest control work in production areas such as orchards or other crop areas. This work should be reported on the Production Agriculture Monthly Pesticide Use Report.

In Column G, if use of the product is not included in one of the number-coded categories that are identified in Column E, enter the amount treated and the appropriate unit of measure (acres, pounds, square feet, tons, etc.). If you have a different measure, describe it fully and enter the amount treated. Leave Column E blank.

Enter the name of the person responsible for completing the information, and date the report. This could be a licensee, a manager, the person who applied the pesticide, a bookkeeper, etc.