

*City of Flagstaff*  
*Maintenance Yard*

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**STORMWATER POLLUTION  
PREVENTION PLAN**

**Revision 2**

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**419 N. MOGOLLON  
FLAGSTAFF, ARIZONA**

**PERMIT NO. AZMSG-6242**

**CONTROL COPY \_\_\_\_\_**

Prepared By:  
City of Flagstaff  
Environmental Management Section

**Original Rev 0 April 2001  
City Updates Rev 2 August 2016**

**CITY OF FLAGSTAFF MAINTENANCE YARD  
STORMWATER POLLUTION PREVENTION PLAN**

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**MANAGEMENT APPROVAL**

This Stormwater Pollution Prevention Plan for the City of Flagstaff - Maintenance Yard has my full endorsement and I am at a level of authority to commit the necessary resources to implement this Plan as herein described.

Signature: \_\_\_\_\_

Name: Andy Bertelsen

Title: Public Works Director, City of Flagstaff

**CITY OF FLAGSTAFF MAINTENANCE YARD  
STORMWATER POLLUTION PREVENTION PLAN**

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**SWPPP REVIEW AND ACCEPTANCE SHEET**

**CITY OF FLAGSTAFF  
MAINTENANCE YARD  
419 N. MOGOLLON  
FLAGSTAFF, ARIZONA**

**PERMIT NO. AZMSG-6242**

We, the undersigned have reviewed the City of Flagstaff - Maintenance Yard, Stormwater Pollution Prevention Plan (SWPPP) and revisions in their entirety and to the best of our knowledge believe all information to be true and factual and will implement the SWPPP in accordance with the requirements herein.

**Plan Reviewed and Accepted by:**

\_\_\_\_\_ Date: \_\_\_\_\_  
**Name and Title**

\_\_\_\_\_ Date: \_\_\_\_\_  
**Name and Title**

\_\_\_\_\_ Date: \_\_\_\_\_  
**Name and Title**

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## CITY OF FLAGSTAFF MAINTENANCE YARD STORMWATER POLLUTION PREVENTION PLAN

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### 1.0 INTRODUCTION

#### 1.1 REGULATORY REQUIREMENTS FOR STORMWATER DISCHARGE

The Clean Water Act (CWA) of 1972, 33 U.S.C. 1311, gives the Environmental Protection Agency (EPA) the authority to regulate stormwater discharges to the waters of the United States including the National Pollutant Discharge Elimination System (NPDES). The NPDES permit program implements the CWA prohibition on unauthorized discharges by requiring a permit for every discharge of pollutants from a point source to waters of the United States.

In September 1995, the EPA issued a NPDES Multi-Sector General Stormwater Permit (MSGP) which applied to facilities in certain industrial segments identified by Standard Industrial Classification (SIC) codes. Under the MSGP, stormwater dischargers were required to develop site-specific pollution prevention plans based on industry-specific best management practices (BMPs) specified in the permit.

In the final reissuance of the NPDES Stormwater MSGP for Industrial Activities; Notice (Federal Register/Volume 65, No 210 dated October 30, 2000/Notices, pages 64746 through 64880), the EPA re-evaluated the industry specific and monitoring requirements of the MSGP. As stipulated in the 1995 NPDES Stormwater MSGP and as part of the current (2010) NPDES Stormwater MSGP, facilities requesting permit coverage must submit a Notice of Intent (NOI) prior to the authorization of stormwater discharges. A copy of the Federal Register, Volume 65, Number 210 dated October 30, 2000, providing the most recent MSGP background and SWPPP requirements for stormwater discharges associated with industrial activity is located in Appendix L, Federal Register.

Stormwater discharges to waters of the United States from industrial activity (non-mining) in Arizona are currently authorized according to the Arizona Pollutant Discharge Elimination System (AZPDES) program administered by the Arizona Department of Environmental Quality (ADEQ) under permit AZMSG2010-002. The AZPDES general program became effective on February 1, 2011 and expires on January 31, 2016 but may be administratively continued at their discretion.

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### 1.2 CITY OF FLAGSTAFF MAINTANANCE YARD STORMWATER DISCHARGE REGULATORY HISTORY

The City of Flagstaff - Maintenance Yard is located at 419 North Mogollon, Flagstaff, Arizona and is classified as a Sector P, Land Transportation and Warehousing, and activity code 4321 – Motor Freight Transportation and Warehousing Facility. Figure 2-1, Vicinity Map, provides the location of the site within Flagstaff. Figures 1 and 2-2, Site Plans, provide an illustration of the site.

This Stormwater Pollution Prevention Plan (SWPPP) was originally prepared following guidance provided in EPA Office of Wastewater Management Permits Division's Stormwater MSGP Information Package dated October 1995 and the Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Stormwater MSGP for Industrial Activities; Notice dated October 30, 2000.

The City of Flagstaff originally voluntarily developed and implemented this SWPPP in 2001 to assist in complying with future regulations and to reduce the possibility of spills or releases of hazardous materials to the environment. The SWPPP has been implemented continuously since then. In accordance with the current (2010) NPDES MSGP, this SWPPP has been updated and revised according to the ADEQ MSGP 2010-002 by City of Flagstaff's Environmental Management Section. This SWPPP is currently authorized through AZPDES MSGP number AZMSG2010-002 effective on February 1, 2011 for stormwater discharges associated with industrial activities from non-mining facilities to waters of the United States. The City of Flagstaff – Maintenance Yard is authorized to discharge stormwater under the AZPDES permit AZMSG-6242.

Facilities that have vehicle maintenance shops, equipment cleaning operations, and asphalt handling activities as currently conducted at the City of Flagstaff - Maintenance Yard, are subject to the stormwater regulation of the AZPDES general program.

The regulation applies only to those portions of the facility that are involved in outdoor vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, and asphalt handling), equipment cleaning operations or other activities that are identified in another subcategory of the rules that meet the definition of stormwater discharges “associated with industrial activity.”

This SWPPP identifies sources of pollution that potentially affect the quality of stormwater discharges from the facility, and identifies and describes control measures to minimize the potential for pollutant discharges. The SWPPP also provides a description of maintenance procedures for erosion and sediment control and stormwater management.



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### 1.3 REGULATORY REQUIREMENTS FOR NON-STORMWATER DISCHARGES FROM VEHICLE AND EQUIPMENT CLEANING AND MAINTENANCE FACILITIES

Due to concern that many non-stormwater discharges may be present at vehicle and equipment cleaning and maintenance facilities, the AZPDES MSGP requires that all facilities provide proof that these discharges are not commingled with stormwater runoff and are appropriately controlled so as to protect all receiving waters.

The ADEQ MSGP clarifies that non-stormwater discharges, including vehicle and equipment washwater, are not permitted to be discharged to waters of the United States. The operators of such non-stormwater discharges must obtain coverage under a separate NPDES permit if discharged to waters of the United States or through a municipal separate stormwater system, or comply with applicable industrial pretreatment requirements if discharged to a municipal sanitary sewer system. There is a vehicle wash rack located at the City of Flagstaff - Maintenance Yard used for all vehicle washing and it discharges to the sanitary sewer system.

For facilities that discharge vehicle and equipment washwater to the sanitary sewer system, the operator of the sanitary sewer system and associated treatment plant must be notified. A copy of the notification letter must be attached to the SWPPP, if the facility is an industrial user. The City of Flagstaff - Maintenance Yard is a municipal user conducting industrial activities and discharges vehicle and equipment washwater to the sanitary sewer system. As such, the City of Flagstaff Industrial Waste Section was contacted to clarify City of Flagstaff Discharge Permit requirements. According to City of Flagstaff Industrial Waste Section personnel, a discharge permit is not required for the City of Flagstaff - Maintenance Yard.

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### 2.0 STORMWATER POLLUTION PREVENTION TEAM

**Section On-Site Environmental Coordinators** - Currently, three (3) City of Flagstaff Sections including Fleet Services, Solid Waste, and the Streets Section, conduct operations at the City of Flagstaff - Maintenance Yard. These Sections perform their operations independent of one another but share common buildings and grounds at the City of Flagstaff - Maintenance Yard. To satisfy SWPPP requirements, an On-Site Environmental Coordinator for each Section has been identified for responsibility and implementation of the SWPPP.

**Stormwater Pollution Prevention Team** – The City of Flagstaff - Maintenance Yard has selected a Stormwater Pollution Prevention Team (SWPPT) consisting of individuals from facility staff, which have been drawn from different areas of the facility operations to best utilize the experience of each team member. This team is responsible for assisting the On-Site Environmental Coordinator in the development and implementation of this SWPPP. Team members are each responsible for one or more areas of stormwater pollution prevention. Individual team members and their responsibilities are identified in [Table 2-1, Stormwater Pollution Prevention Plan Team](#). For ease of future revisions, individual SWPPT member names and contact numbers are provided on the Contact List in Appendix C.

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### 3.0 SITE EVALUATION

To assist in determining potential areas of environmental concern, a site evaluation describing potential pollutant sources is summarized in this section and is required by the AZPDES MSGP guidelines. A description of potential pollutant sources at the facility is provided in the following subsections.

#### 3.1 SITE MAP

A site map (Figure 3-1, Site Plan Showing Areas Potentially Exposed to Stormwater, Surface Water Drainage, and Surface Water Discharge Points) illustrates the location of each stormwater discharge point including the areas, which drain to each discharge point. Stormwater at the facility discharges to six outfalls at points located both on-site and off-site. The locations of materials exposed to stormwater are included on the site map along with other pertinent site features. **Table 3-1, Summary of Facility Areas**, provides a listing of facility areas, activities conducted in each area, and the approximate site acreage used for each activity on the site.

#### 3.2 CITY OF FLAGSTAFF MAINTENANCE YARD ACTIVITIES

The City of Flagstaff presently operates in several buildings located at the City of Flagstaff - Maintenance Yard, located at 419 North Mogollon, Flagstaff, Arizona. The buildings serve as operational centers for the City of Flagstaff Streets Section, Fleet Services Section, and Solid Waste Section. The activities conducted at the City of Flagstaff - Maintenance Yard are generally described as follows.

§ **City of Flagstaff Fleet Services (Vehicle Maintenance):** Fleet Services personnel maintain and service both light and heavy duty city vehicles and operate from three buildings within the City of Flagstaff - Maintenance Yard. Fleet Services personnel maintain management offices and personnel lounge/restrooms in Vehicle Maintenance Building (Building 1). Other activities conducted in Building 1 include uniform washing, vehicle maintenance in two shop areas; a parts shop that provides oils, fluids, and various mechanical items for vehicle maintenance; tire storage; and general storage areas. Fleet Services activities identified as preventive maintenance (PM) are conducted in Building 5 and the welding shop in Building 3.

Fleet Services personnel also operate an above-ground storage tank (AST) and fueling facility located in an area west of Building 1 and a vehicle wash rack located in an area north of Building 1. The number of vehicles serviced by Fleet Services varies based on demand. Vehicles awaiting service in the Vehicle Repair Staging Area are stored to the south and east of Building 1.

§ **City of Flagstaff Solid Waste (Sanitation):** Solid Waste Section personnel provide municipal/commercial waste (trash) removal for the City of Flagstaff, operating from three buildings within the City of Flagstaff - Maintenance Yard. Solid Waste Section management personnel are located in the Sanitation Building (Building 2). Solid Waste

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Section personnel operate bays in the Sanitation Equipment Garage (Building 6) and Streets Equipment Garage (Building 5) for the storage and servicing of residential and commercial solid waste trucks. Solid Waste Section personnel operate the Paint Booth in Building 5 for painting activities.

Solid Waste Section personnel routinely operate approximately 20 trucks daily.

§ **City of Flagstaff Streets Section:** Streets Section personnel provide street maintenance for the City of Flagstaff and operate from four buildings within the City of Flagstaff - Maintenance Yard. The Streets Section stores street sweepers in the northeastern portion of Building 1. The Streets Section maintains offices, a carpenter shop, and a sign shop in the Streets Building (Building 3). The Streets Section stores various paints in the Paint Storage Shed (Building 4). The Streets Section operates bays for sweeper and vehicle storage in Streets Equipment Garage (Building 5).

The Streets Section also formerly (up to 1999) operated an Asphalt/Cinder Stockpile and Vehicle Staging Area that is located to the east of Building 3. Currently, the Asphalt Milling/Cinder Stockpile is located east of Gemini Drive on McMillan Mesa. Cold patch asphalt and salt is stored inside a building located at 216 West Phoenix Avenue.

Streets Section personnel daily operate approximately 35 diesel vehicles in the winter season and 12 diesel vehicles during the summer season.

Currently, the City of Flagstaff - Maintenance Yard is supplied with natural gas for heating purposes. Approximately nine natural gas heaters are used by Fleet Services; seven natural gas heaters are used by the Streets Section; and seven natural gas heaters are used by the Solid Waste Section. Historically, waste oil was burned in heater units at the site. Waste oil burning for heating was discontinued throughout the majority of the facility. Until 1996, waste oil was burned in Building 1 using heaters in Upper and Lower Shop areas.

