

### Exhibit 17: Facility Non Storm Water Discharge Activities

Facility Name	Facility Type	Facility Site Number	District	Facility Address	Outfalls Latitude/Longitude	Non-storm Water Discharge Activities Conducted at Facility
Grand Canyon Airport	Aeronautics		Flagstaff	Hwy 64, Grand Canyon	35: 57: 25N/112: 08: 03 W	1, 3, 7, 10, 14, 17, 19
Mesa Constr. Yard	Construction	111500	Phoenix	2409 N. Country Club Dr.	33:28:28.848N/111:50:21.476W	No Discharges
Salt River Constr. Office	Construction	111600	Phoenix	2409 N. Country Club Dr.	33:28:28.848N/111:50:21.476W	No Discharges
Equipment Services Prep. & Auction	Equipment Services	390500	Phoenix	2350 S. 22nd Ave.	33:25:34.752N/112:06:23.130W	9, 19
Equipment Services	Equipment Services	380300	Phoenix	2225 S. 22nd Ave.	33:25:39.990N/112:06:22.248W	7, 9, 19 Does not leave the Property
Gen. Ops./Contracts & Specs. Bldg.	Headquarters	380400	Phoenix	1655 W. Jackson St.	33:26:42N/112:02:47W	9
Agua Fria Landscape Yard	Maintenance	111800	Phoenix	1702 N. 10th Street, Avondale	33:26:59.485N/112:20:13.103W	19
Broadway Hwy. Maint.	Maintenance	112200	Phoenix	2540 W. Broadway Rd.	33:24:24.581N/112:06:40.468W	6, 7, 8, 9, 13, 15, 19, 20, 21, 27
Broadway Landscape/Maint./Const.	Maintenance	112400	Phoenix	2600 W. Broadway Rd.	33:24:24.581N/112:06:40.468W	6, 7, 8, 9, 13, 19, 20
Douglas Maint. Yard	Maintenance	123500	Safford	2100 'A' Avenue	31D 21' 23.824N/109D 32' 46.529W	4, 6, 7, 9, 13, 14, 16, 19, 21
Durango Maint. Yard	Maintenance	111200	Phoenix	2209 W. Durango St.	33:25:34.752N/112:06:23.130W	7, 9, 19
Flagstaff Maint. Yard	Maintenance	141100	Flagstaff	5701 Railhead Ave.	35D 13.592'N/111D 34.088'W 35D 13.471'N/111D 33.956'W 35D 13.451'N/111D 33.994'W 35D 13.455'N/111D 34.023'W	8, 9
Mesa Maint. Yard	Maintenance	111700	Phoenix	1540 S. Recker Rd.	33: 23: 9.366 N/ 111: 42: 7.920 W	9
Nogales Maint. Yard	Maintenance	124500	Tucson	1340 N. Hohokam Dr.	31D 21' 23.432N/110D 55' 34.799W 31D 21' 22.557N/110D 55' 43.921W 31D 21' 23.223N/110D 55" 41.900W	9, 13, 16, 21
Nogales Maintenance Storage Yard	Maintenance	121400	Tucson	240 N. Perkins	31D 20' 56.113/110D 55' 35.655W	21
North Phoenix Maint. Yard	Maintenance	720000	Phoenix	24251 N. 7th Ave.	33: 42: 22.273 N/ 112: 04:56.525 W	9
Prescott Valley Maint. Yard	Maintenance	731000	Prescott	SR 69/MP 288.7(Glassford Hill Dr.)	34: 34: 53.504 N/112: 20: 33.025 W	9, 19
Superior Maint. Yard	Maintenance	122400	Globe	US 60/MP 226	33 D 17' 14.190N/111 D 06' 40.374W	5, 6, 9, 19
Traffic Signal Signs & Striping Yard (Sign Factory)	Maintenance	110200	Phoenix	2104 S 22nd Ave.	33:25:44N/112:06:23W	8, 9

