



Compliance and Enforcement for the Stormwater Program

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Pre-Inspection

- Before the inspection, the inspector will:
 - Verify the information provided on the NOI
 - Review the Discharge Monitoring Reports
 - Determine whether any Sector Specific Requirements or if TMDL applies
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Physical Inspection

- At the beginning of every inspection, the inspector will:
 - Present photo ID and explain purpose of the inspection
 - Review the Notice of Inspection Rights with the responsible party (RP) (A.R.S. § 49-1009)
 - Provide written notice of inspection rights and present for signature by the on site representative
 - Provide the opportunity for an authorized individual to accompany them on the inspection
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Steps of the Inspection

- Interview with the facility
 - Discuss facility operations
 - Review any potential discrepancies identified in pre-inspection file review
 - Physical observation of site
 - Inspect site for implementation of BMPs
 - Look for evidence of unauthorized discharges
 - Record review
 - SWPPP
 - Inspections
 - Exit Debriefing
 - Discuss findings of the inspection
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After the Inspection

- Inspection report will be provided to the facility within 30 working days from the inspection
 - The report will document the inspector's findings
 - Identify whether potential deficiencies exist
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Types of Enforcement Actions

- The majority of violations are resolved using informal notices
 - Notice of Opportunity to Correct Deficiencies
 - Notice of Violation
 - Formal Actions/ Administrative Orders are used to address imminent threats or to address violations that may take longer than allowed under a formal action
 - Consent Order
 - Compliance Orders
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Notice of Opportunity to Correct Deficiencies

- Informal compliance assurance tool
 - Non-significant violations
 - Opportunity to resolve deficiencies within prescribed time
 - If deficiencies are corrected – no enforcement
 - ADEQ may allow up to 180 days to correct the violation
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Notice of Violation

- Informal compliance assurance tool
 - Significant violations
 - Opportunity to meet to demonstrate no violation occurred or correct Reservation of rights to seek penalty
 - ADEQ may allow up to 120 days to correct the violation
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Bilateral/ Consent Orders

- Issued after negotiation with RP
 - Facility can provide input into the compliance schedule
 - Consent Orders are not appealable agency actions because the facility agrees to the Order.
 - Consent Orders are the preferred formal action.
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Unilateral Order/ Compliance Order

- Are typically issued without input from RP
 - May be issued when ADEQ is unsuccessful in negotiating Consent Order
 - Appealable agency action
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Civil Penalties

- In instances where penalty non-compliance exists ADEQ may seek penalties
 - Up to \$25,000 per day per violation
 - Can seek injunctive relief to resolve violations
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Additional compliance information

- Compliance and Enforcement Handbook

<http://www.azdeq.gov/function/forms/download/handbook/fullhandbookw.pdf>

- Inspections and Enforcement

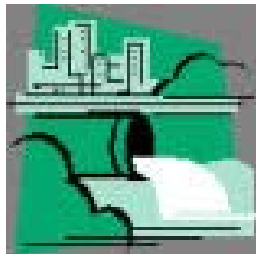
<http://www.azdeq.gov/environ/water/compliance/ic.html>

- Water Quality Compliance Section

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MSGP 2010: Industrial Stormwater Control Measures

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STORM – MSGP Seminar
Phoenix, June 10, 2013

Control Measures – Part 2.1

1. Minimize exposure
2. Good housekeeping
3. Preventive maintenance
4. Employee training
5. Spill prevention and response
6. Sediment & erosion controls
7. Management of runoff & SW diversions
8. Salt storage piles or piles containing salt
9. Sector specific control measures
10. Non-stormwater discharges
11. Other controls to minimize or stop off-site discharges
12. Waste, garbage, floatable debris



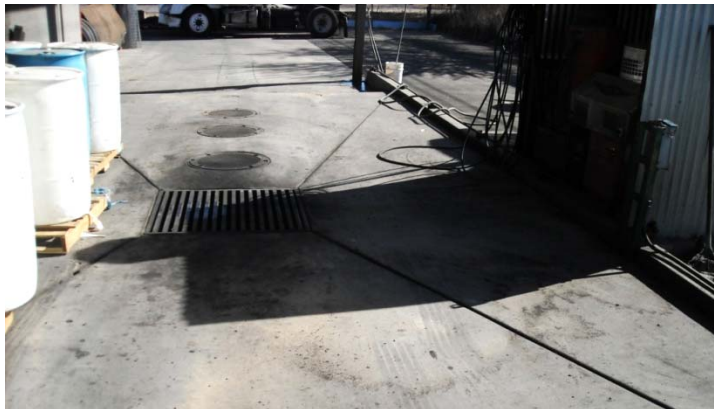
Control Measures

Actions or devices used to prevent or reduce water pollution

- ▶ More effective when used in combination rather than isolation.
- ▶ Preventing stormwater from contacting polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater.