Incidental leaks and spills of vehicle and equipment oils/fluids are encountered throughout the City of Flagstaff - Maintenance Yard. Absorbents such as kitty litter and vermiculite were historically and are currently used to contain and soak up leaks and spills along with drip pans. Absorbents are collected in municipal waste bins and disposed at the City of Flagstaff landfill or utilizing a waste disposal contractor. Additionally, precipitation flows across areas of incidental leaks and spills which can discharge off-site. Absorbent socks are placed at the various outfall locations to minimize the discharge of pollutants from the site.

Appendix C, List of Key Contacts, identifies contractors that provide recycling and waste handling activities for the City of Flagstaff - Maintenance Yard.

Operations and portions of the site that may encounter stormwater include vehicle washing at the wash rack; solid waste container locations along exterior walls throughout the facility; Fleet Services Vehicle Repair Staging Area; the AST's and Fuel Pumps; the inactive Streets Section Asphalt/Cinder Stockpile

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and active Vehicle Staging Area; storage areas for new and used materials including used oils, miscellaneous fluids, and antifreeze located throughout the facility; loading and unloading areas; painting operations; and paved storage and staging areas.

### 3.3 POTENTIAL POLLUTANTS IN STORMWATER

The Federal Register, Volume 65, Number 210, Notices dated Monday, October 30, 2000, Final Reissuance of National Pollutant Discharge Elimination System Stormwater MSGP for Industrial Activities; the permit provides a summary of potential pollutants from vehicle maintenance, cleaning operations, and asphalt handling, as follows:

\$	Acid and alkaline wastes	\$	Hydraulic Fluids
\$	Heavy Metals	\$	Oils
\$	Chlorinated solvents	\$	Organics
\$	Chemical Oxygen Demand (COD)	\$	Paint and Residual Paint Wastes
\$	Detergents	\$	Particulates
\$	Propylene Glycol	\$	pH
\$	Fuel	\$	Phosphorous
\$	Grease		

In addition, as a result of development and implementation of this SWPPP, pollutants should be reduced or eliminated, leaving only the following:

- \$ **Petroleum Hydrocarbons:** Petroleum hydrocarbons originating from automobile engine oil and fuel drips and residuals from asphalt parking surfaces are anticipated to be in stormwater during the initial 15 to 30 minutes of a storm event. Engine oil from parked automobiles may contain trace amounts of gasoline or diesel compounds. Petroleum hydrocarbon absorbent pillows are placed at each surface water outfall location to assist in absorbing petroleum hydrocarbons from surface flows.
- \$ **Propylene Glycol:** Propylene glycol originating from automobile radiator antifreeze leakage is anticipated to be in stormwater during the initial 15 to 30 minutes of a storm event. Propylene glycol absorbent pillows are placed at each surface water outfall location to assist in absorbing propylene glycol from surface flows.
- \$ **Particulates from De-Icing Applications:** Particulates (glass beads or sand) from de-icing applications adhere to ice and snow accumulating on vehicles and are anticipated to be in stormwater during the winter months during the initial 15 to 30 minutes of a storm event. Settling basins are located at surface water discharge points to assist in removing particulates from storm flows.

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### 3.4 INVENTORY OF MATERIALS AND PROCESSES POTENTIALLY EXPOSED TO STORMWATER

The City of Flagstaff has completed an inventory of chemicals used and processes conducted at the site that may include use of hazardous or regulated materials. The following activities use, store, or transport hazardous or regulated materials on the site that may potentially be exposed to stormwater. The areas where these activities are conducted are illustrated on Figure 3-1, Site Plan Showing Areas Potentially Exposed to Stormwater, Surface Water Drainage and Surface Water Discharge Points.

- \$ Vehicle Wash Areas;
- \$ Municipal Waste Containers;
- \$ Vehicle Repair Staging Area;
- \$ AST's and Fuel Pumps;
- \$ Inactive Streets Section Asphalt/Cinder Stockpile;
- \$ Streets Section Vehicle Staging Area;
- \$ Exterior Storage and Handling Areas;
- \$ Loading and Unloading Areas (not specified on Figure 3-1);
- \$ Solid Waste Section Paint Booth and Other On-Site Painting Operations, and
- \$ Open Drainage System Surface Water Discharge Points.

A description of the above, including the respective potential pollutants generated from each source, is provided below. BMPs are provided in the Best Management Practices portion of the SWPPP.

#### 3.4.1 Vehicle Wash Areas

Vehicle wash areas were previously located adjacent and to the south of Building 3, adjacent and to the north of Building 6, and north of the Building 1 at the Vehicle Wash Rack (Figure 3-1). Vehicle wash areas drained to various outfalls at the facility. These practices have been discontinued and are restricted to the Vehicle Wash Rack described below.

The Vehicle Wash Rack is located north of Building 1. The Vehicle Wash Rack consists of a slightly elevated concrete pad that discharges to a grated, slit drain that collects wash water and discharges to an oil/water separator located directly to the north of the pad. The oil/water separator is connected by a closed pipe system to the City of Flagstaff sanitary sewer system. Additionally, the Vehicle Wash Rack is constructed to reduce the potential of surface water flow (sheet flow) to wash over the Vehicle Wash Rack area during precipitation events.

Potential Pollutants: Potential stormwater pollutants associated with the Vehicle Wash Areas include oil, detergents, heavy metals, phosphorus, and suspended solids.

Any washing of vehicles in uncovered and unrestricted areas of the facility produces wash water that may contain restricted or hazardous components as described above. Washwater from vehicles washed in uncovered and unrestricted areas discharges off-site through surface water discharge points and impacts local drainages and waterways and is not compliant with the stormwater regulations.

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The SWPPP reference guidelines recommend the following construction details and operational practices to be compliant: cleaning operations are to be performed indoors, covering of cleaning areas, ensuring that all washwater drains to the intended collection system, and collecting stormwater runoff from the cleaning area and providing treatment or recycling.

### 3.4.2 Municipal Waste Containers

Closed municipal waste containers are located along the exterior of Buildings 1, 3, 5, and 6. The municipal waste containers are used for the disposal of oil/fluid saturated absorbents, used aerosol cans, used rags, waste metal, waste oil filters, paper waste, empty cans/containers, paint residues, and other vehicle maintenance-related wastes. The municipal waste containers are picked up on a weekly basis or as needed by the City of Flagstaff Solid Waste Section and transported to the City of Flagstaff landfill.

Potential Pollutants: Any unsecured containers can allow precipitation to enter the containers, stormwater exposure is expected. Any materials placed in open top containers which are susceptible to wind dispersion or leaching via rainwater contact are considered potential stormwater pollutants. Potential stormwater pollutants associated with municipal waste containers include oil, heavy metals, paint, chlorinated solvents, detergents, phosphorous, acid/alkaline wastes, and propylene glycol.

### 3.4.3 Vehicle Repair Staging Area

The Vehicle Repair Staging Area is located adjacent and to the south and east of Building 1. City of Flagstaff vehicles that require maintenance are staged in this area prior to repair. Absorbents are applied to outdoor uncontrolled fluid leaks and spills from this staging area. Drip pans are also utilized. The waste absorbents and liquids are collected and disposed of utilizing waste disposal contractors or as municipal waste during cleaning. Removal of absorbents and liquids collected in drip pans needs to occur prior to precipitation events to prevent discharge to outfalls located along the perimeter of the facility.

Potential Pollutants: The Vehicle Repair Staging Area is open to the elements and in contact with stormwater at the present time. Potential stormwater pollutants associated with the Vehicle Repair Staging Area include oil, propylene glycol, corrosives, refrigerants (CFCs), hydraulic fluids, heavy metals, and fuels.

### 3.4.4 Above Ground Storage Tanks and Fuel Pumps

The AST's and Fueling Pumps are located to the west of Building 1 and consist of three 10,000-gallon capacity, double-walled, AST's (two diesel and one gasoline) and fuel dispensing pumps built on a concrete pad. The concrete pad drains to a low spot in the northeastern corner. The concrete driveways that access the fuel pumps are sloped and conduct runoff to the north and south. The AST's and Fuel Pumps are located under a metal canopy. There is secondary containment for the AST's and the Fuel Pumps but the configuration of the secondary containment cannot contain line leaks or spills that may occur during fuel dispensing activities.

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Potential Pollutants: The AST's and Fuel Pumps are covered with a metal canopy and installed on a bermed concrete pad. However, the concrete driveways that access the fuel pumps do not have a secondary containment to capture accidental spills. Potential stormwater pollutants from this system include fuels.

### 3.4.5 Streets Section Asphalt/Cinder Stockpile

The Streets Section Asphalt/Cinder Stockpile was used for the paving, patching, and repair of City of Flagstaff streets. The Streets Section is currently utilizing an Asphalt Milling/Cinder Stockpile located east of Gemini Drive on McMillan Mesa. The Streets Section Asphalt/Cinder Stockpile located adjacent and to the east of Building 3 is currently inactive. The inactive Streets Section Asphalt/Cinder Stockpile located within the City of Flagstaff - Maintenance Yard is not lined or covered.

Potential Pollutants: Even though the Streets Section is utilizing an off-site location, the potential for pollutants associated with the inactive stockpile remain a concern at the City of Flagstaff - Maintenance Yard. Surface water runoff from the inactive Streets Section Asphalt/Cinder Stockpile is directed to outfalls located to the north and northeast of the inactive Streets Section Asphalt/Cinder Stockpile. Potential stormwater pollutants associated with the inactive location of the Streets Section Asphalt/Cinder Stockpile include total suspended solids, oil, grease, pH, and chemical oxygen demand.

### 3.4.6 Streets Section Vehicle Staging Area

The Streets Section Vehicle Staging Area is located to the east, southeast of the location of the inactive Streets Section Asphalt/Cinder Stockpile. Trucks and beds are stored under a metal framework that allows for the hanging of truck beds. The metal framework is constructed over a concrete pad with no secondary containment. Formerly during the winter months, oil/diesel was hand sprayed within the truck beds prior to loading materials to prevent freezing.

Potential Pollutants: The Street Section Vehicle Staging Area drains to outfalls located to the north and east. Potential pollutants consist of total suspended solids, oil, grease, pH, chemical oxygen demand, oil, hydraulic fluids, heavy metals, and fuels.

### 3.4.7 Exterior Storage and Handling Areas

Exterior, previously used unsecured chemical/materials storage and handling areas are located on eastern and southern exposures of Buildings 1, 3, and 5. Previous practices included outdoor storage of drums and containers of open and closed, and new and used, largely unlabeled chemicals and materials used for vehicle maintenance activities. Outdoor storage of chemicals has been discontinued. A few drums are located outside the Preventative Maintenance shop that are empty and covered.

Potential Pollutants: Chemicals and materials handled or spilled within the storage and handling areas are a potential source of stormwater pollutants. Potential stormwater pollutants associated



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with exterior storage and handling areas include oil, heavy metals, paint, chlorinated solvents, detergents, phosphorous, acid/alkaline wastes, and propylene glycol.

### 3.4.8 Loading and Unloading Areas

Loading and unloading of materials is done at several access points to the facility. A description of each area including respective potential pollutants generated from routine activities, follows.

1. The Parts Shop is located in the northwestern portion of Building 1. Materials handled at this location consist of new or unused vehicle and machine parts, cleaners and degreasers, engine fluids, lubricants and greases (small quantities five-gallons or less), antifreeze, paints, batteries, insecticides, propane, and oil absorbents. Used tires and batteries are stored indoors until removed for recycling. Some tires are temporarily stored outdoors on the south side of Building 1 for installation on vehicles. Bay doors located on the western and northern walls accommodate most loading and unloading activities for batteries and small parts. Other materials are dispensed to use areas from doorways that lead to the rest of the building.

Potential Pollutants: Potential stormwater pollutants associated with material transfers to and from the Parts Shop include oil, heavy metals, paint, chlorinated solvents, detergents, phosphorous, acid/alkaline wastes, insecticides, and propylene glycol.

2. New and used materials stored in AST's and drums are located in the Upper and Lower Shops (Building 1), Paint Storage Shed (Building 4), Sanitation Equipment Garage (Building 5), and Preventive Maintenance Shop (Building 5). The filling of day use containers or small containers used for the transport of these materials to the place of use occurs at these areas.

Potential Pollutants: Leaks or spills from tanks/drums containing chemicals, lubricating greases, oils, cleaning liquids, paints, and/or hazardous waste and flammable liquid during loading or unloading could be a potential source of stormwater pollution.

3. Internal oil/water drain systems are located in Buildings 1, 3, 5, and 7. Drainage of these systems is directly connected to the City of Flagstaff sanitary sewer system. Either the separators, as needed, are pumped and the wastes disposed by City of Flagstaff Streets personnel using a hydrovac truck or an off-site contractor is used to service the separator. Sediments are disposed to the City of Flagstaff landfill pending analytical testing results.

A total of three exterior, oil/water separators are identified within the City of Flagstaff - Maintenance Yard. The separators are located to the north of the Vehicle Wash Rack, north of Building 5 and adjacent to the PM Shop, and south of Building 5. The oil/water separators located adjacent to Building 5 are connected via enclosed piping to other floor drains located within City of Flagstaff - Maintenance Yard buildings and eventually discharge to the City of Flagstaff sanitary sewer system through enclosed piping. The Vehicle Wash Rack oil/water separator is connected via an enclosed pipe system directly to the City of Flagstaff sanitary sewer system.