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Tucson Operations Yard	Maintenance	121000	Tucson	1444 W. Grant Rd.	32: 15: 1 N/ 110: 59: 43 W 32 15' 08.653 N. 110 59' 49, 642W 32 15' 14. 887 N. 110 59' 54, 735 W. 32 15' 16. 095 N. 110 59' 55, 615 W. 32 15' 20, 669 N. 110 59' 58, 934 W. 32 15' 26, 983 N. 111 00' 10, 537 W.	9, 13, 15, 16, 21
Wickenburg Maint. Yard	Maintenance	131400	Prescott	US 60/MP 111.3	33:58:17N/112:43:20W	6, 9, 19, 21, 25
Yuma HDQ. Maint. Yard	Maintenance	133100	Yuma	2100 E. Gila Ridge Rd.	32: 41: 28.907N/ 114:35:55.770 W	1, 6, 9, 11, 13, 14, 19, 20, 21, 25, 26, 27, 29, 30
Yuma Maint. Yard	Maintenance	133X00	Yuma	2243 Gila Ridge Rd.	32 42.281N/114 37.347W 32 42.317N/114 37.369W 32 42.301N/114 37.381W 32 42.313N/114 37.385W 32 42.295N/114 37.382W 32 42.307N/ 114 37.370W 32 42.309N/114 37.367W 32 42.291N/114 37.348W	1, 9
Bisbee storage yard	Maintenance			SR 80/MP 344	31D 25' 39.157N/109D 53' 19.831W	13, 14, 16, 19, 21
Statewide striping facility	Maintenance		Phoenix	3836 W. Buckeye	33: 26: 12.854 N / 112: 08: 28.691W	No Discharges
Superior storage yard	Maintenance		Globe	950 Main St.	33 D 17' 16.911N/111D 06' 43.384W	5, 6, 9, 19
Nogales MVD	MVD	527800	Tucson	3030 N. Grande Ave.	31D 23' 13.500N/110D 56' 58.348W 31D 23' 11.347N/110D 56' 57.012N	No Discharges
Superior MVD	MVD		Globe	60 E. Main St.	33 D 17' 38.217N/111 D 05' 42.873W	No Discharges
Landscape Mntc	Maintenance	380900	Phoenix	1600 Grand Ave.	33: 27: 37 N / 112: 5: 35 W	1, 3, 6, 7, 9
Douglas Port of Entry	Port of Entry	527300	Safford	SR 80/MP 370.5	31 23.021N/109 31.011W 31 23.021N/109 31.011W	1, 3, 6, 7, 9
Nogales Port of Entry	Port of Entry	527400	Tucson	210 N. Mariposa Rd. (NAFTA)	31: 20: 6 N/ 110: 58: 3 W	1, 3, 6, 7, 9
Springerville Port of Entry & MVD	Port of Entry	548400	Globe	US 60/MP 386.3	34D 08' 57.011N/109D 17' 45.858W 34D 08' 56.059N/109D 17' 43.950W 34D 08' 53.790N/109D 17' 41.840W 34D 08' 50.357N/109D 17' 41.748W	1, 3, 6, 7, 9
Yuma Port of Entry	Port of Entry	538000	Yuma	I-8/MP 2	32 42.815N/114 36.725W 32 42.803N/114 36.725W 32 42.585N/114 37.489W	1, 3, 6, 7, 9

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### Non-Storm Water Discharges

Typical non-storm water discharges attributable to ADOT facilities were compiled and submitted to ADEQ as part of an agencywide list of ADOT De Minimus discharges in July 2004. The following section provides more details on each of these activities.

### Facilities

- 1. Discharges related to installation and maintenance of potable water supply systems.** These discharges include discharges of hypo-chlorinated water when disinfecting a water system or cleaning tanks, tank and standpipe overflows, and discharges from line breaks. Chlorine is the only pollutant of concern when performing disinfection activities.
- 2. Well development and maintenance and/or aquifer testing.** Similar to the construction non-storm water discharges, this activity involves the use of potable or nonpotable water, which may be enhanced with bentonite or polymer drilling fluids to aid in drilling of rock and/or hard soils. The water is generally transported to the site in a water truck, and a recirculation system is set up to minimize the amounts needed. Quantities are very small, usually on the order of hundreds of gallons, and are contained near the drilling areas either within the recirculation system (and placed back in the truck) or within pits next to the drill holes. The most likely pollutants are the soils mixed with the fluids and, if used, the bentonite or polymer drilling fluid (usually biodegradable). Rehabilitation of existing potable water wells may involve test-pumping or flushing the system and discharge of potable water.
- 3. Discharges from hydrostatic testing of potable water systems, reclaimed water systems, or sewage systems.** Standard testing of new lines includes pressurizing the systems to confirm integrity. These are one-time activities with minimal amounts of water. Pollutants would be dependent on the source water used.
- 4. Water line breaks, nonpotable.** Nonpotable water lines are used for vegetation irrigation or dust control. Potential pollutants would be dependent on the source water and may include mobilization of sediment.
- 5. Subterranean dewatering and collection and discharge of uncontaminated storm water collected in the hazardous material containments, scale pits, and communication manholes.** Uncontaminated ground water and storm water is collected in underground structures and above-ground concrete containments. Typical of the above-ground containments are leaking truck hazardous material concrete-lined containment units and the pits located under the scales at the ports-of-entry. Communication manholes, footer drains, etc., collect both surface and ground water at facilities. All of these structures must be dewatered to maintain their utility. Typically, they are pumped out and discharged on-site, where discharges are subject to evaporation and absorption. Scale pits and leaking truck containments are tested prior to discharge for residual contaminants from previous use prior to discharge. ADOT is investigating use of bioretention areas as an on-site BMP to retain these discharges on-site.
- 6. Discharge of landscape and lawn irrigation water.** Landscape and lawn irrigation water is used at all administrative buildings. Water may be potable, nonpotable, or reclaimed. Potential pollutants are dependent on the source water used.

