



FP-7

FIRE DEPARTMENT ACTIVITIES

Although fire department activities are not considered a chronic source of stormwater pollution, some activities can result in the discharge of water containing pollutants that can pose a threat to both human health and the quality of receiving waters if they enter the storm drain system. Fire department activities include the following:

- 1. Emergency Fire Fighting Activities**
- 2. Post-Emergency Fire Fighting Activities**
- 3. Fire Fighting Training Activities**
- 4. Fire Station Activities**
- 5. Fire Hydrant and Fire Sprinkler Testing**
- 6. Trauma Scene Clean-up**

Cities that do not provide fire department services should coordinate with the agency responsible for these activities and ensure that these model procedures are followed.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for fire department activities include:

- To the extent allowed by the circumstances at the scene and without compromising the health and safety of personnel or the public, inspect potential non-storm water discharge flow paths and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).
- Once per year, educate fire department staff on pollution prevention measures.

MODEL PROCEDURES:

1. Emergency Fire Fighting Activities

An “emergency” exists from alarm notification until, in the opinion of the incident commander, the emergency has concluded and emergency equipment is returned to the station. Discharges occurring during emergency fire fighting activities (i.e. flows necessary for the protection of life and property) do not require BMPs and are not prohibited under the stormwater permits. However, to the extent allowed by the circumstances at the scene and without compromising the health and safety of personnel or the public, emergency fire fighting activities should be performed in a manner that avoids or minimizes discharges to the storm water system.

BMPs that may be considered during emergency fire fighting activities include the following:

- Minimize the use of water on the fire and/or use foam;
- Block the storm drains that may be impacted to prevent the runoff from entering the storm drain system;
- Avoid directing fire fighting flows directly on erodible surfaces if runoff will enter receiving waters or storm drains;
- Apply fire fighting flows such that runoff will flow over vegetated areas prior to entering receiving waters or storm drains.

2. Post-Emergency Fire Fighting Activities

The post-emergency rehabilitation and maintenance of response equipment should be performed in a manner that prevents discharges to the storm water system whenever practicable, and minimizes discharges to the storm water system when elimination of discharges is practically unavoidable.

3. Fire Fighting Training Activities

Training activities, which simulate emergency responses, should be performed in a manner that reduces or prevents discharges to the storm water systems. In addition, when the elimination of discharges into the storm water system is unavoidable (i.e., equipment failures), measures should be implemented to minimize the potential impacts to water quality:

- Fire training should be conducted, where feasible, in facilities where runoff controls protecting the storm drain system have been engineered and built into the facility;
- Direct water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion;

- When flowing water can not be contained in the landscaped areas, survey the area prior to the training exercise to ensure that debris and pollutants will not enter the storm water system as a result of the flows generated during the drill;
- When practicable and necessary, divert flows to the sewer, with the permission of the local sewerage agency;
- Use fog streams for short durations;
- Use lower gallon per minute (GPM) nozzle settings;
- Prevent discharge of foam to the storm drain system. If training activities involve the use of foam, seal all potentially affected storm drain inlets with plastic sheeting and sandbags or temporary berms, collect the runoff, apply a defoaming agent, and discharge to the sanitary sewer, with the permission of the local sewerage agency;
- Pre-plan live fire training activities to allow integration of structural BMPs to control runoff.

4. Fire Station Activities

Fire stations are identified in the Drainage Area Management Plan (DAMP) as a Municipal Fixed Facility. Potential pollutant generating activities typically performed at fire stations that could result in discharge of pollutants to the storm drain system include the following:

- Building Maintenance and Repair: FF-2
- Equipment Maintenance and Repair: FF-3
- Fueling: FF-4
- Material Storage, Handling, and Disposal: FF-7
- Spill Prevention and Control: FF-10
- Vehicle and Equipment Cleaning: FF-11
- Vehicle and Equipment Storage: FF-12
- Waste Disposal and Handling: FF-13

Fire station personnel are referred to various Fact Sheets listed above that describe pollution prevention and model procedures associated with these activities. Pertinent Fact Sheets are identified by number (e.g. FF-2) in the above list of activities.

5. Fire Hydrant and Fire Sprinkler Testing

Fire hydrant and fire sprinkler testing are normally performed by water utility or other non-fire fighting personnel. However, in the event that such activities are performed by fire fighting personnel, the model procedures contained within Fact Sheet FP-6 in Appendix A-5 and Fact Sheet IC-23 in Appendix A-9 of the Local Implementation Plan should be followed.

6. Trauma Scene Clean-up

Although fire fighting personnel are not routinely involved in the clean-up of trauma scenes, they may be incidentally involved while performing other work. Trauma scene clean-up must only be performed by OSHA – blood-borne pathogen trained personnel. Specific guidance on trauma scene clean-up procedures is provided in Section 10.2.9.1 of the DAMP.

Additional information and guidance for clean-up policies and procedures for bodily fluids may be obtained 24 hours a day by contacting the Orange County Health Care Agency (HCA) – Public Health by calling Orange County Control One at (714) 628-7008.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbooks. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

California Storm Water Best Management Practice Handbooks. Industrial/Commercial and Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates for California Stormwater Quality Association. January 2003.