

Waste Water Discharge

1102.1 PURPOSE AND SCOPE

The practices detailed in this policy are intended to minimize run-off releases associated with firefighting, fire training, emergency scene spills and discharges, trauma scene waste management and fire facility maintenance activities.

1102.2 POLICY

It is the policy of the Fresno County Fire Protection District to adhere to the regulations established by the state Regional Water Quality Board for this region.

1102.3 NON-EMERGENCY ACTIVITIES

1102.3.1 DISCHARGES ASSOCIATED WITH FIRE TRAINING ACTIVITIES

Training activities should be performed in a manner that reduces or prevents discharges to the storm water systems. When discharge into the storm water system is unavoidable (i.e. equipment failures), the following measures should be implemented to minimize the impact to water quality:

- Fire training should be conducted, where feasible, in facilities where run-off controls that protect the storm drain system have been engineered and built into the facility.
- Direct water flows to landscape or greenbelt areas whenever possible.
- When flowing water cannot be contained in the landscape areas, survey the area prior to the training exercise to ensure that debris will not enter the storm water system as a result of water flow generated during the drill.
- When practicable and necessary, divert flows to the sewer, with the permission of the local sewer agency.
- Use fog streams for short durations.
- Use lower gallon per minute nozzle settings.
- Prevent discharge of foam to the storm drain system. If training activities involve the use of foam, block off all potentially affected storm drain inlets with plastic sheeting and sandbags, construct a temporary berm, collect the run-off and discharge to the sanitary sewer after a de-foaming agent has been applied.

1102.3.2 VEHICLE AND EQUIPMENT WASHING AND CLEANING

The following should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system from vehicle and equipment washing and cleaning:

- Use cleaning methods that employ the minimal use of water, such as a wet chamois or non-water rinse, when applicable.
- Limit the use of all cleaning agents and when feasible, use only water.

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- Remove debris from any area or facility that is used for washing and/or cleaning vehicles.
- Direct water flows to landscape or green areas or contain the water on-site and allow it to evaporate and infiltrate whenever it is safe to do so without causing damage or erosion.
- Use designated wash areas (preferably covered and bermed) to contain and/or divert the wash water to the sewer, either through the use of a wet-vac or a plumbed sanitary sewer connection.
- Use self-contained water recycling systems.
- Use off-site commercial washing and steam-cleaning facilities. Prohibit all steam cleaning discharge from entering the storm drain. Direct all steam-cleaning discharge to the sanitary sewer.

1102.3.3 VEHICLE FUELING

The following measures should be taken to reduce the impact to storm water:

- The fueling area should be protected from storm water by installing a canopy.
- Pave fueling area surfaces with Portland cement concrete (or other equivalent smooth impervious surface) with a 2 percent to 4 percent slope to prevent puddles.
- Keep perimeter drains clear of debris at all times.
- If a perimeter drain is not installed, install a berm or graded area to prevent run-off of storm water and spilled liquids.
- Use a dead-end sump to collect spills or install an oil-water separator.
- Utilize vapor recovery nozzles to help control drips as well as air pollution.
- Maintain a spill control kit at the refueling site.
- When fueling fire vehicles, members should take the following measures to prevent fuel spills and leaks:
 - Avoid fueling during rain conditions in fuel areas that do not have a canopy.
 - When necessary to refuel during rain conditions in fueling areas that do not have a canopy, the person refueling shall not leave the fueling area while fuel is flowing from the pump.
 - Avoid topping-off fuel tanks.
 - Use absorbent material on small spills and for general cleaning rather than hosing down an area. Remove the absorbent material promptly and dispose as hazardous waste.

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- Avoid mobile fueling during non-emergency events if the vehicles and/or equipment can be brought to the refueling facility.

1102.3.4 VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR

A “dry shop” can help prevent or reduce the discharge of pollutants from vehicle and equipment maintenance as follows:

- Conduct vehicle and equipment maintenance in areas where precautions have been taken to prevent spills from entering the storm drain system.
- Use dry cleaning methods in maintenance and repair areas unless adequate precautions have been taken to prevent the discharge of wash water to the storm drain.