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Potential Pollutants: The interior oil/water separators have minimal likelihood of being impacted by stormwater with the exception of an occasional stormwater incursion beneath doors and bay doors to the Welding Shop in Building 3. However, exterior oil/water separators receive stormwater and may overflow; thereby adding potential pollutants to surface water runoff at the City of Flagstaff - Maintenance Yard. The potential for pollution of stormwater from the oil/water separators includes all chemicals and materials used in Building 5 and associated with the Vehicle Wash Rack. The potential pollutants to surface water runoff include oil, heavy metals, paint, detergents, suspended soils, chlorinated solvents, detergents, phosphorous, acid/alkaline wastes, and propylene glycol

To fulfill the requirements of the SWPPP, the existing oil/water separators are fitted with watertight covers to preclude an incursion of surface water.

### 3.4.9 Solid Waste Section Paint Booth and Other On-Site Painting Operations

The Solid Waste Section Paint Booth (Building 5) is used to paint municipal waste receptacles utilizing water-based paints. Other operations that use paints at the facility include: Building 1 in the Parts Shop (storage only) and Upper/Lower Shops (aerosol can painting); Building 3 in the Carpenter Shop, Sign Shop, and Welding Shop; Building 4 (storage only); Building 5 in both the Sanitation Equipment Garage and Preventive Maintenance Shop; and Building 6 in the Sanitation Equipment Garage.

Paint is stored until used in the Parts Shop (Building 1), the Streets Section Paint Storage Shed (Building 4), and the Street Equipment Garage (Building 5). Paint application is not conducted in these three areas.

Potential Pollutants: Potential pollutants from paint and paint thinner spills, spray painting, sanding, paint stripping, and paint clean up consist of paint, spent chlorinated solvents, heavy metals, paint solids, and airborne particulates (dust).

### 3.4.10 Open Drainage System and Surface Water Discharge Points

Surface water outfalls are located along the northern, eastern, and southern boundaries of the City of Flagstaff - Maintenance Yard and are illustrated along with surficial drainage patterns on Figure 3-1. A description of each outfall is provided below:

**Discharge Point #1** - Discharge Point #1 is located at the front entrance to the City of Flagstaff - Maintenance Yard and receives surface water during storm events and vehicle and equipment wash down activities from operations conducted in or adjacent to Buildings 2, 4, 5, and 6 and the AST's and Fuel Pumps. Uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard to Mogollon Street and then to a small tributary to the Rio De Flag located approximately 150 feet south of the discharge location.

Potential pollutants that may be associated with runoff to Discharge Point #1 include:

§ Leaks or spills from tanks and drums containing chemicals;

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- \$ Parked vehicles;
- \$ Fuels;
- \$ De-icing materials (glass beads or sand particles);
- \$ Heavy metals;
- \$ Lubricating greases;
- \$ Oils;
- \$ Cleaning liquids;
- \$ Paints;
- \$ Hazardous and flammable liquid; and
- \$ The AST's, Piping, and Fuel Pumps.

**Discharge Point #2** - Discharge Point #2 is located near the southeastern corner of the City of Flagstaff - Maintenance Yard and receives surface water during storm events and wash down activities from the bay doors of Building 1, Vehicle Repair Staging Area, and the AST's. Uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard through a break in a concrete berm to a small ditch that discharges to the south and away from the City of Flagstaff - Maintenance Yard. Uncontrolled surface water from Discharge Point #2 then is diverted into a stormwater catch basin adjacent to the Water Salesmen and thence into the stormwater system that discharges into the Rio De Flag.

Potential pollutants that may be associated with runoff to Discharge Point #2 include:

- \$ Oil;
- \$ Hydraulic fluids;
- \$ Fuels;
- \$ De-icing materials (glass beads or sand particles);
- \$ Heavy metals;
- \$ Paint;
- \$ Chlorinated solvents;
- \$ Detergents;
- \$ Phosphorus;
- \$ Acid/alkaline wastes; and
- \$ Propylene glycol.

**Discharge Point #3** - Discharge Point #3 is located near the northeastern corner of the City of Flagstaff - Maintenance Yard and receives surface water from storm events and wash down activities from exterior storage areas adjacent to Buildings 1, 3, and 5 as well as the Vehicle Wash Rack, the inactive Asphalt/Cinder Stock pile, Vehicle Staging Area, and the AST's. Uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard through a break in a concrete berm to a small ditch that discharges to the north and away from the City of Flagstaff - Maintenance Yard into the Rio De Flag.

Potential pollutants that may be associated with runoff to Discharge Point #3 include:

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- \$ Oil;
- \$ Hydraulic fluids;
- \$ De-icing materials (glass beads or sand particles);
- \$ Heavy metals;
- \$ Paint;
- \$ Chlorinated solvents;
- \$ Detergents;
- \$ Phosphorus;
- \$ Acid/alkaline wastes;
- \$ Propylene glycol; and
- \$ Fuels.

**Discharge Point #4** - Discharge Point #4 is located along the northern perimeter of the City of Flagstaff - Maintenance Yard's Streets Staging Area and receives surface water from storm events and wash down activities from the inactive Asphalt/Cinder Stockpile and active Vehicle Staging Area. Uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard over an embankment to a small ditch that trends parallel to the property boundary. If a storm event that is of substantial duration and volume, surface runoff would discharge into the Rio De Flag located north of the City of Flagstaff - Maintenance Yard.

Potential pollutants that may be associated with runoff to Discharge Point #4 include:

- \$ Total suspended solids;
- \$ Oil;
- \$ Grease;
- \$ pH;
- \$ COD;
- \$ Oil;
- \$ Hydraulic fluids;
- \$ De-icing materials (glass beads or sand particles);
- \$ Heavy metals; and
- \$ Fuels.

**Discharge Point #5** - Discharge Point #5 is located along the northern perimeter of the City of Flagstaff - Maintenance Yards Streets Staging Area and receives surface water from storm events and wash down activities from the inactive Asphalt/Cinder Stockpile and active Vehicle Staging Area. Uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard over into a small drainage ditch that eventually discharges into the Rio De Flag located north of the City of Flagstaff - Maintenance Yard.

Potential pollutants that may be associated with runoff to Discharge Point #5 include:

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- \$ Total suspended solids;
- \$ Oil;
- \$ Grease;
- \$ pH;
- \$ COD;
- \$ Hydraulic fluids;
- \$ Heavy metals; and
- \$ Fuels.

**Discharge Point #6** - Discharge Point #6 is a catchment basin located to the east of the Vehicle Wash Rack. The catchment basin was filled to the surface with sediments when last inspected. The catchment basin is connected to a second basin located directly to the north and outside of the fenced perimeter of the City of Flagstaff - Maintenance Yard. Discharge Point #6 receives surface water from storm events and wash down activities from exterior storage areas adjacent to Buildings 1, 3, and 5 as well as the Vehicle Wash Rack, the inactive Street Section Asphalt/Cinder Stock Pile and active Vehicle Staging Area, and the AST's. When not clogged with sediment, uncontrolled surface water is directed from the City of Flagstaff - Maintenance Yard to a catch basin that discharges into the Rio De Flag located to the north of the City of Flagstaff - Maintenance Yard.

Potential pollutants that may be associated with runoff to Discharge Point #6 include:

- \$ Oil;
- \$ Hydraulic fluids;
- \$ Heavy metals;
- \$ Paint;
- \$ Chlorinated solvents;
- \$ Detergents;
- \$ Phosphorus;
- \$ Acid/alkaline wastes;
- \$ Propylene glycol; and
- \$ Fuels.

### 3.5 HISTORY OF SPILLS/LEAKS OF HAZARDOUS MATERIALS DURING LAST THREE YEARS

No significant spills or leaks of hazardous materials have occurred at the facility during the last three years. Minor, unreported spill/leaks of regulated materials (diesel, fuel, oil) have occurred at the site as described in preceding sections.

If a spill or leak of hazardous materials does occur that could impact stormwater, it will be documented in accordance with procedures identified in Appendix D, Spill Control and Countermeasure Plan.

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### 3.6 DISCHARGE POINT TESTING

All stormwater that falls onto the facility property is discharged off-site through discharge points previously described and identified on Figure 3-1. As part of implementation of this SWPPP, sampling and visual observation of discharge water is performed at identified discharge points.

In accordance with the AZPDES general permit the permittee shall perform two visual assessments during the summer wet season and two visual assessments during the winter wet season when the facility is discharging.

Wet seasons, for the purposes of visual assessments, are defined as follows:

- Summer wet season: June 1 – October 31
- Winter wet season: November 1 – May 31

The term ‘wet season’ applies statewide and includes the areas where freezing conditions exist that prevent runoff from occurring for extended periods. In areas where freezing conditions exist, the four visual assessments may be distributed during seasons when precipitation runoff occurs.

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### 4.0 BEST MANAGEMENT PRACTICES IDENTIFICATION/SELECTION

Best Management Practices (BMPs) are intended to provide long-term stormwater management control. BMPs refer to schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of United States waterways. BMPs include treatment requirements, recycling, reduction, reuse, operating procedures and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Pollution reduction or elimination at the sources (rather than treatment or disposal) has proven to be the most effective approach to protecting the environment. City of Flagstaff policy is to minimize the adverse effects of stormwater runoff by using the following general approaches.

- § Reduce the rate or volume of stormwater runoff.
- § Reduce certain sources of pollutants.
- § Remove pollutants from stormwater using approved devices such as filters, drip pans, absorbents, etc.
- § Implement effective materials handling procedures.

Action taken to implement these approaches must be documented and become part of this SWPPP.

BMPs must be implemented to prevent or minimize pollution of stormwater under the requirements of the MSGP. Materials and processes potentially exposed to stormwater are presented previously in Section 3.4

The following subsections provide a description of general BMPs selected for the facility including specific schedules and milestones as to when measures and controls will be implemented.

#### 4.1 GOOD HOUSEKEEPING

Proper housekeeping can improve the efficiency of stormwater management controls and reduce the costs of maintenance. For example, asphalt or loose materials, such as the inactive Streets Section Asphalt/Cinder Stockpile could be removed, enclosed or contained, or, alternatively, an enclosed facility could be utilized. Also, protected storage areas for chemicals, paints, solvents, and other potentially toxic materials will be provided. Equipment maintenance and repair will occur in designated areas where spills may be contained. Section Superintendents will ensure that the work environment within and outside all affected buildings is maintained in a clean and orderly manner.

A management team, consisting of the Section On-Site Environmental Coordinators and individual Section employees, will perform regular inspections of the facility looking for safety hazards, housekeeping practices that may impact stormwater, and general facility housekeeping. Any deficiencies noted are to be corrected immediately.

Forms used to verify aspects of each inspection activity are located in Appendix M, D-Forms. The forms are to be filled out at the time of the inspection and signed by the inspector. Completed forms are then submitted to the Section On-Site Environmental Coordinator for the Section and must be retained for at

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least three years. The completed inspection forms document compliance or non-compliance with the SWPPP requirements and will be used in the annual comprehensive compliance evaluation described in Section 7.0 of this SWPPP.

All equipment, drums, and other facilities that use, store, or transport hazardous or regulated materials on-site will be inspected monthly for signs of spillage, deterioration, time exceedences, and other criteria that include sealed, watertight lids for drums and secured drum bungs that may provide forewarning of a potential spill. If any equipment, drums, or facilities are determined to be substandard, activities to correct the problem will be immediately enacted. Inspections required for all equipment, drums, and other facilities that use, store, or transport hazardous or regulated materials on-site are documented on Form D-3, Visual Inspection of Hazardous or Regulated Areas Conducted Monthly by Section On-Site Environmental Coordinator or their Designee, found in Appendix M.

Surface water discharge points and catchment basins will be monitored on a monthly basis or after major storms for signs of spills or deterioration. Inspection of stormwater discharge points including catch basin are documented on Form D-4, Visual Inspection of Stormwater Discharge Points Conducted Monthly by Section On-site Environmental Coordinator or their Designee, found in Appendix M.

In addition, all exterior oil/water separators will be tested and cleaned on an annual basis by an approved contractor. Inspection of the oil/water separators are documented on Form D-5, Visual Inspection of Exterior Oil/Water Separators Conducted Semi-annually by Section On-Site Environmental Coordinator or Their Designee

Keeping the site neat and orderly is the responsibility of the individual Sections and their employees. As a check, each Section will designate an employee who will be responsible for walking their respective property once daily. He/she will carry a trash bag and pick up any stray trash. During his/her daily walk, the designated employee from each Section will also look for poor housekeeping that can impact stormwater including oil spots, leaks, dust, etc. If any condition is noted that the custodian cannot correct during his/her walk of the property, he/she will notify the responsible Section On-Site Environmental Coordinator. General housekeeping inspections are documented on Form D-6, Visual Inspection for General Housekeeping Evaluation of Facility Conducted Daily by Designated Section Employee.