■ Actions

- ❑ Processes, procedures
- ❑ Schedules of activities
- ❑ Prohibitions on practices
- ❑ Policies that minimize the disturbance of soil
- ❑ Other management practices



■ Devices - structural or installed

- ❑ Diversion structures
- ❑ Treatment interceptors
- ❑ Attenuate flow to reduce erosion
- ❑ Increase infiltration onsite (ponds, grass/ bioswales)
- ❑ Minimize impervious areas
- ❑ Reduce connection of impervious area to receiving waters
- ❑ Conserve/ restore riparian buffers

Minimize exposure



- Minimize the exposure of manufacturing, processing, and material storage areas (loading and unloading, storage, disposal, cleaning, maintenance, & fueling operations) to rain, snow, snowmelt, and runoff
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Good Housekeeping

- Implement good housekeeping measures for all exposed areas that are potential sources of pollutants. Such measures may include:
 - Sweeping at regular intervals;
 - Keeping materials orderly and labeled;
 - Storing materials in appropriate containers;
 - Cleaning up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
 - Using drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible.
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Improper Housekeeping

- Trash storage
- Battery storage
- Exposure of material storage areas to rain, etc.



- ✘ No minimized exposure
- ✘ No spill prevention/ response
- ✘ No housekeeping
- ✘ No employee training
- ✘ No management of runoff
- ✘ No sector specific control measures
- ✘ Waste, garbage, floatable debris



Good Housekeeping



Waste oil palletized, sheltered



Proper clean up and disposal of spills



Batteries palletized, sheltered



Proper disposal of trash

Maintenance

- Regularly inspect, test, maintain, and repair all industrial equipment and systems that have the potential for exposure to stormwater to avoid situations that may result in leaks, spills, and other releases of pollutants to stormwater discharged from the site.
 - Maintain all control measures and equipment in effective operating condition.
 - Non-structural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained).
 - If control measures are not achieving the intended effect of minimizing pollutant discharges (i.e., control measures need repair or replacement), make any necessary changes within 14 calendar days following discovery, or before the next measurable storm event (see Part 6.1.2.2), whichever is sooner.
 - If necessary changes cannot be implemented within the specified timeframe(s), document in the SWPPP:
 - The reasons for the delay;
 - A schedule for completing the necessary changes;
 - Date completed; and
 - Any back-up control measures in place.
 - ... to ensure compliance with the applicable numeric effluent limitations in Part 2.2.1 and water quality-based limitations in Parts 2.2.2 and 2.2.3 of this permit should a runoff event occur while a control measure is off-line (either in part or in whole).
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Spill Prevention and Response Procedures

Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for timely and effective clean-up of spills if or when they occur by implementing measures such as:

- Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) susceptible to spillage or leakage
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases; train staff on proper reporting procedures established by their facility
- Employees who are responsible for spill response and/or cleanup, must be properly trained and have necessary spill response equipment available
- Procedures for notification of appropriate facility personnel and emergency response

For complete details on spills, response and reporting, see Part 2.1.1.4

For more on employee training, see Part 2.1.1.9

Spill Prevention and Response Procedures



Erosion and Sediment Controls

- Minimize on-site erosion and sedimentation, and the resulting discharge of pollutants by using methods such as:
 - Stabilizing exposed areas;
 - Containing runoff using structural and/or non-structural control measures;
 - Placing flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants.



Management of Runoff



Reduce stormwater runoff to minimize the discharge of pollutants from the facility by implementing control measures such as:

- ❑ Diverting, infiltrating, reusing, containing runoff, or
- ❑ Treating and/or recycling stormwater runoff collected.

Management of Runoff, cont'd



Salt Storage Piles or Piles Containing Salt

- Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces.
- Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.
- Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another AZPDES permit.