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7. **Pavement wash water.** Similar to wash water used at rest areas (see maintenance non–storm water discharges); ports-of-entry and administrative buildings also use water to wash sidewalks and public areas. Pollutants may include solid waste, sediment, and bacteria.
8. **Building sprinkler system flush water.** Building sprinkler systems are cleaned and tested by flushing the systems. Small amounts of potable water are discharged on a one-time basis. Water is absorbed on-site or evaporated.
9. **Evaporative cooler discharge water and air conditioning condensate water.** ADOT facilities of all kinds use evaporative coolers and air conditioning, which both produce water when used. Water is usually potable water, and any contaminants would come from the cooling system. Quantities are not large, but use is continuous during hot weather. Evaporative cooler water may be recycled as landscape water.
10. **Individual residential car washing (ADOT-owned residences).** Several remote facilities have associated ADOT-owned residential communities. Residents are allowed to wash personal vehicles in these communities. Potential pollutants include soaps, oil and greases, and sediments.

### Maintenance

11. **Flushing of culverts, storm drains, and ditches during routine maintenance.** Potable water (high pressure hose) is used to assist in clean-out of culverts, storm drains, and ditches if there is a blockage not accessible by conventional means. This method is also used to test new work to see whether everything flows properly. This method would flush out most debris in the culvert to the culvert opening. Where a hydro-vacuum truck or services are available, the vacuum truck would capture all the discharge and debris accumulated at the opening. Other remote or rural jurisdictions do not have access to a hydro-vacuum truck but may hand-remove large debris at the opening. Potential pollutants include sediment and debris.
12. **Discharges of water associated with drilling, rehabilitation, and maintenance of potable or nonpotable water wells and pumping systems.** See Facilities—Non–Storm Water Discharges: Well Development and Maintenance and/or Aquifer Testing.
13. **Dust control water on power brooms and mobile street sweepers.** ADOT uses both spray bar–equipped power brooms that do not collect the water and spray bar–equipped vacuum sweepers that do collect all debris and water. Potable water is used in all brooms and sweepers. Sweepers hold approximately 285 gallons while brooms hold 100–150 gallons. Although most water from the power brooms will evaporate, there is the potential that small amounts of water and sediment could reach storm drains.
14. **Water for compaction of earth and aggregate base course for routine maintenance of dirt roads and shoulders.** Typically, this involves the application of potable or nonpotable water as a lubricant to natural materials, or processed aggregate materials, to facilitate the compaction process of these materials. The water is usually applied in limited quantities to the materials with a moving spray truck to sufficiently be absorbed to near optimal conditions to achieve maximum compaction with minimum effort. Runoff is unlikely, or

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minimal. Potential pollutants would be possible fine particles from the applied earthen material, or aggregate base materials, and could be from the water source.

- 15. Herbicide additions to roadsides and highway structures to control vegetation and invasive species. Herbicide applications to drainage channels for vegetation control. Pesticide additions to impoundments and drainage channels to control mosquitoes (West Nile Virus).** ADOT applies only EPA-labeled and registered herbicides and aquatic pesticides to control vegetation and mosquitoes. Herbicides are applied only by licensed applicators in accordance with standard ADOT environmental requirements and mitigation measures (see *MS4 Permit No. AZS000018 Storm Water Management Plan Annual Report*, September 2004). Application is restricted in environmentally sensitive areas. Potential pollutants are dependent on the mixture used.
- 16. Deicing and anti-icing agents applied to roadways.** ADOT uses both abrasive and chemical deicing and anti-icing agents. IceSlicer is a proprietary product that is saltlike and is the most widely used chemical. Magnesium chloride and calcium magnesium acetate (CMA) are used on bridges throughout the state. The ADOT Winter Storm Management program has been subject to environmental assessment since 1992. The most recent environmental assessment (2004) identifies best management practices that will be adopted as an addition to the PeCoS system. Potential pollutants include cinders, sediment, IceSlicer, CMA, and magnesium chloride.
- 17. Gray water systems (reclaimed water) used to water landscaping.** Gray water collected from facility domestic use (sinks, showers, etc.) is used to water on-site landscaping. Off-site migration is minimal due to absorption and evaporation. Potential pollutants include soaps and sediment.
- 18. Wash water from the following activities:**
  - a. **Tunnel maintenance**—Solutions used to remove dirt and grime from tunnel walls are washed into the tunnel drainage systems. Potential pollutants include sediment, solvents, oils, and greases.
  - b. **Rest area maintenance**—Water is used to clean restroom buildings and some outdoor facilities. Potential contaminants include oils, greases, solid waste, and bacteria.
  - c. **Interstate sign washing**—Very small amounts of water (5 gallons or less) are used in combination with biodegradable soaps in a pressure washer to wash dirt and grime from signs. Potential pollutants include sediment and solid waste. Migration outside of the right-of-way is minimal due to rapid absorption and evaporation of water.
- 19. Equipment washing within maintenance yards.** Equipment may be washed in a variety of sites from fully contained truck washes to impromptu hosing down on graveled parking areas. ADOT is assessing this activity at all maintenance yards and has determined that structural retrofits and washing policy modifications are appropriate at several sites. Orders have been placed for seven new fully contained truck wash facilities that will be installed in 2005. Potential pollutants include soaps, oil and grease, metals, and sediment.
- 20. Irrigation line flushing.** This is a routine maintenance activity to clear vegetation irrigation lines located either at vegetation establishment areas or facility landscaping. The amount of water discharges is small and on a one-time basis. Pollutants would be typical of the source water, either potable or nonpotable.