### **4.2 PREVENTIVE MAINTENANCE OF STORMWATER CONTROLS AND OTHER FACILITY EQUIPMENT**

Section Superintendents at the City of Flagstaff - Maintenance Yard are responsible for SWPPP preventive maintenance for the facility and its operation on an ongoing basis to minimize the risk of pollutant release from the site.

Preventive maintenance is implemented to keep the open drainage system and stormwater discharge points in good working order. A preventive maintenance inspection of the open drainage system and stormwater discharge points will be performed by the responsible Section On-Site Environmental Coordinator or designee on a monthly basis. The monthly inspection includes observation and corrective action of the following minimum items.



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- § Maintenance and cleaning of the open drainage system component watercourses and stormwater discharge points on a monthly basis, particularly at pedestrian and vehicular crossing points.
- § Accumulated debris such as trash and vegetative matter, will be removed.
- § Deposits of sand, silt, and sediment will be removed annually.

This preventive maintenance schedule reduces the occurrence of illicit discharges and spills to the stormwater discharge points. The preventive maintenance schedule will be kept in the respective Section On-Site Environmental Coordinator's file. Inspections of stormwater controls are documented on Form D-7, Visual Inspection and Maintenance of Stormwater Controls Conducted Monthly by the Section On-Site Environmental Coordinator or Designee.

The maintenance of catch basins and oil/water separators are addressed in specific BMPs.

### 4.3 SPILL PREVENTION AND EMERGENCY RESPONSE PROCEDURES

**Spill Prevention Control and Countermeasure Plan** - The City of Flagstaff has a Spill Prevention Control and Countermeasure (SPCC) Plan for the facility and a copy of the SPCC is included as Appendix D, Spill Prevention Control and Countermeasure Plan, of this plan. The SPCC describes the procedures for responding to a spill or leak on the property. In general, the City of Flagstaff has adopted the methods outlined in Appendix D to be used to control and contain spills of oil, cleaning liquids or other hazardous or regulated materials near or on the facility grounds.

The SPCC identifies the practices used to prevent the occurrence of a spill, the control measures (containment) should a spill occur and the countermeasures (spill contingency plan) should a spill breach the existing primary containment. The Facility Spill Contingency Plan is located in Exhibit A, Facility Spill Contingency Plan, of the SPCC.

The preventive measures are used to operate, store, and load/unload regulated and hazardous chemicals and to conduct periodic inspections. The implementation of these procedures should assure the integrity of primary containment and minimize the need to utilize control measures and perform countermeasures.

The control measures and countermeasures are planned to provide sufficient containment capacities and to implement procedures to prevent a discharge of regulated chemicals from reaching navigable waters of the United States.

During the operational hours of the City of Flagstaff - Maintenance Yard, there shall be at least one person present who is trained in the SPCC plan procedures. In case of a spill, the Facility Spill Contingency Plan located in Exhibit A of the SPCC shall be implemented.

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**Hazardous Waste Contingency Plan and Emergency Response Plan** – In the event that a spill or leak becomes an emergency situation, the City of Flagstaff has a Hazardous Waste Contingency Plan and Emergency Response Plan for the facility and a copy of the Emergency Response Plan is included in Appendix E. In general, the City of Flagstaff has adopted the responses outlined in Appendix E to be used in the event of, but no limited to the following:

- Fires
- A release of hydrocarbons, regulated, or hazardous materials
- An accumulation of hydrocarbon vapors or fuels resulting from dispenser pump failure, tank failures, or spills from vehicle tanks and waste containers
- Filling or pumping errors or on-site fuel transport incidents
- Accidental releases from routine activities such as vehicle maintenance, chemical handling, or chemical transporting.

### 4.4 EMPLOYEE TRAINING AND RECORD KEEPING

City of Flagstaff - Maintenance Yard personnel are trained to the appropriate levels of responsibility for the components and goals of the SWPPP and SPCC. Employee training will include such topics as good housekeeping, materials management, and spill response procedures. Where appropriate contractor personnel also must be trained in relevant aspects of this SPCC.

#### 4.4.1 Stormwater Pollution Prevention Team Training

The SWPPT receives refresher training once a year. Specific topics covered during the yearly refresher training are presented below.

- The SWPPP and SPCC.
- Proper Material Handling to Prevent Stormwater Pollution.
- Best Management Procedures (BMPs) for Preventing Pollution including:
  - spill prevention and response
  - good housekeeping
  - preventive maintenance
  - material-specific BMPs (inventory of exposed materials)
  - process-specific BMPs (exposed process activities)
- OSHA 1910.1200 Hazard Communication Standard.

#### 4.4.2 Overall SWPPP Personnel Training

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City of Flagstaff - Maintenance Yard personnel receive initial training for the SWPPP at the time of plan implementation. In addition to introducing the goals of the SWPPP, specific topics to be covered include the following.

- Identification of Section On-Site Environmental Coordinators and members of the SWPPT
- Good Housekeeping Practices
- Location of Stormwater Discharge Points
- Material Management
- Spill Prevention and Response Procedures
- Location of Emergency Response Equipment (Figure 4-1)
- Reporting Procedures
- Processes that potentially could be exposed to stormwater
- OSHA 1910.1200 Hazard Communication Standard

Initial training for new employees is provided during the employee's initiation at the City of Flagstaff - Maintenance Yard by each Section supervisor. Refresher training is held annually or in the event of SWPPP revision.

### 4.4.3 Activity Specific Training

Training in BMPs and procedures for specific activities is provided by Section Superintendents (SWPPT Members) to City of Flagstaff personnel assigned to their Section. Personnel receive initial training at the time of SWPPP initiation and refreshers are received annually or in the event of changes in systems or operations.

Copies of records of the topics covered during training, identification of personnel who received training, and the dates of training will be kept within the respective Section On-Site Environmental Coordinator's SWPPP files with original records forwarded to City of Flagstaff Human Resources for inclusion in personnel files.

Employees are trained annually regarding stormwater pollution prevention practices for operations at the City of Flagstaff - Maintenance Yard.

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### 4.4.4 Record Keeping

Stormwater records will be maintained in the respective Section On-Site Environmental Coordinator's SWPPP files. Records to be kept include:

- Monitoring Data (including existing data)
- Stormwater Pollution Prevention Plan and Revisions
- Notice Of Intent
- Site Inspections
- Training Records (Copies Only)
- Preventive Maintenance Records (kept in maintenance office)
- Spill and Leak Records
- All Other Records Associated with Stormwater

All stormwater related records will be maintained on-site for the duration of operations at the City of Flagstaff - Maintenance Yard.

### 4.5 SEDIMENT AND EROSION CONTROL

Several areas with a potential for erosion are located at the City of Flagstaff - Maintenance Yard including discharge points and the inactive Streets Section Asphalt/Cinder Stockpile. The remainder of the City of Flagstaff - Maintenance Yard is hardscaped with concrete, asphalt, or structures to prevent erosion.

Surface water discharge points located around the perimeter of the facility have a potential for erosion including Surface Water Discharge Point #2 where erosion of the slope downgradient of the discharge point has occurred.

### 4.6 TRADITIONAL STORMWATER MANAGEMENT MEASURES

Traditional stormwater management practices at the City of Flagstaff - Maintenance Yard are not available to prevent stormwater flows from leaving the property. The City of Flagstaff - Maintenance Yard consists of an open or “Country” drainage system to collect surface water runoff from rainfall events over a specified drainage area and conveys the surface water through a series of surface structures (concrete valley gutters) and overland flow patterns to release or discharge points. Discharge points are located around the perimeter of the facility. As a result, this SWPPP focuses on prompt clean up of leaks from vehicles stored outdoors. Absorbent pillows are also placed at all six outfall locations to absorb contaminants and stop sediment flow from the facility.

### 4.7 ACTIVITY SPECIFIC BEST MANAGEMENT PRACTICES

Activity specific BMPs are provided for site specific and activity specific issues to assist in preventing spills of hazardous or regulated chemicals to stormwater on-site. Specific BMPs will be instituted by the

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City of Flagstaff - Maintenance Yard personnel and can be utilized after recommended upgrades identified in Appendix O, Best Management Practices Upgrade Requirements, of this SWPPP.

Table 4-1, *SWPPP Best Management Practices Inspection Summary*, identifies inspection requirements for site personnel to verify BMP adherence. Table 4-2, *SWPPP Inspection Schedule by Section*, identifies the BMP inspection activity, frequency of inspections, personnel responsible for the inspections, and the applicable form to be used to verify inspection activities.

Forms used to verify aspects of each inspection activity are located in Appendix M, D-Forms. The forms are to be filled out at the time of the inspection and signed by the inspector. Completed forms are then submitted to the respective Section On-Site Environmental Coordinator for the Section and must be retained in the SWPPP Appendix M, D-Forms for at least three years. The completed inspection forms document compliance or non-compliance with the SWPPP requirements and will be used in the annual comprehensive compliance evaluation described in Section 7.0 of this SWPPP.

### 4.7.1 Vehicle Wash Rack

Washing of vehicles is restricted to the Vehicle Wash Rack only. The following operations and activities are conducted to ensure proper implementation of this BMP.

- § Vehicle washes are accomplished using phosphate-free biodegradable detergents.
- § All vehicle wash water is collected and contained within the Vehicle Wash Rack area and discharged to the slit drain. The slit drain discharge is directed to a settling chamber for the removal of suspended sediment and grit and an oil/water separator to remove oil from the washwater.
- § Fleet Services personnel inspect the Vehicle Wash Rack weekly or as needed for the following:
  - Wash water runoff to sources other than the slit drain.
  - Spills or leaks of oil or other vehicular fluids.
  - Use of phosphate-free detergents for washing activities.
  - General condition of the Vehicle Wash Rack.
- Fleet Services personnel inspect the slit drain, settling chamber, and oil/water separator system on a monthly basis or sooner if needed to ensure:
  - That the system is processing and discharging vehicle wash water efficiently.
  - That leaks are not present. The disposal contractor is called immediately, the Fleet Services On-Site Environmental Coordinator is notified, and protocol identified in Appendices D and/or E utilized in the event of system leakage.
  - Fleet Services Section personnel pump and clean the system as needed to ensure proper drainage to meet facility demands.

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Inspections of the vehicle washing areas are documented on Form D-8, Visual Inspection of Vehicle Wash Rack Slit Drain, Settling Chamber, and Oil/Water Separator Conducted Monthly and Weekly by Fleet Services Personnel.

### 4.7.2 Municipal Waste Containers

If washed away in runoff, refuse and litter can become water pollutants. The temporary storage of refuse is into containers supplied by the Solid Waste Section that are covered, leak-proof, and designed for waste storage. The municipal waste containers are used to collect wastes that will be picked up by the Solid Waste Section for delivery to the City of Flagstaff landfill. The individual Section Superintendents are responsible for the daily inspection of the municipal waste containers and the areas around them within individual Section work areas. Inspection of trash containers is documented on Form D-6.

### 4.7.3 Vehicle Repair Staging Area

Contaminates from the wear and corrosion of parts, leaking oils and lubricants, and combustion byproducts that are deposited on paved surfaces can wash into the stormwater system or off-site into waterways. Leaks and spills from vehicles scheduled for maintenance are a constant source of pollutants to stormwater. Every vehicle entering or leaving may leak fuel or oil onto the staging area. To prevent large amounts of oil or fuel spills and leaks the following activities and operations will be conducted to ensure proper implementation of this BMP.

Fleet Services personnel:

- Confine the storage of leaky or leak prone vehicles/equipment awaiting maintenance to a paved, designated area.
- § Inspect vehicles and trailers for leaks upon arrival.
- § In case of a spill or leak, the material will be contained, absorbents used, collected by dry methods, and properly disposed in accordance with protocol identified in Appendices D and/or E.
- § Use drip pans under all vehicles and equipment waiting for maintenance.
- § Park vehicles and equipment under a roof, if possible.
- § Inspect the staging area daily for filled drip pans and other signs of leaks or spills.
- § Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers at unsecured locations to avoid accidental spills.
- § Empty and clean drip pans and containers.

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- § Drain and contain all fluids from wrecked vehicles and parts from cars.
- § Contain and transfer to Parts Shop Used Battery Storage Area any leaking or spent batteries.

Fleet Services personnel will be trained prior to working in the staging area in the procedures of absorbent application and cleanup pursuant to Section 4.3, Spill Prevention and Response Procedures, of this SWPPP. City of Flagstaff - Maintenance Yard personnel are never to pour liquid wastes, on to the ground or floors, into drains, or outdoor storm drain inlets.

Inspections of the vehicle repair staging area are documented on Form D-9, Visual Inspection of Staging Area Conducted by Fleet Services Personnel. If large quantity leak/spills that exceed the capabilities of on-site spill containment equipment occur, protocol and procedures identified in Appendices D and/or E are to be utilized.

### 4.7.4 Above Ground Storage Tanks and Fuel Pumps

The AST's and Fuel Pumps are operated by the Fleet Services personnel. The system is constructed beneath a metal canopy and within a bermed, concrete pad. The concrete pad is also constructed to drain to a low spot in the northeastern corner.