Sector Specific Control Measures

Industrial Sectors Covered by MSGP

- Timber Products
- Asphalt Paving & Roofing
- Mining / Oil & Gas
- Landfills & Hazardous Waste Disposal
- Electronic, Electrical & Optical Goods
- Furniture, Rubber & Fabricated Metal
- Plastic Products
- Textile Mills & Other Fabric Products
- Leather Tanning
- Air, Land & Water Transportation
- Treatment Works
- Printing & Publishing
- Food & Kindred Products
- Automobile, Scrap & Battery Recycling
- Paper Manufacturing
- Chemical Manufacturing
- Steam Electric Plants
- Other facilities designated by the Director that need coverage

Sector P – Vehicle Maintenance Facilities

- ❑ Drainage Site Map
 - ❑ Potential Pollutant Sources
 - ❑ Good Housekeeping Measures
 - ❑ Vehicle and Equipment Storage Areas
 - ❑ Fueling Areas
 - ❑ Material Storage Areas
 - ❑ Vehicle and Equipment Cleaning and Maintenance Areas
 - ❑ Locomotive Sanding (Loading Sand for Traction) Areas
 - ❑ Vehicle and Equipment Washwater Requirements
 - ❑ Inspections
 - ❑ Employee Training
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Sector S – Air Transportation

- Specialized control measures related to:
 - ❑ Management of runoff;
 - ❑ Source reduction;
 - ❑ Material storage areas;
 - ❑ Airport fuel system and fueling areas;
 - ❑ Airport & aircraft deicing/anti-icing;
 - ❑ Aircraft, ground vehicle and equipment cleaning, maintenance and storage areas





Storage area control measures



Preferred 02/17/2005



Not preferred 02/17/2005



Sector L – Landfills

- Preventive maintenance program
 - all elements of leachate collection and treatment systems to prevent commingling of leachate with stormwater
 - the integrity and effectiveness of any intermediate or final cover
 - Erosion and sedimentation control – provide temporary stabilization:
 - materials stockpiled for daily, intermediate, and final cover
 - inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established
 - Unauthorized discharge test certification
 - Inspections:
 - Active sites – inspect once per month
 - Sites within ¼ mile of an impaired or outstanding Arizona waters – Conduct twice per month, perform visual assessment at each measureable storm event
 - Inactive sites – at least quarterly
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Sector M – Automobile Salvage Yards

- Spill and Leak Prevention Procedures
 - Drain vehicles of fluids to prevent spills and leaks
- Employee Training
 - Train employees in proper handling (collection, storage, and disposal) of oil, used mineral spirits, antifreeze, mercury switches, and solvents
- Management of Runoff – install controls, such as:
 - Berms or drainage ditches on the property line (prevent run-on/ runoff);
 - Berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage;
 - Detention ponds; and
 - Filtering devices and oil / water separators.



Employee Training

- Employees who may cause or detect a spill or leak should be knowledgeable in the proper reporting procedures established by their facility. Employees who are responsible for spill response and/or cleanup, must be properly trained and have necessary spill response equipment available
 - Train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the facility's stormwater pollution prevention team (see Part 5.1.1). Training must cover both the specific control measures used to achieve the requirements in Part 2.2 and (for those who will be involved in these activities) the monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Conduct training at least annually (or more often if circumstances warrant, such as high employee turnover).
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Non-Stormwater Discharges

- The permittee shall not allow any non-stormwater discharges from the facility unless they are specifically authorized in Part 1.1.3
- Discharges from emergency fire-fighting activities are an allowable non-stormwater discharge activity without regard to the receiving water
- The following non-stormwater discharges are allowed under this permit provided they are ancillary to the permitted use:


(*next slide*)

Allowable Non-Stormwater Discharges

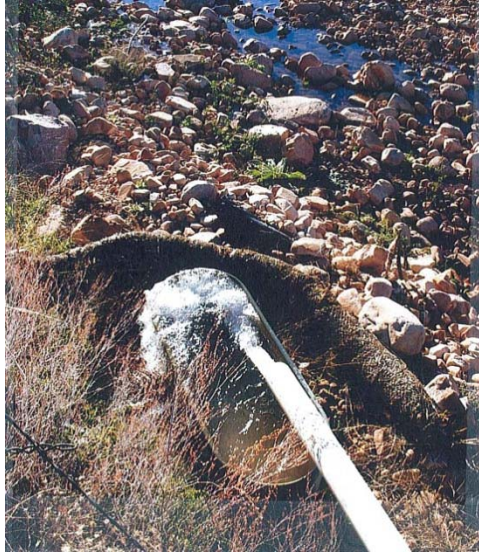
- Fire fighting system testing / maintenance, incl. hydrant flushings
- Uncontaminated condensate from air conditioners, evaporative cooler water
- Irrigation drainage and line flushing
- Potable water supply systems & drinking water wells (installation, maintenance, disinfection, flushing)
- Landscape watering
- Pavement wash waters
- Routine external building washdown
- Dust control (excluding reclaimed water)
- Uncontaminated groundwater or spring water
- Foundation or footing drains
- Hydrostatic testing of new pipes, etc.
- Cooling tower mist (windblown)
- Discharges of water associated with drilling
- Non-stormwater discharges subject to an ELG



