

**City of Phoenix
Water Services Department
Stormwater Management Section**

A Guide to Writing Your Stormwater Management Plan

The City of Phoenix's storm drain system empties untreated water directly into rivers and washes. Because stormwater runoff can transport pollutants to the City's storm drain system, the City has a permit from the Arizona Department of Environmental Quality (ADEQ) that mandates we take action to minimize stormwater pollution from industrial and commercial facilities. Phoenix City Code (PCC), Chapter 32C, Section 104, requires any business that has the potential to affect the quality of stormwater impounded on or released from its property to prepare and implement a written Stormwater Management Plan (SWMP). The SWMP describes the steps your company is taking to protect stormwater quality.

Certain businesses are also regulated by the ADEQ Arizona Pollution Discharge Elimination System (AZPDES) program for managing stormwater, based on their Standard Industrial Classification (SIC) code¹. If your business has a SIC code that is identified in Appendix C of the ADEQ Multi-Sector General Permit (MSGP)² then your business is required to file either a Notice of Intent (NOI) or a No Exposure Certification (NEC) with ADEQ to obtain permit coverage under the MSGP. This is in addition to meeting PCC Chapter 32C requirements³. Facility operators determine for themselves their facility's SIC code and whether or not they are eligible for permit coverage under ADEQ's MSGP. Please be advised that the City is required by its AZPDES permit to identify those facilities regulated under the MSGP that the City inspects to ADEQ if the facility has not filed either a NOI or NEC with ADEQ.

This facility appears to be conducting activities which would be regulated by the AZPDES program (i.e. you may need to file a NOI or NEC with ADEQ). **The City of Phoenix will accept a Stormwater Pollution Prevention Plan (SWPPP)² in lieu of a SWMP, provided the information in the SWPPP includes all the elements required for a SWMP.** Facilities filing a NEC with ADEQ may also need to prepare and implement a SWMP under PCC Chapter 32C.

The SWMP includes the following information:

1. Facility Information:

- a. Identify the complete address of each parcel of property included in the plan (PCC 32C-104.C).
- b. Provide facility contact information including the owner and/or manager, designated contact person, complete address, email address and telephone number of both the corporate office AND local contact person.
- c. Describe business activities at the site (PCC 32C-104.C) and include the Standard Industrial Classification (known as the SIC code) of the business. Include whether the business is a mobile operation¹.
- d. Attach a site plan to the SWMP (See Section 4- "Appendix A – Site Plan" below).

¹ SIC codes are identified on the United States Department of Labor website at http://www.osha.gov/pls/imis/sic_manual.html.

² ADEQ Multi-Sector General Permit (MSGP) <http://azdeq.gov/enviro/water/permits/msgp.html>

³ Phoenix City Code Chapter 32C: <http://www.codepublishing.com/AZ/Phoenix/html/Phoenix32C/Phoenix32c.html>

2. Materials, Products and Chemicals (PCC 32C-104.C):
 - a. List the names, quantities, use and location of raw materials, stockpiles, waste materials, chemicals, fuels, hazardous substances, fertilizers, pesticides, herbicides, detergents, etc., that you:
 - Use or store outside
 - Use or store indoors near exterior doorways
 - Move throughout the property, with the potential to be spilled or tracked outside.Only list liquids in 5 gallon receptacles or more unless they are toxic or hazardous.
 - b. Identify where and how you store and use the materials onsite.
 - c. Explain how you dispose of or recycle excess, spent or waste materials from your facility.

3. Best Management Practices (BMPs):

BMPs are procedures, practices, material storage systems and constructed features (i.e. structural BMPs or controls) that you put into place to prevent the release of pollutants to the storm drain system. Describe the BMPs that you use to minimize stormwater pollution. Categories of BMPs to describe in the SWMP are Administrative and Source Control BMPs, Spill Control BMPs, and Structural BMPs or controls. Examples of BMPs are available at www.phoenix.gov/stormwater and may include the following:

