



Stormwater Construction General Permit CGP-2013

Stormwater Construction General Permit (CGP)

Stormwater Outreach for Regional Municipalities
MS4 Statewide Summit
June 18, 2013

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Arizona Department of Environmental Quality (ADEQ)

Funding Stormwater The WIFA Way... Affordable & Efficient



Stormwater Project Examples

- ◆ Stormwater management projects
 - ◆ Water quality or public health benefit
 - ◆ Design, construction, implementation of stormwater BMPs, including retrofitting
- ◆ Green streets and stormwater management systems for parking areas
 - ◆ Permeable pavement
 - ◆ Bioretention
 - ◆ Green roofs
- ◆ Stormwater harvesting and reuse projects, including pipes to distribute stormwater for reuse
- ◆ Establishment or restoration of riparian buffers, floodplains, wetlands and bioengineered stream banks

Parking lot runoff captured by bioretention in parking islands
Courtesy City of Phoenix



Permeable paver patio
Courtesy Summer Waters, UA
Cooperative Extension



WIFA Offers:



Low-interest financing

- ◆ Planning, design and construction
- ◆ Streamlined application process
- ◆ Year-round financing available
- ◆ No application fees or closing costs
- ◆ No minimum or maximum loan amount
- ◆ Below market interest rates (governmental avg. **2.69%**)
- ◆ Breaks for disadvantaged communities

Planning and design grants (up to \$35K)

Incentives for green projects

Apply online at azwifa.gov/application or contact WIFA at (602) 364-1310

Incentives for Green Projects*



WIFA

EPA Green Categories:



Water Efficiency



Energy Efficiency



Environmentally Innovative



Green Stormwater Infrastructure

**WIFA determines whether a project meets the green criteria as outlined in EPA's guidance*

- 💧 Additional discounts on interest rates (CIFR)
- 💧 For planning and design grants, match requirement is waived

For a stormwater project to be considered green, it must:

Maintain and restore the natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater.

Today's Discussion:

- Program overview / history
- CGP-2013
 1. Coverage / eligibility
 2. NOI / NOT
 3. Effluent Limitation (control measures / BMPs)
 4. Inspections
 5. Corrective Actions
 6. SWPPP
 7. Monitoring
 8. Fees
- Questions

Regulated Construction Activities –

What Projects Need Permit Coverage:

- Large construction (>5 acres), 40 CFR 122.26(b)(14)(x) of industrial activity (Phase I, 1990).
- Small construction activity (1-5 acres), 40 CFR 122.26(B)(15), (Phase II, 1999).

A Construction activity that will disturb one or more acres is subject to permitting.

- EPA finalized its rule on Construction and Development Effluent Limitation Guidelines (ELGs) on December 1, 2009.
- Part 450.21 establishes 6 Best Practicable Technology (BPT) criteria.



CGP Regulatory Overview

1. Erosion and sediment control;
2. Soil stabilization;
3. Dewatering;
4. Pollution prevention measures;
5. Prohibited discharges;
6. Surface outlets.

- Part 450.22 established a numeric turbidity limit that was to be phased in (280 NTUs);
- EPA was challenged on this number and it was suspended by the court.
- Ultimately withdrawn.
- Future of numeric limit....



CGP Regulatory Overview

Senate Bill 1289:

Amended A.R.S 49-255.01 signed into law
April 2012

Requires reduced controls for sites that retain stormwater (except in extreme events) if the following conditions are met:

- Nearest downstream receiving water is ephemeral and is sufficient distance away (2.5 miles);
- Stormwater is directed to retention basin(s) that has a capacity to retain stormwater from a local 100-year, 2-hour storm event;
- The operator complies with good housekeeping measures; and
- The operator maintains the basin capacity.



CGP Regulatory Overview

SB-1289 (cont'd):

Paragraph (M) Allows new operators to obtain coverage under an expired permit if the director (ADEQ) has commenced the proceedings to re-issue the general permit.

- ADEQ initiated stakeholder process in November 2011.
- Draft permit published in AAR November 2012. Public comment closed on January 11, 2013.
- Stakeholders consisted of: homebuilders, cities, counties, utility companies, ADOT, and contractors.



CGP-2013

The AZPDES
Stormwater
Construction General
Permit (CGP-2013)
became effective on
June 3, 2013 and
replaces CGP-2008.

Permit No. AZG2013-001



STATE OF ARIZONA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PHOENIX, ARIZONA 85007

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION ACTIVITY
TO WATERS OF THE UNITED STATES

This permit provides authorization to discharge under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of the Arizona Revised Statutes, Title 49, Chapter 2, Article 3.1, the Arizona Administrative Code (A.C.C.), Title 18, Chapter 9, Articles 9 and Chapter 11, Article 1, and the Clean Water Act as amended (33 U.S.C. 1251 et seq.).

