1) **Activity Description: Management of Pesticides and Herbicides**

This activity covers the proper storage, handling, transportation, and disposal of all pesticides, herbicides, rodenticides, insecticides, and larvicides (hereinafter referred to as pesticides). For application instruction, read the labeling instructions on the container and/or speak to a supervisor.

*This EG is one of several specifically identified procedures for activities/facilities that are required by the Pollution Prevention/Good Housekeeping section of CCD’s MS4 permit. Related procedures not specially addressed in this EG include, but are not limited to, those identified in the Reference section of this document.*

2) **Potential Environmental Risks**

A. The following environmental concerns are associated with these activities:
- Improper or inappropriate use of pesticides and herbicides
- Contamination of soils
- Contamination of surface water
- Contamination of groundwater
- Destruction of wildlife/protected species
- Destruction of wetlands
- Improper or inappropriate disposal of pesticides and herbicides

B. Potential consequences from performing the activity incorrectly:
- Personal injury, property damage, or long-term damage to the environment
- Possible regulatory noncompliance, Notices of Violation, and related [financial & non-financial] penalties

3) **Critical Requirements and Tasks**

A. **Prohibited Activities**

i) Disposal of any unused pesticides in the storm sewer system or anywhere on DEN property is prohibited.
   - Unused, recalled, or waste pesticides may require special handling as hazardous (universal) waste.

ii) Disposal of pesticide containers without triple rinsing to remove residues is prohibited.
   - Triple rinse all pesticide containers prior to sending them off for disposal. Rinse water shall be applied to an area for treatment.

iii) Application of pesticides classified as “restricted use” by an unlicensed applicator is prohibited.
   - These activities must employ an applicator licensed with the Colorado Department of Agriculture.

iv) Washing spills into the stormwater sewer system is prohibited.

v) Discharges to surface waters of the State without a permit are prohibited.
o See CDPS General Permit “Discharges from Applications of Pesticides” for specific eligibility requirements.

B. General Considerations

i) Each operator and tenant conducting activities utilizing a pesticide or herbicide is responsible for understanding the applicable regulations and managing their activities accordingly; this Environmental Guideline is meant as guidance only and does not supersede any regulations.

ii) Follow application instructions exactly as described on the container label.

iii) Take care not to breathe chemicals. Wear appropriate personal protection equipment (PPE) during application and handling of materials. Prior to usage, read the container labeling for PPE requirements.

iv) Pesticide MSDSs and product information must be made available at the facility to all employees that utilize the chemicals.

v) Minimize use of pesticides. Seek less harmful/toxic pesticides to replace ones currently in use.

vi) Have adequate first aid materials near application area in case of emergency. Read container label for first aid requirements.

vii) Maintain adequate supplies of spill response equipment and materials in locations where spills are likely to occur.

viii) If waste materials are handled as universal waste, the material can only be stored on site for one year. For more information see ES-301-6.05 Management of Universal Wastes.

ix) Maintain inventories of pesticide materials stored on site. When possible, pesticide inventory should be minimized to amounts required for intended use.

C. Employee Training

i) Contractors engaged in the application of restricted use pesticides must be qualified and licensed as Commercial Pesticide Applicators by the Colorado Department of Agriculture.

ii) Employees using pesticides shall be trained by their Supervisor on proper use, handling, and disposal.

• Training will be conducted as necessary to conduct the Activity as described herein and to inform employees of impacts associated with illegal discharges and improper disposal of waste from municipal operations.

• Records of on-the-job training are not required. Records of formal employee training, if provided, shall be retained.

D. Storage & Material Handling Requirements

i) Store materials per FIFRA-approved methods.

ii) Maintain legible labels and markings on all containers and tanks.

iii) Ensure adequate secondary containment for all bulk storage containers, and that all containers and containment are in good operating condition.

E. Emergency Response

i) Call DEN Communications Center immediately at 303-342-4200 for all spills.
ii) If a spill occurs, refer to Environmental Guideline ES–301-5.02 Spill Response.

iii) Control spills to minimize property damage and eliminate imminent risk to human health and the environment.

iv) Containerize all collected wastes and evaluate for labeling, storage and disposal.

Expected Records / Outputs:

- Usage Records
  - For DEN applications, pursuant to XO 127A, the CCoD Department/Agency applying mosquito control larvicides shall record the location and frequency of application as well as the amount applied. This information shall be submitted to the CCoD Animal Control Division on a monthly basis during the application season. Copies are kept in ES files (09.18.03.05.01.05).
  - The department responsible for the deployment of mosquito control larvicides must complete the attached Larvicide Usage Report or similar document when larvicide is applied. Completed reports shall be submitted to DEN Environmental Services (ES). DEN ES will submit the report to the CCoD Animal Control Division (Diane Milholin) on a monthly basis during the application season. Tenants should utilize the “Pond Inspection Checklist” (provided at end of this EG) or similar document to record inspection and maintenance activities.
  - Contractors applying pesticides, including larvicides, on DEN are responsible for maintaining usage records.

- Waste management records (profiles, manifests, sample results, etc.).
  - Based on the disposal profile, manifests and related forms may be required. Manifests & profile forms can be obtained from the disposal facility for off-site disposal activities (manifests are required for hazardous, special and universal waste).
  - Operator must maintain waste management records at the facility for a minimum of 3 years.

- MSDSs for pesticides and herbicides
  - Manufacturers of these products will supply MSDS documents on demand. MSDSs for all pesticides/ herbicides/larvicides should be made available to all employees engaged in application activities. MSDSs should be maintained on file at the maintenance center facility.
  - Contractors that apply herbicides and pesticides are responsible for making MSDSs available to employees and for training on proper use.

4) Inspection Requirements:

Chemical storage areas should be reviewed for proper storage and general housekeeping. Inspections of chemical storage areas are recommended weekly for correct materials management, containment, security, cleanliness, access, correct labeling, storage duration, spills, and leaks.

Expected Records / Outputs:

- MS4 related maintenance activities conducted by DEN Field Maintenance shall be recorded in the DEN Maximo system. Recorded information should include costs incurred and total
hours for the activity. This information will be incorporated into the CCD MS4 Annual Report.

5) References

A. Phone Numbers

DEN Communications Center (for Spill Reporting)........................................... (303) 342-4200
Tom Somers (DEN Environmental Services)...................................................... (303) 342-2733
DEN Environmental Services (Main Line)......................................................... (303) 342-2730

B. Guidance Materials (list not limited to the following)

- Product label
- City and County of Denver Noxious and Invasive Weeds Management Guidelines
- MSDSs

C. Related Environmental Guidelines (list not limited to the following)

- ES-301-5.02 Spill Response
- ES-301-6.01 General Waste Management
- ES-301-6.05 Management of Universal Waste
- ES-301-1.07 Storage of Vehicles and Equipment Containing Chemicals
- ES-301-4.01 Management of Pesticides and Herbicides
- ES-301-5.02 Spill Response
- ES-301-6.01 General Waste Management
- ES-301-6.05 Management of Universal Waste
- ES-301-5.02 Spill Response
- ES-301-6.01 General Waste Management
- ES-301-6.05 Management of Universal Waste

D. Applicable Regulations (list not limited to the following)

- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 260-262-273 Federal RCRA Regulations
- 6 CCR 1007-3, Part 261 State RCRA Regulations
- CCD MS4 Permit
- CCD Ordinances
- Denver Wastewater Management Division Rules and Regulations
- Metro Wastewater Reclamation District Rules and Regulations
- DEN Rules and Regulations
- CCD Mayor’s Executive Orders

E. Other Documents

- DEN Managers Bulletins