Fleet Services personnel will conduct the following activities to ensure the proper functioning of the system.

- § Maintain good integrity of all storage tank containers.
- § Inspect the integrity of storage tanks and perform preventive maintenance to preclude any failure of the system on a weekly basis.
- § Inspect operating, monitoring and gauging systems daily.
- § Inspect piping system including pipes, pumps, flanges, couplings, hoses, and valves for indications of leakage, failure, or corrosion on a monthly basis or as needed.
- § Train personnel on proper filling and transfer procedures.
- § Use spill and overflow protection while fueling vehicles or filling equipment/ containers.
- § Use dry methods for the fueling area cleaning rather than hosing the fuel area down.
- § Use proper fueling techniques.

Fleet Services personnel will be trained prior to working on the AST's and Fuel Pumps in the procedures outlined in Section 4.3, Spill Prevention and Response Procedures, of this SWPPP.

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Inspections are documented on Form D-10, Visual Inspection of Above ground Storage Tanks and Fuel Pumps Conducted Daily by Fleet Services personnel. If large quantity leak/spills that exceed the capabilities of on-site spill containment equipment occur, protocol and procedures identified in Appendices D and/or E are to be utilized.

### 4.7.5 Inactive Streets Section Asphalt/Cinder Stock Pile

Streets Section personnel will conduct the following activities to ensure compliance until such time as the Asphalt/Cinder Stockpile is removed from the City of Flagstaff - Maintenance Yard.

- Inspection of the Streets Section inactive Asphalt/Cinder Stockpile area for indications of breached in the containment system monthly or after major storm events.
- Removal of spilled materials (dirt, mud, debris, etc.) from paved portions of the facility by shoveling and sweeping on a daily schedule.
- Pump and clean the containment system as needed to ensure proper drainage to meet facility demands.
- Practice good stockpiling handling and transfer procedures to preclude damage to the containment system.

Inspection activities are conducted by Streets Section personnel under the direction of the Streets Section On-Site Environmental Coordinator and with significant findings forwarded to the Streets Section On-Site Environmental Coordinator. Inspections are documented on Form D-12, Visual Inspection of Stockpile and Containment System conducted Monthly or After a Major Storm by Streets Section personnel.

### 4.7.6 Streets Section Vehicle Staging Area

Streets Section personnel will conduct the following activities to ensure compliance.

- § Confine the storage of leaky or leak prone vehicles/equipment awaiting maintenance to a paved, designated area.
- § Inspect vehicles and trailers for leaks upon arrival.
- § In case of a spill/leak, the material will be contained, absorbents used, collected utilizing dry methods, and properly disposed in accordance with Appendices D and/or E.
- § Use drip pans under all stored vehicles and equipment.



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- § Inspect the staging area daily for filling drip pans and other signs of leaks/spills.
- § Empty and clean drip pans and containers as needed to avoid spills.
- § Park vehicles and equipment under a roof, if possible.
- § Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers at unsecured locations to avoid accidental spills.
- § Contain and transfer to the Parts Shop Used Battery Storage Area any leaking or spent batteries.
- § Use appropriate techniques to prevent freezing of truck beds other than spray oil application.
- Snow inserts used in the truck beds will be repainted each year.

Streets Section personnel are responsible for inspection activities. Inspections are documented on Form D-13, Visual Inspection of Staging Area Conducted Daily by the Streets Section Personnel. If large quantity leak/spills that exceed the capabilities of on-site spill containment equipment occur, protocol and procedures identified in Appendices D and/or E are to be utilized.

### 4.7.7 Exterior Storage and Handling Areas

BMPs to reduce the potential for leakage of hazardous or regulated materials in exterior storage and handling areas can be divided into two general activities, including container inspections and container handling.

**Container Inspections** - Before any drums are placed in storage and handling areas, the drums will be checked to ensure drums are in good condition; free of cracks or punctures; and drums have little or no rust. Only compatible wastes are to be stored in an individual drum; and are fitted with appropriate covers. Non-compatible wastes must not be stored near each other. Each container must be plainly labeled as to contents (e.g. used oil, spent solvents, etc.).

For hazardous waste, each container must be clearly and visibly labeled at all times with the following information:

- § The words “Hazardous Waste”;
- § The name of the waste (example “Waste Methylene Chloride”);
- § The type of hazards the waste presents (e.g. ignitable, toxic, dangerous when wet, or corrosive); and

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§ The date on which the accumulation of waste began.

Hazardous waste generating operations will meet the following requirements.

- Hazardous waste will not be stored in a container that is or will be corroded, ruptured, or damaged in any way by that waste.
- The containers will be closed except when being filled or emptied.
- The containers will be inspected weekly, maintained, and replaced if leaking.
- Waste from leaking containers will be transferred to different containers. The new containers should be labeled with the start date from the original container.
- Different wastes will never be stored in the same container if they are non-compatible.
- Containers of ignitable or reactive wastes will be stored as far as possible from the facility property line to ensure a minimum zone of 15 feet from abutments.
- Where feasible, containers should be stored indoors in areas with temperature-control conditions.

**Container Handling** – During the transporting of materials to or from storage and handling areas, employees will:

- Be trained in handling the hazardous and regulated materials and spill containment procedures.
- Inspect all containers used for transportation of hazardous materials prior to moving or transfer of liquids. To ensure against spills, the employee:
  - Always checks the condition of a drum before it is moved;
  - Makes sure that it has no dents, pin holes, or other weak areas;
  - Ensures that the drum is closed and sealed tightly;
  - Makes certain the drum handler has a good “grab” on the drum;
  - Practices safe operating and driving techniques with the lift truck; and,
  - When possible, avoids moving drummed chemicals during a rain or snow storm.

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- Will ensure all materials are in approved containers (United Nations [UN] approved 55-gallon drums or sealable one to five-gallon buckets). Transfer containers will be transported using a drum dolly.
- Exercise care during the transfer process to ensure that the containers do not spill onto surrounding pavements.

Materials should be stored on pallets. Only pallets clean and free of chemicals or debris are to be used. Pallets that are damaged will be placed in a damaged pallet storage area for repair or disposal. Pallets that have been impacted by site chemicals will be temporarily stored until disposed in accordance with applicable regulations.

Handling and storage areas are inspected daily by City of Flagstaff - Maintenance Yard personnel as part of the general housekeeping visual inspection (Form D-6). The individual City of Flagstaff - Maintenance Yard Section Management personnel are responsible for maintaining good housekeeping practices for handling and storage and prevention of stormwater pollution from these areas.

### 4.7.8 Loading and Unloading

**Parts Shop** – The Parts Shop is located within a portion of Building I that does not drain to an internal sewer drain oil/water separator which reduces the potential for uncontrolled releases. The Section On-Site Environmental Coordinator or designee from the Parts Shop are responsible for weekly inspection of the Parts Shop dock, internal storage area and used battery storage area. Inspections are documented on Form D-14, Visual Inspection of Parts Shop Dock and Interior Storage Area Weekly by Fleet Services On-Site Environmental Coordinator or Designee.

The Parts Shop manager is responsible for the maintenance of an organized inventory of materials used in the maintenance shop.

To reduce the potential for leakage of hazardous or regulated materials during delivery or pickup of chemicals to the Parts Shop, BMPs can be divided into several general activities including container/package inspections, container/package handling, used battery storage, and delivery vehicles.

- **Container/Package Inspections** – Before any containers are accepted or transferred, the containers are checked to ensure containers/packages are in good condition, free of cracks or punctures, and have little or no rust. Only clean, good condition drums are accepted for delivery to the facility. It is the responsibility of the Parts Shop Personnel to conduct the inspection of containers arriving or leaving the site.
- **Container/Package Handling** – During the transportation of materials to or from the Parts Shop, employees:
  - 1) Will be trained in handling the hazardous and regulated materials and spill containment procedures.

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- 2) Will inspect all containers used for transporting hazardous or regulated materials to or from the Parts Shop. Prior to moving or transferring of liquids, to ensure against spills, the employee will:
    - Always check the condition of a drum before it is moved
    - Make sure that it has no dents, pin holes, or other weak areas
    - Ensure that the drum is closed and sealed tightly
    - Make certain the drum handler has a good “grab” on the drum
    - Practice safe operating and driving techniques with the lift truck
    - When possible, avoid moving drummed chemicals during a rain or snow storm
    - During transfer of bulk liquids, always check hose seals for signs of leakage
    - Continually monitor bulk transfer hoses for leaks
    - Have prepared emergency spill equipment in the case of a release
  - 3) Will ensure that all materials are in approved containers (UN approved 55-gallon drums or sealable one to five-gallon buckets). Transfer containers will be transported using a drum dolly only.
  - 4) Care will be employed during the transfer process to ensure that the containers do not spill onto the surrounding pavement.
- **Used Battery Storage** – Used batteries are stored by the Parts Shop until sent off-site for recycling. The acid and metal in vehicle batteries are hazardous waste once they are removed from the batteries. Lead-acid batteries that can no longer hold a charge or have been damaged will be taken out of service, recycled, disposed, or reclaimed. Off-site recycling is the most viable alternative to waste minimization. Batteries will not be drained before shipment off site for recycling.

The Parts Shop manager is responsible for the inventory of used batteries as batteries are transferred to the storage area, placement of used batteries on pallets with secondary containment, labeling batteries for tracking of time in storage, and sending batteries off site for recycling. Only pallets clean and free of chemicals or debris are used to store used batteries. Pallets that are damaged will be placed in a damaged pallet storage area for

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repair or disposal. Pallets that have been impacted by site chemicals will be temporarily stored until disposal in accordance with applicable regulations.

- **Delivery Vehicles** – Every vehicle entering or leaving the Parts Shop may leak fuel or oil onto a concrete pad. To prevent large amounts of oil or fuel spills/leaks, vehicles and trailers will be inspected for leaks upon arrival. In case of a spill/leak, the material will be contained, collected, and properly disposed in accordance with Appendices D and/or E.

**Above Ground Storage Tanks/Containers (Used Oil)** – The majority of the AST's and containers located within buildings contain used oil. Used oil is any oil that has been used and, as a result of use, is contaminated by physical or chemical impurities. Used oil includes spent automotive lubricating oils, transmission fluid, brake fluid, spent industrial oils (compressor, turbine, and bearing oil), hydraulic oils, metal working oils, and gear oil. Under the EPA guidelines, used oil is considered hazardous if it meets one or more of the following conditions:

- Waste oil ignites with a flashpoint below 100 degrees Fahrenheit.
- Waste oils are mixed with a listed hazardous waste or with a characteristic hazardous waste so that the whole mixture exhibits the characteristic.
- Waste oil exceeds any of the following concentrations: 50 parts per million (ppm) of polychlorinated biphenyls (PCBs), 5 ppm of arsenic, 2 ppm of cadmium, 10 ppm of chromium, 100 ppm of lead, or 4,000 ppm of total halogens.

Several management options are available for managing waste oil and may only be used if the waste oil has not been mixed with listed or hazardous waste. The City of Flagstaff's preferred option is off-site recycling of used waste oil. Recycling requires the maintenance of inventories, and shipping records that certify that the used oil was properly recycled. The off-site, contract recycler of waste oil must have an EPA permit for recycling activities.

With the exception of the AST's for fuel, all AST's and containers located in the Upper/Lower Shops, Paint Storage Shed, Sanitation Equipment Garage, and Preventive Maintenance Shop are located within buildings on concrete pads but without secondary containment. With the exception of the Paint Storage Shed, all areas with AST's or containers are internally drained by a drain pipe connected to oil/water separators that discharge via a closed system to the City of Flagstaff sanitary sewer system, reducing the exposure of pollutants to stormwater.

City of Flagstaff personnel in these areas will complete the following activities for compliance with SWPPP requirements:

- Maintain the AST's and containers and ancillary equipment pursuant to manufacturer's specifications;

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- Inspect the AST's and containers and ancillary equipment for corrosion, leaks, punctures, and equipment failures daily or at each time of use; and
- Maintain training in the filling and use of the equipment.

In the event of leaks, spills, or equipment failure, City of Flagstaff personnel are to plug interior drains or oil/water separators and utilize spill containment procedures provided in Appendix D.

Waste oil filters are punctured, drained into the proper receptacle, crushed, and recycled to eliminate the requirement as disposal as a hazardous waste.

**Above Ground Storage Tanks/Containers (Solvents)** -A spent solvent is no longer fit for use without being regenerated, reclaimed, or otherwise reprocessed. Spent solvents may be classified as hazardous waste under the Resource Conservation and Recovery Act (RCRA) and are typically listed because of their ignitability or toxicity. The City of Flagstaff - Maintenance Yard uses solvents primarily for cleaning parts, carburetors, and for thinning paint.

Steam cleaning has been substituted for parts cleaning in the Fleet Services shop areas. Wastewater generated from the steam cleaning can be discharged to the oil/water separators on-site (depending on waste content) and are not regulated as an RCRA hazardous waste.

City of Flagstaff - Maintenance Yard personnel will use environmentally safe, nonhazardous solvents and contracts with a licensed hazardous waste management firm for the recycling or treatment of spent hazardous solvents. Where feasible and cost-effective, City of Flagstaff - Maintenance Yard personnel should recycle all spent solvents.