 - a. Administrative and Source Control BMPs:
 - Good housekeeping BMPs (PCC 32C-104.F): Describe how you manage litter, keep outdoor areas swept and clean, catch drips and leaks from vehicles or equipment, and properly dispose of chemicals, materials and debris.
 - Prepare for weather: Describe BMPs for how you modify activities conducted outdoors during windy or rainy weather conditions (PCC 32C-104.C).
 - Material storage management (PCC 32C-104.C and F): Describe how you store, use, treat and dispose of materials to prevent exposure to rain and stormwater. Examples of practices you can implement at your business may include the following:
 - ✓ Store materials and parts on pallets and under cover to avoid contact with rainfall and runoff.
 - ✓ Store chemicals within secondary containment, under cover and on pallets.
 - ✓ Consider constructing roofs over outdoor material storage areas, or use other measures (tarps, etc.) to prevent rainfall and runoff from contacting chemicals.
 - ✓ Store materials in labeled, closed containers that are in good condition.
 - ✓ Drain fluids from equipment and parts before storage.
 - ✓ Place leaking parts within secondary containment and under cover.
 - ✓ Ship wastes and recyclables off site regularly.
 - Training: Describe your employee training on facility BMPs (including spill identification and control procedures as required by PCC 32C-104.F). Be sure to make a record of the training. Train new employees in BMPs upon hire and retrain all employees on a regular schedule (such as annually).
 - Inspections: Conduct inspections on a quarterly basis and after rain events greater than 0.10 inch to confirm that BMPs are being implemented and are working at your business. An example checklist for facility inspections is included in Appendix B. If you find a BMP is not working well, update your SWMP to document any improvements that you have made to your plan.
 - b. Spill Control BMPs:
 - Keep spill control equipment in an easily accessible area (PCC Section 32C-104.C).
 - Describe your procedures to contain and clean up spills for each chemical or material you store or use onsite (PCC 32C-104.C).

- Implement the spill control procedures designed to keep pollutants out of the storm drain system (PCC 32C-104.C).
- Describe the procedures you will use to protect the storm drain system from pollutants from your facility.
- Include names and telephone numbers of your employees responsible for directing spill control efforts in your SWMP. Describe who responds to large spills or contamination onsite for your company if you utilize the services of a contractor. In the case of a major spill, call the Phoenix Fire Department (dial 911).
- Report releases of pollutants to the City storm drain system immediately (PCC 32C-107.G). Once the emergency has been adequately controlled, telephone the initial report to the Stormwater Hotline at (602)256-3190, and leave a detailed message concerning the incident (such as material spilled, an estimate of the amount, location where the spill entered the storm drain system, how it was cleaned up, etc.). PCC 32C-107.G also requires a written notification within five days of the incident detailing the cause of the release and measures being taken to prevent reoccurrence. The notification should include facility contact information. Fax the five day notification to the City of Phoenix Stormwater Management Section at (602)534-7151 or by mail to:

City of Phoenix
 Stormwater Management Section
 2474 South 22nd Avenue, Building 31
 Phoenix, Arizona 85009

Note: If you have the potential to store more than 1320 gallons of petroleum products above ground, you may be required to create a Spill Prevention, Control and Countermeasures (SPCC) plan. See www.epa.gov/oilspill. You may include the SPCC as your spill control BMPs by reference in the SWMP.

c. Structural BMPs or controls (PCC 32C-104F):

Describe all structural BMPs or controls (constructed features to manage stormwater) on the property. Structural BMPs are typically permanent items that may include containment areas (such as curbed containment areas, berms or other secondary containment structures), retention/detention basins, drywells, covered storage areas, stormwater treatment devices (such as oil/water separators), etc. Describe inspection and maintenance of structural BMPs in this section.

4. Appendix A – Site Plan

Attach one site plan to your SWMP showing street names, north arrow, property layout, material storage locations, and structural BMPs identified in the SWMP. Include arrows showing the general direction of stormwater drainage as observed onsite. Three different example site plan layouts are included in Appendix A. Your site plan may be hand drawn, computer generated or produced using available aerial imagery (such as Google Maps, Bing, or Yahoo! Maps modified by using Paint or other software). Examples are attached in Appendix A.

5. Appendix B – BMP Checklist

Attach an inspection checklist to help you document inspections of your facility for implementation of BMPs. An example is included in Appendix B. Your checklist will include all of the BMPs that are specific for your facility conditions that you listed in Section 3- Best Management Practices above. Conduct stormwater inspections at least quarterly and after rain events to make sure that BMPs are working properly.

EXAMPLE Stormwater Management Plan

XYZ Company

Date of SWMP: January 1, 2014

1. FACILITY INFORMATION

Company Name:	XYZ Company
Local Street Address:	123 Mockingbird Lane, Phoenix, AZ 85000
Mailing Address:	P.O. Box 00000, Phoenix, AZ 85000
Corporate Address:	123 Songbird Lane, Los Angeles, CA 10000
Owner/Manager:	Oliver Green, Branch Manager
Contact Name:	Jennifer Blue, Shop Manager
Contact Email:	JBlue@xyzcompany.com
Contact Telephone:	(123)456-7890
Contact Fax Number:	(098)765-4321
SIC or NAICS Code:	6513
Describe business activities at this site:	Apartment building management and maintenance