1102.3.5 HOSE WASHING AND CLEANING

The discharge of pollutants from washing and cleaning fire hoses and equipment may be prevented or reduced by using the following safeguards, as appropriate:

- Design new areas or facilities that will be used for washing and/or cleaning fire hoses in a way that prevents wash water or other debris from entering the storm drain or from receiving water that has not been adequately treated.
- Direct water flows to landscaped or green areas, or contain the water on-site and allow it to percolate through plant material or the landscape, or to evaporate completely whenever it is safe to do so without causing damage or erosion.
- Use designated wash areas (preferably covered and bermed) to contain and/or divert the wash water to the sewer either through the use of a wet-vac or a plumbed sanitary sewer connection.
- When cleaning the wash area, use wet mop cleaning methods in small areas, when feasible.
- Use methods of cleaning fire hoses that employ the minimal use of water, such as high-pressure spray washers, when applicable.
- Consider the use of biodegradable cleaning agents.

1102.3.6 FACILITY MAINTENANCE

Facility maintenance should be conducted as follows:

- Use dry cleaning methods (e.g., sweeping) to clean impervious hardscape areas, such as apparatus floors, driveways, patios and walkways. Place debris in receptacles for solid waste disposal.
- Maintain landscape areas as required to limit introduction of leaves and other landscape waste into the storm water system.
- Monitor and maintain irrigation systems as required to minimize off-site discharge of irrigation run-off.

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- Provide spill kits at the work site and use them for cleaning when appropriate. Dispose of spilled material in accordance with applicable regulations. See applicable regulations listed by the California Environmental Protection Agency (Cal/EPA) at [website](#).
- Maintain and repair structures using methods that do not result in the release of water, soil or waste into the storm drain system.

1102.3.7 SOLID WASTE AND HAZARDOUS MATERIALS STORAGE AREAS

Solid waste and hazardous materials storage areas should be maintained as follows:

- There should be a canopy or roof over solid waste and hazardous materials storage areas.
- There should be secondary containment (e.g., a metal or plastic pan with a raised edge) for hazardous materials storage areas.
- All trash and solid waste receptacles should have lids. Keep lids closed to prevent contact with rainfall and to ensure containment of waste within the storage area.

1102.4 EMERGENCY ACTIVITIES

It is not always possible to prevent discharge that occurs during emergency firefighting activities (e.g., flows necessary for the protection of life and property). However, when practicable, the following should be considered.

1102.4.1 TRAUMA SCENE CLEANUP

Trauma scene wastes (e.g., blood and human tissue) may be generated at various types of crime, collision or accident scenes. This type of waste can pose a health risk to those responsible for overseeing and conducting the cleanup. The following procedures should be used when practicable to protect members and prevent any unnecessary discharge of material into the storm drain.

1102.4.2 CLEANUP OF TRAUMA SCENE WASTE ON PUBLIC PROPERTY

The Incident Commander should determine whether there are sufficient resources for the cleanup of trauma scene waste on public property (e.g., personnel trained to deal with bloodborne pathogens).

When a scene requires decontamination and cleanup beyond the capability of on-scene emergency responders, a registered Trauma Scene Waste Management Practitioner (TSWMP) is necessary. These practitioners are registered with the Department of Public Health (DPH) and will conduct cleanup operations in accordance with the Medical Waste Management Act (Health and Safety Code § 118321 et seq.). A list of practitioners can be obtained from the DPH [website](#).

- Before proceeding with site cleanup, emergency responders must have the proper personal protective equipment (PPE), adequate supplies of bleach and sufficient water to properly complete the operation. Universal precautions must be utilized during

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any cleanup operation. Additional information and guidance for cleanup policies and procedures for bodily fluids may be obtained 24 hours a day by contacting the county health department.

- Personnel shall wear gloves when washing or handling contaminated equipment, clothing or other materials. Additional PPE may be necessary if there is the potential for splashing.
- The Coroner should remove any human tissue or body parts at the scene of a fatality, following its own policies and procedures. The Coroner will generally not respond to a non-fatal incident for the purpose of human tissue removal.
- Human tissue, body parts or blood/body fluids in a solid state should not be allowed to enter a storm drain. Tissue found in the storm drain system should be removed to the maximum extent practicable.
- Sharps waste shall be disposed of in a rigid sharps container. The sealed container shall be disposed of in an appropriate manner in compliance with the Medical Waste Management Act.
- The county health department may be contacted, if needed, for consultation or assistance in trauma scene management or questions regarding legal disposition of medical waste.
- For incidents on freeways, coordination should occur with the California Highway Patrol regarding the potential use of California Department of Transportation (CALTRANS) for cleanup of trauma scene waste.
- When a TSWMP is called to a scene, Fresno County Fire Protection District members are responsible for staying on-scene until the TSWMP arrives. Only in highly unusual life-threatening emergency situations shall a trauma cleanup scene be abandoned by members prior to the arrival of the TSWMP.
- Reasonable efforts should be made to protect the storm drain system when conducting cleanup of a trauma scene. Notifications regarding significant potential impacts to the storm drain system and additional information and guidance may be obtained 24 hours a day by contacting the county.