This general permit specifically authorizes stormwater discharges associated with construction activity, pursuant to 40 CFR § 122.26(b)(14)(x) and 40 CFR § 122.26(b)(15) in Arizona. All discharges authorized by this general permit shall be consistent with the terms and conditions of this general permit. Permit coverage is required from the "commencement of construction activities" until "final stabilization", as these terms are defined in this permit.

This general permit becomes effective on June 3, 2013.

This general permit and the authorization to discharge expire at midnight, June 2, 2018.

Signed this 29th day of May, 2013.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

A handwritten signature in black ink, appearing to read "M. Fulton", is written over a horizontal line.

Michael A. Fulton, Director
Water Quality Division

What Are Construction Activities?

- Clearing
- Grading
- Excavating

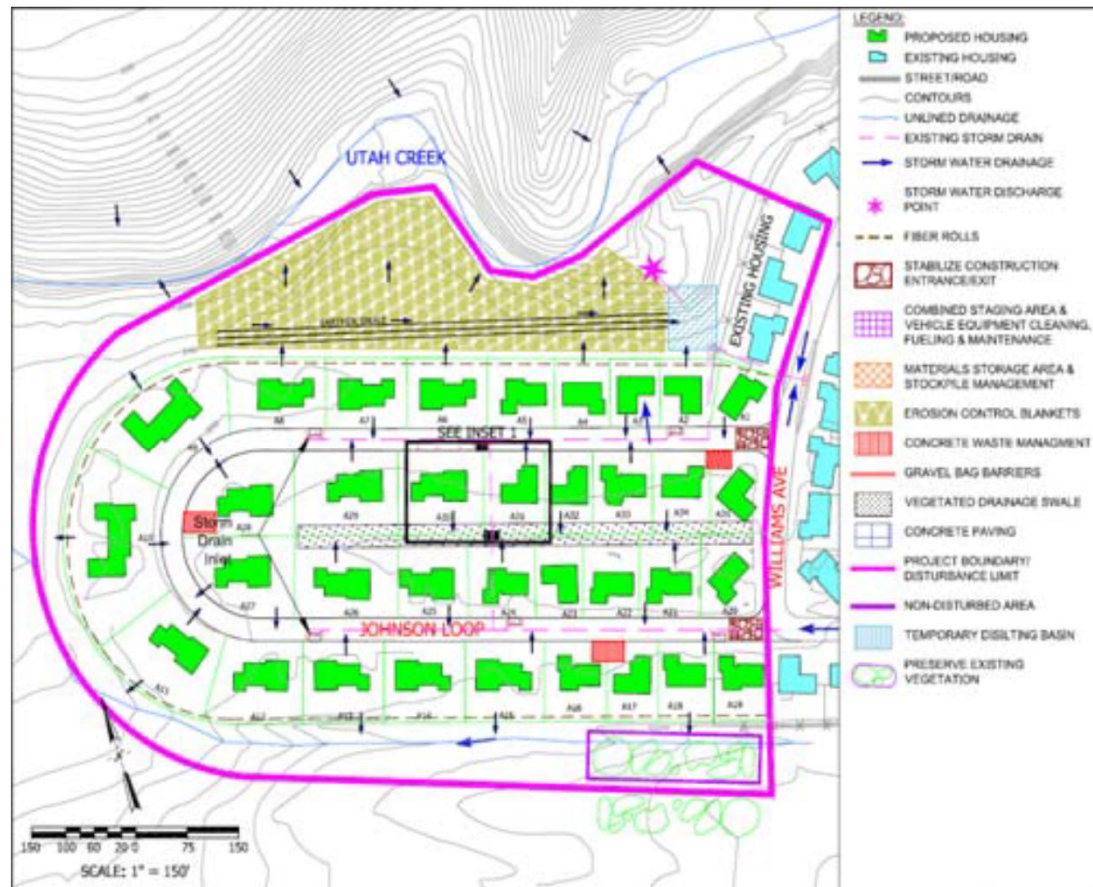


Part 1 of CGP-2013:

- Specifies permit area (Arizona, except Indian Country);
- Permit covers construction activities 1 acre and larger, including off site support activities (such a batch plants, must be exclusive to project), and common plans of development.