2. MATERIALS, PRODUCTS AND CHEMICALS

2a. Materials and Chemical Inventory

	Material, Product or Chemical	Operation Used	Location	Maximum Quantity
1	Chlorine Tabs	Pool/spa maintenance	Pool Maint. Shed	75 lb
2	Muriatic Acid	Pool/spa maintenance	Pool Maint. Shed	70 gal
3	Liquid Chlorine	Pool/spa maintenance	Pool Maint. Shed	12 gal
4	Latex Paint	Building maintenance	Maintenance Garage	50 gal
5	Gasoline	Landscaping equipment	Maintenance Garage	25 gal
6	Oil	Landscaping equipment	Maintenance Garage	5 gal
7	Sodium Bicarbonate	Pool/spa maintenance	Pool Maint. Shed	50 lb
8	Soda Ash	Pool/spa maintenance	Pool Maint. Shed	50 lb
9	Polymer Solution	Pool maintenance	Pool Maint. Shed	5 gal
10	Spa Anti-Foam	Spa maintenance	Pool Maint. Shed	10 gal
12	Polymer Solution w/Chlorine	Spa maintenance	Pool Maint. Shed	10 gal
13	Roundup concentrate	Landscaping maint.	Maintenance Garage	5 gal
14	Ortho pest control	Pest control	Maintenance Garage	5 gal

2b. Where and how will the materials be stored onsite?

All pool/spa chemicals are stored in the pool maintenance shed next to the pool complex. Liquid chlorine is stored on a secondary containment pallet. Polymers are stored on a shelf in the shed inside of totes to provide secondary containment. Acids are separated from the other chemicals and stored on a separate secondary containment pallet. Fuel and oil are stored in the maintenance garage. Weed and pest control chemicals are also stored in the maintenance garage.

2c. Disposal of excess, spent or waste materials (including recycling).

Residual non-hazardous paint (in cans or buckets) is allowed to evaporate outdoors only under cover, within secondary containment. Residual material in paint cans is left open to dry out. Once dry they are placed in a bag with other trash and placed into a dumpster. Empty containers from pool chemicals and landscaping care chemicals are also placed in a bag and placed into a dumpster. The gasoline cans are reused. Empty oil bottles are used to collect used oil from equipment maintenance and sent annually to the oil recycler.

3. BEST MANAGEMENT PRACTICES (BMPs)

3a. Administrative and Source Control BMPs:

The following housekeeping practices will be used to reduce the risk of spills or other accidental exposure of materials/chemicals to stormwater runoff:

- Only a limited supply of any one chemical is kept on hand as listed in Section 2.
- Chemicals are stored in a neat and orderly manner in their designated locations as identified in Section 2a. Any excess materials stored outside the buildings are palletized and covered.
- Materials and chemicals are returned to their designated areas after work is complete (no later than the end of the day).
- Products are kept in their original closed containers with the original manufacturer label.
- Sweeping of the maintenance shop area is performed at the end of each day. Sawdust and sweeping debris is placed in the dumpster in a closed bag.
- Sweeping of the loading dock and all storage and parking areas is performed weekly.
- Chemicals are stored on pallets or in totes (secondary containment) as listed in Section 2c above.
- All new employees are trained in the material storage, material handling and spill control procedures upon hire. All employees are trained in BMPs annually.
- Contractors working on-site are trained on the proper housekeeping and BMPs.
- All landscaping waste is bagged and disposed of properly.
- No chemicals are released into the sump, drain, retention areas or street.

- Residents are instructed to call the Property Management Maintenance Engineer if a leak or spill is discovered on the property.
- The areas around the dumpsters are kept clean. Dumpster lids remain closed at all times.
- Building wash water is vacuumed up and disposed of in the sanitary sewer.
- Do not paint surfaces during windy or rainy conditions. Do not apply pest control chemicals, fertilizers, or herbicides during windy conditions. Only apply pest control chemicals, fertilizers, or herbicides during rainy conditions if directed to by the manufacturer's label.

3b. Spill Control BMPs:

- Any spills are immediately swept up or absorbed with kitty litter to prevent spreading.
- Garage leaks and spills are cleaned up immediately using dry clean up methods.
- Spill control equipment is kept in each room that contains any of the materials listed in Section 2. Use the Safety Data Sheet for the chemical to determine how to handle any particular chemical spill.
- Spill control/cleanup equipment consists of a broom, shovel, bucket and sand or sweeping compound for liquid or dry spills.
- Liquid chlorine spills are neutralized with chlorine neutralizer.
- Acid spills are neutralized with soda ash.
- Drip pan or other containment is used to capture leaks and is emptied regularly.