DeMinimis discharges

- Control measures are not specifically named for De-Minimis discharges, but are required; see Appendix B.4:
 - Duty to Mitigate. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)] The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
 - See also Appendix B.7:
 - Property Rights. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)] This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of federal, state, Indian tribe, or local laws or regulations.
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DeMinimis discharges, control measures



Chuck M. Dickens



Tucson Water



Errol L. Montgomery & Associates, Inc.



Southwest Ground-water Consultants Inc.

Litter, Garbage and Floatable Debris



- Ensure that litter, garbage, and floatable debris are not discharged to surface waters
- Keep exposed areas free of such materials or intercept them before they leave the site

Dust Generation and Vehicle Tracking of Industrial Materials

- Minimize generation of dust and off-site tracking of raw, final, or waste materials



Dust Generation and Vehicle Tracking of Industrial Materials



Control the discharge as necessary to not cause or contribute to an exceedance of applicable water quality standards (Part 2.2.2)

- Throughout the permit term, adjust your control measures to respond to any unanticipated storm event or deficiency. In this way, operators may improve upon the initial selection, design, installation, or implementation of control measures to further ensure that the discharges are controlled as necessary to meet applicable water quality standards. Activities that may alert an operator to the need to amend or repair control measures:
 - Routine facility inspections (Part 4.1);
 - Visual assessments (Part 4.2);
 - Comprehensive facility inspections (Part 4.3), including annual reports summarizing the inspections (Part 7.2);
 - Required monitoring for benchmarks, effluent limitations guidelines, specific State or impaired waters; or
 - Information provided to ADEQ or the operator by the public (including State or local authorities) that suggests the control measures are not stringent enough to meet water quality stds.
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A list of common MSGP compliance issues

1. Non-filers (many are unaware of the need to file)
 2. Non-existent SWPPP
 3. SWPPP is too general
 4. 'No Exposure' certification not submitted
 5. Required monitoring and sampling not performed
 6. Copy of permit not included in SWPPP
 7. Good housekeeping not performed throughout facility
 8. BMPs not maintained in effective operating condition
 9. Annual training requirement not completed
 10. Mistaken belief that constructing stormwater retention & diversion facilities negates the need for a permit
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More information from ADEQ

- ADEQ website: www.azdeq.gov
 - Industrial stormwater general permit:
www.azdeq.gov/environ/water/permits/msgp.html
 - Operators are responsible for determining their facility's SIC codes:
 - [*Handbook of Standard Industrial Classifications*](#), Office of Management and Budget, 1987
 - http://www.osha.gov/pls/imis/sic_manual.html
 - Appendix C, Non-mining MSGP
 - Stormwater Webpage:
www.azdeq.gov/environ/water/permits/stormwater.html
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Additional resources – control measures

When selecting, designing, installing, and implementing appropriate control measures, consult EPA's internet-based resources relating to runoff management:

- The sector-specific Industrial Stormwater Fact Sheet Series: www.epa.gov/npdes/stormwater/msgp;
 - National Menu of Stormwater BMPs: www.epa.gov/npdes/stormwater/menuofbmps; and
 - National Management Measures to Control Nonpoint Source Pollution from Urban Areas: www.epa.gov/owow/nps/urbanmm/index.html.
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Additional resources – MSGP fact sheets

- Mining and Non mining Fact Sheets
 - Describes the permitting requirements of the MSGP 2010 for stormwater discharges associated with industrial activity from all non-mining sectors
 - Describes in detail the rationale for significant changes from the MSGP 2000 and ADEQ's rationale for deviations from EPA's 2008 MSGP
 - Table 1, Section III of the Fact Sheet shows the sectors covered by the permit. Appendix C of the permit presents more specific information about each non-mining sector covered by the permit
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Additional references – other water quality permitting programs

Water Quality Permitting Webpage:

<http://www.azdeq.gov/environ/water/permits/index.html>

APP Webpage:

<http://www.azdeq.gov/environ/water/permits/app.html>

Drywell Program Webpage:

<http://www.azdeq.gov/environ/water/permits/drywell.html>

Drywell Forms & Publications:

<http://www.azdeq.gov/function/forms/appswater.html#drywell>