**The disposal of spent solvents on-site is against City of Flagstaff policy.** Under environmental laws, the City of Flagstaff remains liable for any problems caused by the improper disposal of solvents. City of Flagstaff - Maintenance Yard Superintendents are encouraged to procure and use, to the maximum extent possible, nonhazardous or less hazardous parts cleaners rather than known hazardous solvents.

**Above Ground Storage Tanks/Containers (Pressurized Gas Canisters)** - Pressurized gas storage, handling and use areas are identified in the Parts Shop (storage only), Upper/Lower Shops (Freon gas replacement), Sign Shop (compressed oxygen and acetylene), Welding Shop (compressed gases including acetylene), and Paint Storage Shed (storage only).

Impact and puncture of a pressurized, flammable gas containing canister may cause deflagration or detonation of the canister. BMPs for the compressed gas bottle storage rack and use include:

- § Employees operating equipment, including fork lifts and carts, are trained regarding the location of the compressed gas storage areas or racks and may not operate mechanized equipment within 10 feet from the storage areas or racks.

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- § The compressed gas storage areas or racks are located away from normal forklift and personnel traffic areas.
- § The compressed gas storage areas, rack and bottles are inspected by the City of Flagstaff - Maintenance Yard personnel after each delivery.
- § City of Flagstaff - Maintenance Yard personnel are responsible for inspecting the compressed gas containers for possible punctures, evidence of rusting or other signs of impairment.

**Exterior Oil/Water Separators** - An oil/water separator is an underground structure used within a drainage system to collect and separate oil, gas, grease, and other floatable petroleum-based chemicals from stormwater runoff or sewer connections. Accumulated floatable materials are retained and periodically removed, thereby improving the quality of discharge. An oil/water separator is typically installed in conjunction with and immediately prior to its connection with a closed drainage system or a discharge point. Access to the structure is through one or more manholes at the ground surface.

Depending on the expected inflows into the separator, accumulated oil, gas, grease, or other floating materials should be removed from the structure on an annual or semiannual basis. The removal should be performed by a qualified licensed contractor. Disposal of accumulated materials must be performed in accordance with all federal, state, and local regulations.

A total of three exterior oil/water separators are located around the facility including the Vehicle Wash Area oil/water separator that is operated by the Fleet Services, the Street Equipment Garage oil/water separator located to the south of Building 5 that is operated by Streets Section, and the Sanitation Equipment Garage/Preventive Maintenance Shop oil/water separator located to the north of Building 5 that is operated by Solid Waste and Fleet Services, respectively. The oil/water separators drain off-site to enclosed City of Flagstaff sanitary sewer system. The oil/water separators are exposed to surface runoff during rain/snow storms and water from vehicle maintenance and washing activities.

Fleet Services, Streets Section, and Solid Waste personnel are responsible for the inspection and maintenance of the exterior oil/water separator that receives liquids from their respective operations. Inspections are documented on Form D-15, Visual Inspection and Maintenance of Oil/Water Separators Conducted Monthly by On-site Environmental Coordinator or Designee.

- § Fleet Services, Streets Section, and Solid Waste personnel are to inspect the oil/water separator system associated with their activities on a monthly basis or sooner if needed to ensure that the system is processing and discharging water efficiently.
- § Fleet Services, Streets Section, and Solid Waste personnel are to have a contractor pump and clean the systems as needed to ensure proper drainage to meet facility demands.

The Fleet Services Section On-Site Environmental Coordinator, the Streets Section On-Site Environmental Coordinator, and the Solid Waste On-Site Environmental Coordinator or their designee

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will be responsible for inspection activities. If large quantity leak/spills that exceed the capabilities of on-site spill containment equipment occur, protocol and procedures identified in Appendices D and/or E are to be utilized.

### 4.7.9 Solid Waste Section Paint Booth and Other On-Site Painting Operations

Liquid and aerosol paints are used throughout the facility during numerous routine operations. Paint residues are generated from paint adhering to the bottom and sides of container(s) after pouring, spraying, or pumping the product. Paint residues may exhibit the hazardous characteristics of ignitability or may be considered toxic if metals such as lead, cadmium, or chromium were used as pigment or additives.

Where painting activities are conducted, City of Flagstaff personnel will utilize the following management practices.

- § Paint and paint thinner will be stored in appropriate flammable materials storage cabinets when not in use and removed from the cabinet only for use.
- § When possible, paint will be sprayed in an OSHA approved hood.
- § When paint and paint thinner are in use, the placement of the containers will be restricted to secure location to avoid accidental spills.
- § Use effective spray equipment that delivers more paint to the target and less over-spray.
- § Avoid sanding in windy weather and collect and dispose waste properly.
- § Recycle paint, paint thinner, and solvents.

Inspections of the paint booth are documented on Form D-16, Visual Inspection and Maintenance of Paint Booth Conducted Monthly by Section On-Site Environmental Coordinator or Designee. Inspections of other facility painting operations are documented on Form D-6.

### 4.7.10 Open Drainage System and Surface Water Discharge Points

As previously described, stormwater management controls at the facility are through an open (“Country”) drainage system. Surface water is directed to six (6) surface water discharge points are identified around the perimeter of the City of Flagstaff - Maintenance Yard.

BMPs for these discharge points include:

- § Storm drain outlets will be inspected after major storms and at a minimum of once per month. City of Flagstaff - Maintenance Yard personnel must check for material clogging and erosion downslope from the outlets. If slope erosion exists below the outlet, protection will be provided to eliminate or further control sedimentation.



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- § The catch basin is inspected and cleaned twice a year by City of Flagstaff - Maintenance Yard personnel or an outside contractor. Sediments removed from the basin must be covered if sediment is stored on-site.
- § Litter grates on the catch basin must be checked after every storm and once each month.
- § Absorbent pillows are present at each of the outfalls and are maintained and replaced at least once a year.

The Section On-Site Environmental Coordinators are responsible for inspection activities. Inspections are documented on Form D-7. If large quantity leak/spills that exceed the capabilities of on-site spill containment equipment occur, protocol and procedures identified in Appendices D and/or E are to be utilized.

BMPs for cold weather activities that could add pollutants to stormwater include de-icing of hardscaped areas of the City of Flagstaff - Maintenance Yard. The Streets Section applies de-icing materials (glass beads, sand particles, or cinders) to paved areas of the City of Flagstaff - Maintenance Yard to improve vehicular traction during winter months. The use of uncontaminated glass beads, dirt or cinders should be used for de-icing procedures. City of Flagstaff - Maintenance Yard personnel are trained on proper de-icing application procedures.

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### **5.0 EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT**

The Federal Emergency Planning and Community Right-To-Know Act (EPCRA) was signed into law October 17, 1986. The primary goals of EPCRA are to provide to the public access to information concerning hazardous chemicals present in the community and to use this information in order to adopt local emergency response plans in the event of a hazardous chemical release. EPCRA aims to achieve these goals through two mechanisms. First, EPCRA compels the establishment of state and local emergency planning bodies as well as the development and implementation of local emergency plans. Second, EPCRA requires certain facilities to provide detailed reports concerning the presence and health effects of specified chemicals and releases.

The City of Flagstaff currently files EPCRA Section 312 Tier II reports with Local Emergency Planning Committee members and the National Emergency Response Center for gasoline and diesel fuel stored on-site. Tier II reports are annually filed online into the database by Environmental Management Section staff.

EPCRA Section 313 requires operators of certain facilities that manufacture (including import), process, or otherwise use listed toxic chemicals to report annually the releases of those chemicals to any environmental media. Listed toxic chemicals include more than 500 chemicals and chemical classes listed in 40 CFR 372. Currently, the City of Flagstaff - Maintenance Yard does not use listed toxic chemicals identified in 40 CFR 372. However annually, the Section On-Site Environmental Coordinators in coordination with the Manager of the City of Flagstaff Environmental Management Section is responsible for updating the chemical inventory list included in the Spill Prevention Control and Countermeasure Plan (Appendix D) and comparing the chemical inventory to listed chemicals in 40 CFR 372. Should toxic chemicals listed in 40 CFR 372 be identified as used at the City of Flagstaff - Maintenance Yard, appropriate filing under EPCRA and changes to the SWPPP must be initiated by the City of Flagstaff to remain in compliance with federal and state regulations.

Hard copies of EPCRA reporting can be included in Appendix F, EPCRA Filings, of this SWPPP.

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### 6.0 INDUSTRY SPECIFIC BEST MANAGEMENT PRACTICE REQUIREMENTS

As part of the Final NPDES Stormwater MSGP for Industrial Activities; Notice document dated Friday, September 29, 1995 (Federal Register Volume 60 Bi, 189 Notices, [Table D-4 - Measures to Control Pollutant in Stormwater Discharges from Asphalt Facilities and Lubricant Manufacturers](#) and [Table P-7 - General Stormwater BMPs for Activities at Vehicle and Equipment Maintenance Shops](#)), numerous general BMPs are outlined to assist in the development of the SWPPP.

As part of the Final Reissuance of the National Pollutant Discharge Elimination System (NPDES) Stormwater MSGP for Industrial Activities; Notice document dated Thursday, October 30, 2000 (Federal Register Volume 65, Number 210, Section 6.P.3.3 - Good Housekeeping Measures for Vehicle and Equipment Storage Areas; Fueling Area; Material Storage Area; Vehicle and Equipment Cleaning Areas; and Vehicle and Equipment Maintenance Areas), additional controls for BMPs are discussed.

The SWPPP includes the general BMPs and additional controls in this SWPPP, where applicable.

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### 7.0 ANNUAL COMPREHENSIVE COMPLIANCE EVALUATION

An annual comprehensive compliance evaluation will be conducted to assess the general effectiveness of the SWPPP and to provide information to update the SWPPP. Once a year, Environmental Management staff will inspect the facility for stormwater compliance and review and revise (if necessary) this SWPPP to meet the program goals. Site inspections and quarterly visual monitoring results will be considered when determining the need for revisions to this SWPPP and associated BMPs.

As City of Flagstaff - Maintenance Yard operations change, this SWPPP will be modified accordingly. Procedures for revising or modifying this SWPPP and ensuring proper review, authorization and dissemination of any revisions or modifications to appropriate individuals is detailed in Section 13.0, Revising and Updating.

The evaluation will be coordinated by the Section On-Site Environmental Coordinators and may include additional members of the Stormwater Pollution Prevention Team (SWPPT). The evaluation may be conducted using either City of Flagstaff qualified personnel or outside consultants to assess conditions at the City of Flagstaff - Maintenance Yard that could impact stormwater quality and assess the effectiveness of the BMPs used to control the quality of stormwater discharges.

The annual comprehensive compliance evaluation will include but not be limited to the following:

- § Confirmation of the accuracy of the description of potential sources of pollution contained in the existing SWPPP;
- § Determine the effectiveness of the SWPPP;
- § Assess compliance with the terms and conditions of the SWPPP; and
- § Determine personnel training requirements.

Where compliance evaluation schedules overlap with routine inspections, the annual compliance evaluation may be used as one of the routine inspections.

A Compliance Evaluation Report is developed from the above activities and must include the scope of the evaluation, personnel conducting evaluation, dates of the evaluation, and major observations relating to the implementation of the SWPPP. The annual Compliance Evaluation Report must be retained as part of the SWPPP files for three (3) years.

If revisions to the existing SWPPP are required, the Section On-Site Environmental Coordinators or Environmental Management staff will complete the required changes and updates and provide a revised SWPPP to the SWPPT members for review within two weeks after the completion of the compliance evaluation. Revisions, review, and authorization for the SWPPP will be conducted in accordance with Section 13 of this SWPPP. The revised SWPPP will be implemented in a timely manner, not to exceed 12 weeks from the revision date.

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According to City of Flagstaff Industrial Waste Section personnel, a discharge permit is not required at for the City of Flagstaff - Maintenance Yard. The need for a discharge permit will require reevaluation annually.

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**8.0 CONSISTENCY WITH OTHER SITE PLANS**

In addition to this SWPPP, there are other plans in force at the facility which are relevant to stormwater pollution prevention. These include the following:

§ Spill Prevention Control and Countermeasure Plan (Appendix D)

These plans include procedures for the prevention of and/or response to spills and leaks of hazardous and controlled substances used at the facility. Training on these plans is given once annually which aids in reducing the potential for stormwater pollution resulting from facility activities. Copies of these plans are kept in the respective Section On-Site Environmental Coordinator's files and found in the appendices of SWPPP.

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**9.0 DEADLINES**

Not applicable as this SWPPP is now active.

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**10.0 NUMERIC EFFLUENT LIMITATIONS**

Numeric effluent limitations have been set for several types of stormwater discharge categories under the MSGP. The industrial activities performed at the City of Flagstaff - Maintenance Yard do not fall under any of these categories. During development of the Multi-Sector program, the EPA did not believe that it was appropriate to establish specific numeric effluent limitations or a specific design or performance standard for vehicle maintenance facilities to meet the Best Available Technology (BAT)/Best Control Technology (BCT) standards of the Clean Water Act. Instead the EPA developed requirements for the development and implementation of site-specific SWPPPs consisting of a set of BMPs. Therefore, no numeric effluent limitations exist for the facility.