Emergency Numbers-All Facility Spills:

Facility Environmental Officer	(555)555-5555
Business Owner/Manager	(555)555-5550

Emergency Numbers-Major Spills Off Facility Property:

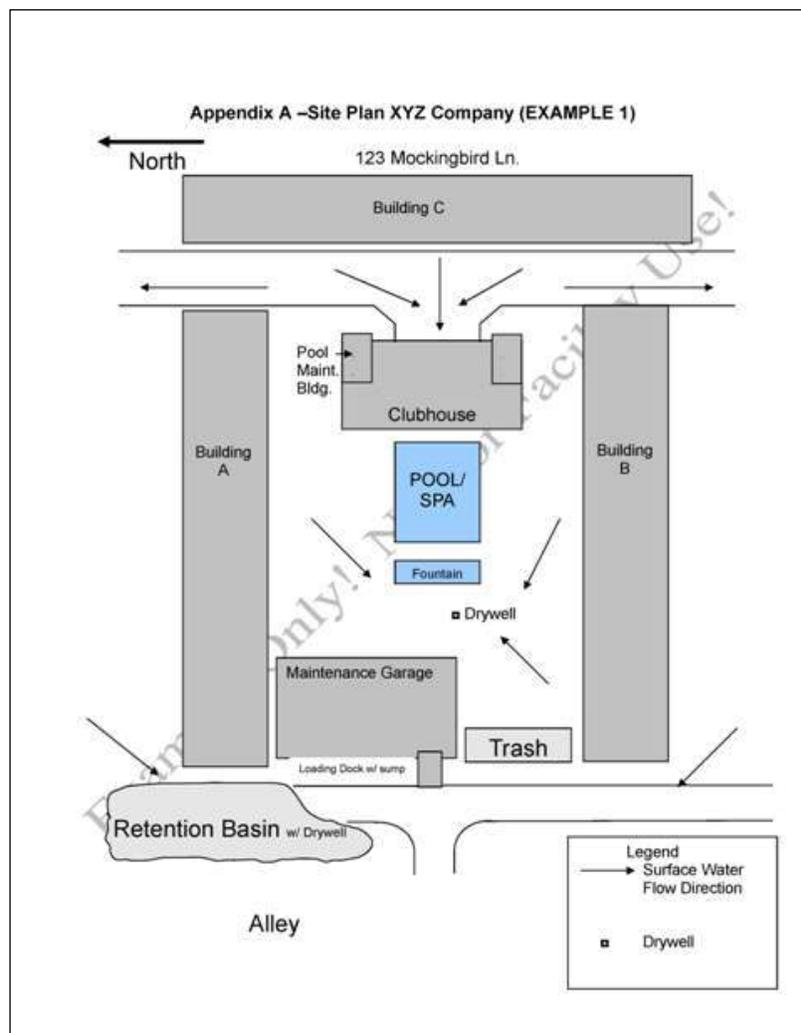
City of Phoenix - Hazardous Spills – Emergency	911
--	-----

Spill Reporting

- Immediately report releases to the City storm drain system. Once the emergency is controlled, telephone the initial report to the Stormwater Hotline at (602)256-3190, and leave a detailed message concerning the incident.
- Within five days of the incident, submit a written notification to the City of Phoenix Stormwater Management Section, detailing the cause of the release and measures being taken to prevent recurrence. The notification should include facility contact information as well. Fax the five day notification to the City of Phoenix Stormwater Management Section at (602)534-7151 or mail to: City of Phoenix Stormwater Management Section, 2474 South 22nd Avenue, Phoenix, Arizona 85009.

3c. Structural BMPs or controls:

- A stormwater sump located in the maintenance loading dock has a submersible pump to remove stormwater. The loading dock and sump is inspected weekly (see Section 3a above) and cleaned on a bi-yearly basis. Before discharging stormwater to the onsite retention basin, the water is visually inspected to verify that the water is clear, with no odor, oil sheen or suds to indicate contamination.
- There is also a retention basin located on the west end of the property. The retention basin is inspected quarterly and cleaned as necessary to assure adequate stormwater capacity.
- One drywell is located in the center of the parking lot and a second drywell is located in the center of the retention basin. The drywells are visually inspected after rain events to make sure that they drain within 36 hours of rainfall, and they are serviced at least every three years as per the City of Phoenix Stormwater Policies & Standards Manual (<http://phoenix.gov/streets/reference/swmanual.html>) Section 6.8.13.



Appendix A –Site Plan XYZ Company (EXAMPLE 2)