1102.4.3 SPECIFIC CLEANUP PROCEDURES FOR SMALL SPILLS

Fresno County Fire Protection District members may decontaminate and then wash down small amounts of human blood/body fluids that are still in a liquid state. A small spill is defined as a spill that can be thoroughly and completely disinfected with one gallon of 10 percent chlorine disinfectant. This determination should be made with the understanding that multiple applications may be necessary to accomplish full disinfection.

- Members shall wear PPEs to protect skin, mucus membranes, lungs and clothing from chlorine or trauma scene waste.

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- Members shall apply disinfectant to the liquid bio-waste (foam may develop) and let it sit for a minimum of 10 minutes.
- After 10 minutes, members shall wash down the area using a fire hose or pressurized water extinguisher.
- In non-emergency situations and when circumstances permit, members should also:
- Attempt to move trash or miscellaneous debris from the path of the run-off so no additional or unnecessary material is discharged or carried into the storm drain.
- If there is a choice between directing the run-off down a storm drain or a sewer, use the sewer.
- Porous surfaces, such as asphalt, may require multiple repetitions to completely disinfect and thoroughly clean the area.

If the material requiring cleanup meets any of the following criteria, emergency responders shall call a TSWMP:

- The amount of liquid waste at the incident reasonably exceeds the ability to thoroughly disinfect it with one gallon of 10 percent chlorine disinfectant.
- The material requiring cleanup is human tissue or a body part and Coroner personnel will not be responding to the scene to remove the material because the incident did not involve a fatality.
- A TSWMP may be requested through dispatch when needed.
- When a TSWMP is called to a scene, Fresno County Fire Protection District members are responsible for staying on-scene until the TSWMP or other responsible agency (e.g., law enforcement, public works) arrives. In no case shall the scene be abandoned prior to the arrival of the TSWMP.

1102.4.4 CLEANUP OF TRAUMA SCENE WASTE ON PRIVATE PROPERTY

Fresno County Fire Protection District personnel should not clean up trauma scene waste on private property.

1102.4.5 DISCHARGES ASSOCIATED WITH EMERGENCY FIREFIGHTING ACTIVITIES

To the extent allowed by the circumstances at the scene and without compromising the health and safety of members or the public, emergency firefighting activities should be performed in a manner that avoids or minimizes discharges to the storm water system, including the following:

- If possible, avoid directing firefighting flows directly on erodible surfaces if run-off will enter receiving waters or storm drains.
- If possible, apply firefighting flows so run-off will flow over vegetated areas prior to entering receiving waters or storm drains.

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1102.4.6 DISCHARGES ASSOCIATED WITH HAZARDOUS MATERIAL SPILLS

The County is the Certified Unified Program Agency (CUPA) with countywide responsibility for coordinating a response to hazardous material spills. The Fresno County Fire Protection District is a participating agency with specified responsibilities within the jurisdiction. The Fresno County Fire Protection District operates under a Hazardous Materials Area Plan that describes procedures for the allocation of resources and assigns tasks during a hazardous materials release emergency. Fire District and law enforcement members shall respond to hazardous material releases according to response protocols established by their department under oversight of CUPA.

1102.4.7 NOTIFICATION OF SPILLS, RELEASES AND DISCHARGES

Spills, releases and discharges of pollutants shall be reported by the Incident Commander as required by all applicable state and federal laws. In addition, any such spills, releases and illegal discharges with the potential to endanger health, safety or the environment shall be reported by the Incident Commander to the county within 24 hours after discovery. If it is safe to do so, necessary actions shall be taken to contain and minimize the spill, release or discharge.