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### 11.0 MONITORING

Periodic monitoring of stormwater generated at the site is required by the MSGP guidelines. The following presents the specific monitoring requirements and schedule for this SWPPP.

#### 11.1 VISUAL EXAMINATION

Under this SWPPP, stormwater discharges from the City of Flagstaff - Maintenance Yard are required to be visually examined for evidence of potential pollution on a quarterly basis. Visual examinations provide a simple and inexpensive means of obtaining a rough assessment of stormwater quality. The visual examination of stormwater will begin during the first quarter of SWPPP implementations. Quarterly visual examinations must be performed during each of the following seasons: June 1 to October 31 and November 1 to May 31. Two visual samples are to be collected and examined from each season.

**Sample Collection Equipment** – The respective Section On-Site Environmental Coordinator or designee will collect a sample (grab sample) in a clear plastic or glass container with a screw lid. The grab sample container capacity should be at least one (1) pint. Each grab sample container will be labeled with discharge point sampled, date/time of sample, and respective Section On-Site Environmental Coordinator or designee’s initials.

**Sample Collection Locations** – The respective Section On-Site Environmental Coordinator or designee will collect a sample of stormwater runoff from each discharge point identified on [Figure 3-1](#). Stormwater discharge samples will be collected from stormwater runoff resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm.

**Visual Sample Examination** – Each examination is to be performed in a well lit area by the respective Section On-Site Environmental Coordinator or designee, who must examine the samples of stormwater discharge within the first half hour of discharge or as soon thereafter as practical but not to exceed one hour.

The respective Section On-Site Environmental Coordinator or designee will use the [Form H-1, Visual Examination of Stormwater Form found in Appendix J, Stormwater Monitoring](#), and note any color, odor, clarity, floating solids, settled solids, suspended solids, foam oil sheen and any other indicators of possible stormwater pollution.

**Interpreting Visual Examination Results** – Results of the visual examinations will be used by the respective Section On-Site Environmental Coordinator to identify any problems that need to be addressed, such as oil and grease in stormwater runoff from discharge points. Initially, City of Flagstaff Environmental Management Section personnel will assist the respective Section On-Site Environmental Coordinator with the interpretation of visual examination results. Thereafter, the Section On-Site Environmental Coordinators will be responsible for reporting to City of Flagstaff Environmental Program Manager or personnel any changes that indicate changes to surface water discharges from the discharge points that may require sampling and analyses.

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**Record Retention** – Records of Visual Examination of Stormwater are not required at this time to be submitted to any federal or state agency. The respective Section On-Site Environmental Coordinator is required to retain records of Visual Examination of Stormwater in Appendix I of this SWPPP for a minimum of three (3) years from the date of sampling.

**Adverse Weather Conditions** – When weather conditions do not allow the collection of stormwater discharge samples for visual examination, the reason for not performing the visual examination must be documented and retained on site in Appendix I of this SWPPP. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, electrical storms, etc.) or other wise make the collection of a sample impracticable (such as drought, extended frozen conditions, etc.).

### 11.2 NON-COMPLIANCE MONITORING

Analytical monitoring or compliance monitoring requirements do not exist under the MSGP requirements for the City of Flagstaff - Maintenance Yard. However, if visual observations indicate that significant stormwater pollution may be present, a sampling plan and protocol will be required to quantify potential contaminants in stormwater runoff. The sampling plan will be based on site specific observations regarding the potential source of the observed pollutants and will be conducted by City of Flagstaff Environmental Program Management personnel.

The *Guidance Manual for Monitoring and Reporting Requirements of the NPDES Stormwater Multi-Sector General Permit* prepared by the US EPA is included in Appendix J. The guidance manual provides assistance in monitoring and reporting requirements under the NPDES program. Information found in the guidance document includes visual, analytical, and compliance monitoring requirements; and proper reporting of laboratory results.

**Table H-1, Analytical Parameters For Discharge Points (located in Appendix J)**, identifies the potential pollutants and current analytical laboratory method for the potential pollutants for each discharge point. **Discharge points are described in Section 3.4.10 and illustrated on Figure 3-1 of this SWPPP.**

US EPA analytical parameters and sample holding times are established by 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants included in Appendix J. Personnel sampling stormwater should contact the analytical laboratory prior to sampling activities to coordinate analytical procedures and obtain sample containers required. If sampling is required due to a release, specific chemicals of concern should be identified and appropriate analytical methods employed in accordance with the provisions of 40 CFR Part 136.

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**12.0 SWPPP AUTHORIZATION**

As previously discussed in Section 7.0, once every year, Section On-Site Environmental Coordinators will review and revise (if necessary) this SWPPP to meet the program goals. Site inspections and quarterly visual monitoring results will be considered when determining the need for revisions to this SWPPP.

As City of Flagstaff - Maintenance Yard operations change, this SWPPP will be modified accordingly. Procedures for revising or modifying this SWPPP and ensuring proper review, authorization and dissemination of any revisions or modifications to appropriate individuals is detailed in Section 13.0, Revising and Updating.

After review, updating and revision of the SWPPP, the SWPPP will be authorized using the SWPPP Authorization Sheet attached to the front of the document.

A copy of the current, authorized SWPPP must be kept at the City of Flagstaff - Maintenance Yard in the event of an EPA or ADEQ inspection. Also in the interest of the public's right-to-know, a copy of the current, authorized SWPPP must be available to the public if requested in writing to do so.

## CITY OF FLAGSTAFF MAINTENANCE YARD STORMWATER POLLUTION PREVENTION PLAN

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### 13.0 REVISING AND UPDATING

#### 13.1 POLICY

The primary methods of formal communication between SWPPP responsible personnel are documents that inform or direct activities affecting the major elements of this SWPPP. The SWPPP and included documents will be controlled utilizing procedures outlined below.

The SWPPP requires updating in the event that a practice or activity is modified or deleted from facility operations; a finding is made during an annual comprehensive compliance evaluation inspection; or a release of reportable quantities of hazardous substances or oil has occurred.

#### 13.2 RESPONSIBILITY

##### 13.2.1 Document Control

The Section On-Site Environmental Coordinators are primarily responsible for the control of all controlled documents and will:

- § Forward controlled SWPPP to assigned individuals. An Acknowledgment Form (Form D-1 located in Appendix M, D-Forms) will be sent with each SWPPP or change to the SWPPP for verification of receipt and return, or destruction of a previous version. Returned forms will be maintained on file for review.
- § Annually review and update the SWPPP as needed. Changes (revisions) will be made on a page replacement basis and will be recorded on the Document Control & Revision Log and sent to individuals with a Revision Acknowledgment Form (Form D-2).
- § Notify all holders of controlled documents of changes to the SWPPP by distributing a Revision Acknowledgment Form (Form D-2) located in Appendix M).
- § Forward revisions of controlled documents to assigned individuals. An Acknowledgment Form (Form D-1 located in Appendix M) will be sent with each SWPPP or change to the SWPPP for verification of receipt and return, or destruction of previous version. Returned forms will be maintained on file for review.
- § Maintain the Document Control & Revision Log of all controlled documents distribution indicating document title, number, revision number, assigned date, and the name of the individual the SWPPP is assigned to. Also included within this log will be the revisions to figures and tables.

## CITY OF FLAGSTAFF MAINTENANCE YARD STORMWATER POLLUTION PREVENTION PLAN

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### 13.2.2 Uncontrolled Copies

Uncontrolled copies of controlled SWPPP will be distributed only if marked “UNCONTROLLED FOR INFORMATION ONLY”.

### 13.2.3 Obsolete Documents

Obsolete documents will be isolated from use or destroyed.

## 13.3 CONTROLLED DOCUMENTS

Controlled documents will include the SWPPP text at large but also all figures and tables therein.

### 13.3.1 SWPPP Text

Each copy of an SWPPP will be a controlled copy. Each controlled copy will be stamped “CONTROLLED COPY NUMBER \_\_\_\_\_” on the title page. Each page of the SWPPP will be dated with the date of origination or revision and assigned a revision number (i.e., REV 0 for the original and REV 1....n for subsequent revisions).

### 13.3.2 Figures and Tables

Figures and tables will be revised on a page replacement basis as described above in subsection 12.2.1.2. Each table or figure of the SWPPP will be dated with the date of origination or revision and assigned a revision number (i.e., REV 0 for the original and REV 1....n for subsequent revisions).

## **APPENDIX A**

### **NOTICE OF INTENT (NOI) CERTIFICATES**

## **APPENDIX B**

# **CITY OF FLAGSTAFF MAINTENANCE YARD PERMITS**

## **APPENDIX C**

### **LIST OF KEY CONTACTS**



**CITY OF FLAGSTAFF MAINTENANCE YARD  
STORMWATER POLLUTION PREVENTION PLAN**

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**LIST OF KEY CONTACTS**

<u>ACTIVITY/WASTE STREAM</u>	<u>SUPPLIER/CONTRACTOR</u>	<u>PHONE NUMBER</u>
Waste (Trash) Disposal	Solid Waste Section	(928) 774-0668
Waste Oil Recycle	Thermofluids	(800) 350-7565
Antifreeze Oil Recycle	Thermofluids	(800) 350-7565
Hazardous Waste Disposal	Solid Waste Section	(928) 527-9005

**CITY OF FLAGSTAFF MAINTENANCE YARD  
STORMWATER POLLUTION PREVENTION PLAN**

<b>CONTACTS FOR CITY OF FLAGSTAFF MAINTENANCE YARD STORMWATER POLLUTION PREVENTION PLAN TEAM (Updated August 2016)</b>		
<b>Team Member</b>	<b>Job Title</b>	<b>Contact Numbers</b>
Mr. Andy Bertelsen	Public Works Director	Phone: (928) 213-2105
Mr. Richard McGaugh <b>On-Site Environmental Coordinator – Fleet Services</b>	Public Works Manager-Fleet Services	Phone: 774-6372 Cell Phone: 853-0337
Mr. Mike O’Conner	Public Works Section Head-Streets Section & Parks	Phone: 213-2107 Cell Phone: 607-2133
Mr. Mike Stress	Lead Worker-Streets Section	Phone: 774-1605 Cell Phone: 607-2810
Mr. Ritchie Hearne	Streets Manager	Phone: 774-1605 Cell Phone: 814-6279
Mr. Julian Milligan <b>On-Site Environmental Coordinator - Streets</b>	Equipment Operator	Phone: 774-1605
Mr. Steve Bergeron <b>On-Site Environmental Coordinator – Collection Services</b>	Solid Waste Manager	Phone: 213-2135 Cell Phone: 310-6210
Mr. Erik Olsen	Environmental Program Manager	Phone: (928) 213-2151 Cell Phone: (928) 853-0456
Mr. Kyle DeHart	Environmental Technician	Phone: (928) 213-2146 Cell Phone: (717) 682-0592
Dean Coughenour	Assistant to City Manager, Risk Management	Phone: (928) 213-2082 Cell Phone: 699-8267

## **APPENDIX D**

# **SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN**

## **APPENDIX E**

# **HAZARDOUS WASTE CONTINGENCY PLAN AND EMERGENCY RESPONSE PLAN**

**APPENDIX F**  
**EPCRA FILINGS**

## **APPENDIX G**

# **CHEMICAL INVENTORY RECORDS & FORMS**

## **APPENDIX H**

### **MATERIAL SAFETY DATA SHEETS (MSDS)**

## **APPENDIX I**

# **QUARTERLY VISUAL INSPECTION RECORDS**



## **APPENDIX J**

### **QUARTERLY VISUAL INSPECTION FORMS**

**APPENDIX K**

**ADEQ MSGP ANNUAL INSPECTION RECORDS**

**APPENDIX L**

**FEDERAL REGISTER**

# **APPENDIX M**

## **D-FORMS**

**APPENDIX N**

**TRAINING RECORDS & FORMS**

## **APPENDIX O**

# **BEST MANAGEMENT PRACTICES UPGRADE REQUIREMENTS**









**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 1	<p>Vehicle Maintenance Building operated by the Vehicle Shop Fleet Services. The building is a dual level, rock sided, wood-truss roofed facility with bay doors and covered, concrete pads.</p> <p>Building 1 contains the following operations/activities.</p> <ul style="list-style-type: none"> <li>• Fleet Services offices where office supplies, printer/copier toner, and household cleaners are stored, used and disposed to municipal waste containers.</li> <li>• Personnel lounge and restrooms.</li> <li>• Prior to July of 2000, uniform washing operation where maintenance worker uniforms were washed and dried. The wastewater from this operation was discharged to the City of Flagstaff Sanitary Sewer System. After July of 2000, a laundry service provides uniform washing.</li> <li>• Parts Shop where new or unused vehicle/machine parts, cleaners/degreasers, engine fluids, lubricants/greases, antifreeze, paints, batteries, insecticides, propane, and oil absorbents are stored until used. An area where used tires and batteries are stored until removed for recycling by Interstate Batteries.</li> <li>• Sweeper Bay where City street sweepers are stored.</li> </ul>	16,200 square feet