Common Plan:

- Includes activities that may be on smaller parcels (i.e., 1 acre) of land but are part of a larger, common plan of development or sale
 - A common plan includes drawings, plans, advertising materials, subdivision plans, etc.
 - A common plan may describe activities that will occur on different schedules



- In addition to authorizing stormwater discharges, CGP-2013 also “allows” certain non-stormwater discharges (Part 1.3(2)).
- Allowable non-stormwater discharges must be managed with control measures, just as with stormwater discharges.

- The permit establishes limits on certain discharges (Part 1.5).
- Operators of sites that are located within $\frac{1}{4}$ mile of an impaired water or Outstanding Arizona Water (OAW) must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP, Part 6) to ADEQ review.
- SWPPP must include monitoring plan or rationale as to why monitoring is not necessary for impaired waters (Part 1.5(3)).

Erosivity Wavier:

Construction activities that meet the following criteria are eligible for a wavier:

1. Must be obtained via the SMART NOI;
2. Less than 5 acres disturbed;
3. Erosivity value less than 5 (calc by SMART NOI);
4. Site cannot be located within 1/4 mile of an impaired water or OAW;
5. Wavier does not extend beyond calculated end date; and
6. Must e-sign wavier form on SMART NOI.

Notice of Intent (NOI):

- ◆ Must be signed by a responsible corporate officer
- ◆ Send copy to the municipality if potential to discharge to municipal separate storm sewer system (MS4)
- ◆ Include applicable fee when submitting the NOI
- ◆ Two ways to file NOI

- “Paper NOI”: fill out and sign and mail or deliver to ADEQ (check or money order):

http://www.azdeq.gov/environ/water/permits/download/construction_noi.pdf

- On-line “SMART NOI” (credit card only):

<https://az.gov/app/smartnoi/>

Who must obtain coverage (Part 2.1):

- Any person that meets the definition of “operator” must submit their own NOI;
- Many sites will have more than one operator;

EPA provided clarification regarding permitting responsibilities in their *NPDES Stormwater Program Question and Answer Document, Volume II* (July 1993) as follows:

Who must apply for permit coverage?

EPA clarified that the operator of a construction activity is the party or parties that either individually or taken together meet the following two criteria: (1) they have operational control over the site specifications (including the ability to make modifications in specifications and (2) they have day-to-day operational control of those activities at the site necessary to ensure compliance with plan requirements and permit conditions (September 9, 1992, Federal Register, p. 41190). If more than one party meets the above criteria, then each party involved must become a co-permittee with any other operators. For example, if the site owner has operational control over site specifications and a general contractor has day-to-day operational control of site activities, then both parties will be co-permittees.

When two or more parties meet the EPA's definition of operator, each operator must submit their own NOI.

Permit coverage begins:

- 7 days after ADEQ receives “paper NOI” (or sooner)
- Immediately if using “SMART NOI” system and using electronic signature

Unless:

- site is within ¼ mile of impaired or Outstanding Arizona Water (OAW), then 30 calendar days (often sooner) while ADEQ reviews SWPPP:
 - Impaired waters – identified as “polluted”
 - Outstanding Arizona Waters – identified as “high quality”

Notice of Termination:

To close out permit coverage, a NOT must be filed, either electronically via SMART NOI or paper form.

Must meet one of the following criteria to submit NOT:

1. Project complete, stabilization established;
2. Another operator has permit coverage;
3. Homeowner has take possession of property;
4. Construction activity never initiated;
5. Coverage obtained under another permit; and
6. Qualifies for alternative stabilization (new, see Part 3.1.2.3).

Change of Operator Request (COR) due to Foreclosure or Bankruptcy (form provided by ADEQ). Must include the following:

1. Date of the loss of control;
2. Person who took control (e.g., bank information);
3. Reason unable to submit NOT;
4. Provide copy of SWPPP to ADEQ (review fee);
5. Condition of site to be documented in SWPPP;
6. Documentation that the new operator was informed;
and
7. Documentation the MS4 was notified.

Effluent Limits: these are the control measures (or BMPs) implemented at the site to reduce pollutants in stormwater and non-stormwater discharges. These are the federal ELG requirements (40 CFR 450.21).

Ongoing projects: projects that obtained coverage under CGP-2008 do not have to comply with the effluent limits in CGP-2013 if it is infeasible.

Erosion and sediment control **Best Management Practices** (BMPs) are used to reduce or minimize sediment (dirt) leaving the site.

- Erosion Control is the **primary** means of preventing stormwater pollution.
- Sediment Control provides a **secondary** line of defense to properly designed and installed erosion controls.