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 1 (continued)	<ul style="list-style-type: none"> <li>• Enclosed, Upper and Lower Shops where vehicle maintenance activities are conducted from bay areas including vehicle repair, parts cleaning, small-scale vehicle (aerosol cans) painting, vehicle fluid replacement , and Freon replacement. Replacement fluids are stored in 55-gallon or smaller drums. Waste oils are collected in several, waste oil storage containers until taken off-site for recycling. Absorbent used to control leaks and spills is swept and disposed to municipal waste containers. Used rags are collected in drums and disposed to municipal waste containers. Area heaters both natural gas and waste oil burners are used within these areas. Used antifreeze is drained and collected for recycling. The Lower Shop has one operational hydraulic lift.</li>   <li>• Tire Storage where new tires are stored until used.</li>   <li>• Exterior, unsecured chemical/materials storage and handling areas located on eastern and southern exposures contain drums/barrels of new and used oil/transmission fluid, antifreeze, and other vehicle maintenance materials. Chemical/materials storage and handling areas are concrete pads that do not have secondary containment.</li>   <li>• Internal oil/water drain system comprised of four oil/water separators located within the Upper and Lower Shops. Drainage of the system is reportedly to enclosed pipes directly connected to the City of Flagstaff Sanitary Sewer System. The separators, as needed, are either pumped out and disposed by an off-site contractor or by City of Flagstaff Maintenance Yard personnel using a hydrovac truck. Reportedly, sediments are profiled and taken to the Wildcat Hill sludge drying beds for disposal.</li> </ul>	16,200 square feet

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 1 (continued)	<ul style="list-style-type: none"> <li>• Vehicle Repair Staging Area is located external and immediately adjacent to the south and east of Building 1. City vehicles that require maintenance are stored in this area prior to repair. Absorbents are applied to uncontrolled fluid leaks and spills from this staging area. The waste absorbents are collected and disposed to the municipal waste or washed off-site during cleaning or precipitation events to discharge points located along the southern and eastern boundary of the facility.</li> </ul> <p>The Vehicle Repair Staging Area is also the location of two former underground storage tank systems that have been removed. The former underground storage tank system located to the east of Building 1 that was operational from 1970 to 1998 was removed in 1998. The former underground storage tank system located south of Building 1 was operated prior to 1970. The underground storage tank system located south of Building 1 was found to be leaking. The majority of contaminated soil from the underground storage tank system area located south of Building 1 was left in-place and passive remediation system was installed to remove contamination in the soil. A portion of contaminated soil from tank removal activities was stockpiled to the west of the excavation and bioremediated. The stockpile was removed in 1998.</p> <p>Parts and tire cleaning by the Fleet Services is accomplished using three steam cleaning stations that are serviced by a contractor.</p>	16,200 square feet
Building 2	Solid Waste Office Building operated by the Solid Waste Section. The building is a single-level facility with office space and employee lounge/restrooms. Chemicals/materials used within the building includes printer/copier toner and household cleaners that are disposed to municipal waste containers.	1,600 square feet

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 3	<p>Streets Building is operated by the Streets Section. The building is a partial, two story prefabricated metal building with bay doors along the southern exposure. Waste receptacles are located on the exterior of the building between bay doors.</p> <p>Building 3 contains the following operations/activities.</p> <ul style="list-style-type: none"> <li>• Street Section Offices where office supplies, printer/copier toner, and household cleaners are stored, used, and disposed to municipal waste container.</li> <li>• Carpenter Shop where concrete framing is assembled and various primers, caulk, stripper, patching materials, cleaners and paints are stored and used.</li> <li>• Sign Shop that fabricates street signs and uses various acrylic/enamel/latex paints, adhesives, acetone, paint thinner, cleaners, primers, compressed oxygen, and acetylene (dissolved).</li> <li>• Equipment Garage is used to maintain and store street striping equipment. Maintenance activities include cleaning of the striping machine that produces an used paint/cleaner waste. The waste materials are stored in 55-gallon drums within the Equipment Garage.</li> <li>• Welding Shop where welding and drill press operations produce waste and scrap metals. Waste metal is disposed to municipal waste containers. Scrap metal is stored on the concrete bay door floor on the exterior of the building and collected by the Solid Waste Section for eventual recycling. Chemicals/materials used in the Welding Shop include compressed gases, cutting fluids, cleaners, lubricants/oils, paints are used to perform welding operations. Used lubricants/oils and absorbents are discharged to municipal waste containers. Reportedly, stormwater occasionally flows under bay doors into the Welding Shop.</li> </ul>	7,200 square feet

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 3 (continued)	<ul style="list-style-type: none"> <li>• A trench drain that discharge to an oil/water separator is located in Building 3. The discharge from the oil/water separator drains to enclosed pipes directly connected to the City of Flagstaff Sanitary Sewer System. The separators, as needed, are either pumped and disposed by an off-site contractor or City of Flagstaff Streets personnel using a hydrovac truck. Reportedly, sediments are disposed to the City landfill.</li>   <li>• Vehicle washing is conducted on the exterior southern, bay door portion of the building. Wash water drains to facility outfalls along the north and east boundaries of the facility.</li> </ul>	7,200 square feet
Building 4	<p>The Paint Storage Shed is operated by the Streets Section and is built on a concrete slab with concrete and wood walls and a wood truss with shingle roof. The Paint Storage Shed does not have secondary containment around its perimeter.</p> <p>The Paint Storage Shed stores various, largely unmarked containers of paints for walls and vehicles, primers, resins, and compressed gas.</p>	800 square feet
Building 5	<p>Streets Equipment Garage is operated by the Streets Section with ancillary interior areas operated by the Fleet and Solid Waste Sections. The building is a metal framed structure built with bay doors along the east and west walls on an internally draining concrete floor.</p> <p>Building 5 contains the following operations/activities:</p> <ul style="list-style-type: none"> <li>• Street Section Equipment Garage - Street vehicles including sweepers, hydrovac, crane, and trucks are stored within this portion of the building. City personnel conduct routine maintenance on Street vehicles that include the use of cleaners/degreasers and motor fluids. Routine maintenance activities include the daily, or as needed, adding of fuels to maintain optimal fluid levels in vehicles. Bulk paint, sealers, and de-icing agents (glass beads) are also stored for eventual use. Materials removed from the hydrovac truck that cleans out Maintenance Yard storm drains is discharged to the City landfill. Used maintenance rags are discharged to municipal waste containers.</li> </ul>	13,000 square feet
Building 5 (continued)	<ul style="list-style-type: none"> <li>• The disposition of used cleaners and degreasers and motor fluids are currently undocumented. However, based on other site activities, used motor fluids are</li> </ul>	13,000 square feet

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
	<p>contained and recycled off-site and used cleaners and degreasers are probably disposed to the municipal waste containers.</p> <ul style="list-style-type: none"> <li>• Sanitation Equipment Garage - Sanitation vehicles are stored within this portion of the building. Chemicals/materials used within the bays include antifreeze, primers, and paints.</li> <li>• Preventive Maintenance (PM) Shop is operated by Fleet Services. Operations performed in the PM portion of the building include general preventative maintenance such as lubricating and oil changes. Chemicals/materials used within this section include cleaners/degreasers, lubricants/oils, antifreeze, vehicle fluids, and paints. Materials are stored within the PM Shop in eight (8) 275 gallon single-walled steel tanks, smaller containers, and day-use bottles.</li> </ul> <p>PM activities within the building generate approximately 30 gallons of waste oil per day and use a 300-gallon above ground oil tank for waste oil storage. The above ground storage tank does not have secondary containment. The waste oil is collected in a above ground storage tank and stored for eventual recycling by an off-site contractor. Waste oil filters from vehicle maintenance activities are punctured, drained, and disposed to municipal waste containers. Bottles along with aerosols and brake cleaners are used are currently stored at work stations.</p> <ul style="list-style-type: none"> <li>• A paint booth is operated by the Streets Section for the painting of waste collection containers using water-based paint. Reportedly, vehicles were formerly painted in the Streets Section Paint Booth but this practice ceased in 1993-1994 time frame. Filters from the paint booth are sent to municipal waste containers.</li> </ul>	

**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 5 (continued)	<ul style="list-style-type: none"> <li>• A floor trench drain is located in Building 5 and discharges to an oil/water separator located to the north of Building 5. The discharge from the oil/water separator drains to enclosed pipes directly connected to the City of Flagstaff Sanitary Sewer System. The separators, as needed, are either pumped and disposed by an off-site contractor or City of Flagstaff Streets personnel using a hydrovac truck. Reportedly, sediments are disposed to the City landfill.</li> <li>• Exterior, unsecured chemical/materials storage and handling areas located on eastern exposure contain drums/barrels of new and used oil/transmission fluid and other vehicle maintenance materials. Chemical handling areas are concrete pads that do not have secondary containment.</li> <li>• Parts washing (one solvent tank) is used for parts cleaning.</li> <li>• An exterior oil/water separator was also identified exterior and immediately to the south of Building 5. According to site plans, this oil/water separator discharges to a line that connects to a floor drain in Building 6 and eventually discharges off-site to a City sanitary sewer. Cleaning and waste disposal protocol for this separator are not documented.</li> </ul>	13,000 square feet
Building 6	Sanitation Equipment Garage is operated by the Solid Waste Section. The building is constructed of metal with bay doors located along the northern wall. The building is used to store sanitation garbage trucks and residential waste disposal bins. Reportedly, no maintenance activities are conducted in this building. Chemical/materials identified in the building include cleaners, spray paints, paint/lacquer thinner, and oils.	5,600 square feet



**Table 3-1  
Summary of Facility Areas**

Facility Name	Activity	Approximate Square Footage
Building 6 (continued)	<p>According to site plans, a single floor drain is located within this building. The floor drain discharges to a drain line that is connected to the north to the exterior, southern Building 5 oil/water separator. Discharges from this system drain off-site in an enclosed pipe to the City of Flagstaff Sanitary Sewer System. The separator, as needed, is either pumped and disposed by an off-site contractor or City of Flagstaff Streets personnel using a hydrovac truck. Reportedly, sediments are disposed to the City landfill.</p> <p>Vehicle washing activities are conducted north of the bay doors. Wash Water discharges off-site at Discharge Point 1.</p>	5,600 square feet
Above Ground Storage Tank System for Fuels and Fuel Pumps	Above Ground Storage Tanks for fuels and Fuel Pumps (System) are operated by Fleet Services. The System is located to the west of Building 1 and consists of three, 10,000 gallon capacity, double walled, above ground storage tanks (2 – diesel and 1 - gasoline) and fuel dispensing pumps built on a concrete pad. The concrete pad drains to a low spot on the northeast corner. The above ground storage tanks and fuel pumps are located under a metal canopy. There is secondary containment for the above ground storage tanks or the fuel pumps but not the configuration to contain line leaks and spills that occur during fuel dispensing activities.	1,250 square feet
Open (“Country”) Drainage System	The exterior asphalt and concrete areas not occupied by buildings comprise the City of Flagstaff Maintenance Yard’s open or “Country” drainage system. The drainage system collects surface water runoff from rainfall events or wash down activities over the City of Flagstaff Maintenance Yard’s drainage area and conveys the surface water through a series of surface structures (concrete valley gutters) and overland flow patterns to release or discharge points. Surface water outfalls are located along the northern, eastern, and southern boundaries of the City of Flagstaff Maintenance Yard. A stormwater catch basin is located in the northeast corner of the facility.	201,600 square feet
Vehicle Wash Rack	The Vehicle Wash Rack is operated by Fleet Services and is used by all operations at the City of Flagstaff Maintenance Yard. On the eastern portion of the wash rack is an enclosed wooden structure constructed on a concrete pad that houses compressor and water delivery equipment. An oil/water separator is located adjacent to the wash rack. The oil/water separator discharges by way of an enclosed pipe to the City of Flagstaff Sanitary Sewer System. The separators, as needed, are either pumped and disposed by an off-site contractor or City of Flagstaff Streets personnel using a hydrovac truck. Reportedly, sediments are disposed to the City landfill.	1,100 square feet

**Table 3-1  
Summary of Facility Areas**

<b>Facility Name</b>	<b>Activity</b>	<b>Approximate Square Footage</b>
Streets Section Asphalt/Cinder Stockpile (Inactive) and Vehicle Staging Area	<p>The Streets Section Asphalt/Cinder Stockpile and Vehicle Staging Area is operated by the Streets Section for the paving, patching and repair of City streets. The Streets Section Asphalt/Cinder Stockpile (currently inactive) is located adjacent and to the east of Building 3. The Streets Section Asphalt/Cinder Stockpile is not lined or covered. The Streets Section Vehicle Staging Area is located to the east, southeast of the Streets Section Asphalt/Cinder Stockpile. Trucks and beds are stored under a metal framework that allows for the hanging of truck beds. The metal framework is constructed over a concrete pad.</p> <p>Formerly during the winter months, oil/diesel was hand sprayed within the truck beds prior to loading materials to prevent freezing.</p>	2,800 square feet