Erosion and Sediment Control Measures:

- Run-on management;
- Sediment basin and traps;
- Preserve natural vegetation;
- Perimeter control (for sites where stormwater is conveyed to a retention basin, the operator is not required to utilize perimeter control, 100yr/2hr event capacity).
- Controls for stockpiles of sediment or soils;
- Inlet protection, as necessary; and
- Maintain 50 ft natural buffer adjacent to river or lake.

Stabilization:

- Temporary – for disturbed areas of the site that will not be worked for 14 or more days. Timeframe for areas within 50 feet of impaired water or OAW is 7 days.
- Final – where construction activities are complete and before NOT is submitted.
- Exception for areas that are intended not to be stabilized...unimproved lots, access roads, utility pole pads, etc.

Stabilization Alternatives (new to CGP-2013):

1. Sites with additional retention capacity:
 - Not within 2.5 miles of perennial water;
 - Stormwater directed to basin(s);
 - Maintain good housekeeping;
 - Maintain basin capacity;
 - Operator determines temp/final stabilization to meet Part 3.2

Stabilization Alternatives (new to CGP-2013):

2. Sites returned to pre-construction discharge conditions:

Must provide demonstration with Notice of Termination that a professional registered with Arizona Board of Technical Registration (BTR) determined that post construction discharges from the site are less than or equal to pre-construction site discharges (in volume and pollutant load).

Pollution Prevention:

1. Implement effective PP control measures to minimize the discharge of pollutants;
2. Minimize discharge of pollutants – concrete washout, equipment and vehicle washing;
3. Washing of applicators and containers;
4. Equipment fueling and maintenance;
5. Construction site egress / trackout; and
6. Good housekeeping measures.

Dewatering Controls for Stormwater and Allowable Non-Stormwater Discharges

- Dewatering must be controlled as necessary to reduce the discharge of pollutants.
- Permit allows dewatering of basins, trenches, excavations, tanks, and other features.

Site Inspections:

1. Routine inspections (weekly, once every 14 calendar days, or once per month);
2. Reduced inspections (if site is stabilized, once per month and before and after a storm event);
3. Inspections for sites located within 1/4 mile of impaired water or OAW (once every 7 days);
4. Inspections for inactive and unstaffed sites (new), once every 6 mos., and 24 hrs after storm event.

Scope of Site Inspections:

- Must be conducted by a qualified person, as defined in the permit, no certification or license is required;
- Inspect control measures,
- Non-structural control effectiveness;
- Areas with temporary stabilization;
- Location where vehicles and equipment enter and exit the site;

Scope of Site Inspections (cont'd):

- Site conditions for evidence, or potential, for pollutants to enter the MS4;
- Site discharge locations for evidence of pollutants;
- Required only during normal business hours;
- Not required during adverse conditions. If inspection is suspended due to adverse conditions, inspection must resume as soon as practicable.

Inspection Report Form:

- Inspections must be documented on a report form, either ADEQ form, or form prepared by operator (must be equivalent to ADEQ form).
- Completed inspection report forms must be kept with the SWPPP (can be electronic format also).



Inspection Follow-up:

- Based on the findings of the inspection, the operator is to implement any changes necessary to meet the effluent limitations in Part 3.
- Determine if Corrective Actions (Part 5) are required.

Corrective Actions:

- Not routine maintenance;
- Actions taken to modify or replace a Control Measures that failed to meet effluent limit requirements (Part 3), including:
 - A necessary CM was never installed (Part 3);
 - A prohibited discharge occurred (Part 1.4);
 - ADEQ or USEPA determines modifications are necessary to meet Part 3 requirements.

Corrective Action Deadlines:

- Complete CA within 7 days.
- If not feasible, document why and establish schedule to complete.

Corrective Action Report:

- CA must be documented in the inspection report form.
- Sites located within 1/4 mile of impaired water or OAW must submit CA report to ADEQ.

What is a SWPPP?

A ***Stormwater Pollution Prevention Plan*** is a detailed plan that:

- Identifies potential sources of sediment and stormwater pollution at the construction site
- Describes practices to reduce pollutant runoff from the site
- Identifies procedures the operator will implement to comply with the terms and conditions of the stormwater permit

SWPPP Components:

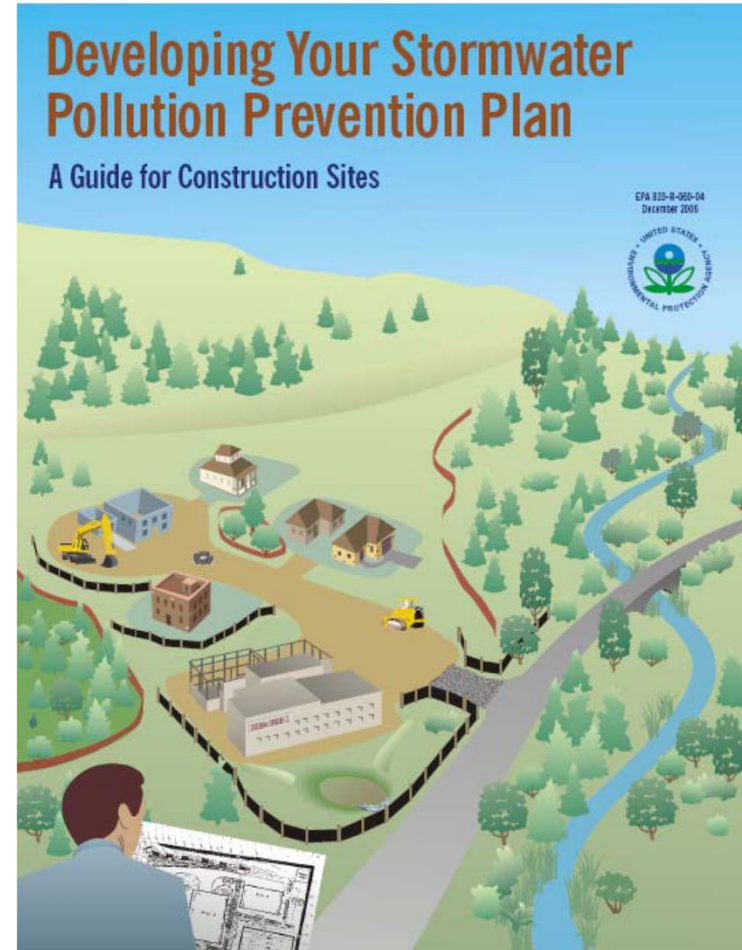
- Operator and stormwater team personnel and operator(s);
- Description of construction activities;
- Estimated dates;
- Site description;
- Site map(s);
- Description of control measures;
- Receiving waters;
- Inspection program;
- Pollution prevention procedures; and
- Monitoring (if required)



This is *not* a SWPPP

Recommended SWPPP Resources:

- Current ADEQ CGP;
- EPA's SWPPP Guidance document;
- ADEQ's SWPPP Checklist.



Other SWPPP Requirements:

SWPPP must be kept on-site while construction activities are underway.

- SWPPP is a “living document” and must be updated as site conditions change.
- SWPPP must include a copy of the permit, NOI, authorization certificate, inspection records, and other relevant information.
- SWPPP must be made available to ADEQ and EPA.

Updates and Modification Requirements:

- Within 7 calendar days whenever:
- Change in design at the construction site;
- ADEQ or USEPA determine there is or was an exceedance of a water quality standard;
- Change in stormwater team;
- See permit (Part 6.5) for additional requirements.

Monitoring:

- If the construction site is located within 1/4 mile of an impaired water or OAW (SWPPP submitted to ADEQ for review, Parts 1.5(3) and (4)), or
- If otherwise notified by ADEQ.

Exception to Monitoring:

- Operators of construction sites that are located within 1/4 of an impaired water can provide a justification as to why monitoring is not necessary (typically because the construction activity is not expected to be an additional source of the pollutant), Part 7.1.
- Must be included in SWPPP submitted to ADEQ for evaluation and approval.

What to Monitor:

- Impaired waters – sample for the pollutant(s) the water is listed.
- OAW – sample for turbidity and pollutants known to be present at the site (e.g., oil and grease, metals, etc.).

Include Sampling and Analysis Plan in the SWPPP (Part 7.3(5)):

- Locations,
- Monitoring team,
- Map showing receiving waters,
- Analytical parameters and methods,
- Sampling protocols, and
- Identification of pollutants and sources.

Monitoring Requirements:

- Sample 2x per wet season (summer/winter);
- Sample at locations observed or suspected of containing highest concentration of pollutant(s);

Number of Locations	Number of Samples
1 to 4	1
5 to 19	2
20 or more	10% of total

Where to Collect Samples:

- Collect samples from where the discharge leaves the site;
- If the site discharges directly to an impaired water or OAW, sample turbidity upstream and downstream of the discharge location and compare results;
- For lakes, submit a site-specific proposal.

Effective July 1, 2011 AZPDES permits are subject to fees.

- Less than or equal to 1 acre = \$250*
- 1 acre to 50 acres = \$350*
- Greater than 50 acres = \$500*
- Waiver = \$750
- SWPPP review = \$1,000

* Billed annually until NOT is submitted



Construction Site Stormwater



Questions?





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