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21. **Stockpile runoff.** Stockpiles are located at many locations throughout the ADOT roadway system and at maintenance facilities. Stockpiled materials consist of sand, gravel, cinders, road salts, and milled asphalt. Stockpiles may be temporary until used in a construction or maintenance project or semipermanent (new material continually supplied). Potential pollutants include sediment and salt.
22. **Salt River Project overflow (unused) water directed into ADOT drainage channels and irrigation tail water discharged to ADOT drainage channels or impoundments.** Both of these discharges can be large-quantity discharges. Typically, they occur within urbanized areas (MS4s). In the case of overflow water, pollutants would be typical of the source water and may include salts and sediments. Irrigation tail water also includes soil amendments and, potentially, pesticides and herbicides.

### Construction

23. **Drill water discharges from geotechnical drilling and coring during design.** Typically, this involves the use of potable or nonpotable water, which may be enhanced with bentonite or polymer drilling fluids to aid in drilling of rock and/or hard soils. The water is generally transported to the site in a water truck, and a recirculation system is set up to minimize the amounts needed. Quantities are very small, usually on the order of hundreds of gallons, and are contained near the drilling areas within the recirculation system (and placed back in the truck) or within pits next to the drill holes. The most likely pollutants are the soils mixed with the fluids and, if used, the bentonite or polymer drilling fluid, which is usually biodegradable.
24. **The discharge of dewatering activities during construction, including ground water from excavations and/or drilling fluids from foundation shafts.** Typically, this occurs during bridge construction over an ephemeral wash where ground water is near the surface. The ground water is usually pumped at a sufficient rate to keep the excavation dry, or in the case of shaft drilling, it is lifted with the removed soil materials and placed on the ground. Quantities for these activities will vary at each site but, in general, they are minimal, especially for shaft construction (the actual shaft is rarely, if ever, dewatered). The most likely pollutants are the soils and, if used, the enhancements used for the drilling fluids for the shafts (see previous bullet).
25. **Application of dust control measures for haul roads and earthwork sites.** Typically, this involves the application of potable or nonpotable water, which may include dust palliatives to control airborne dust at construction sites. The water is usually applied with a spray truck in limited quantities, just sufficient to wet the surface of the road, or fill. Runoff is unlikely due to adsorption and/or evaporation. Potential pollutants would be from the water source (reclaimed water) and from dust palliatives (magnesium chloride, lignites, etc.)
26. **Water for compaction of earth and aggregate base course.** Typically, this involves the application of potable or nonpotable water as a lubricant to natural materials or processed aggregate materials to facilitate the compaction process of these materials. The water is usually applied to the materials, in limited quantities, by a moving spray truck to sufficiently be absorbed to near optimal conditions to achieve maximum compaction with minimum

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effort. Runoff is unlikely or minimal. Potential pollutants would be from the water source, fine particles from the applied earthen material, or aggregate base materials.

- 27. Steel-wheel roller water discharges.** This water is used in steel-wheel rollers as ballast and as a “non-sticking agent” in the compaction process of hot-mix asphalt pavement placement. Typically, this involves a light spray of water to the exterior of the steel drums of the compaction equipment as it operates. Additionally, these steel-wheel rollers typically use water as a ballast material to increase the weight of the equipment to more efficiently compact the hot-mix asphalt. Ballast water is typically delivered and transferred in a stationary position to the roller by a water truck. Runoff is very unlikely from the spray as a “non-sticking agent” as any residual water is usually limited to the hot-mix surface and quickly dissipates through evaporation. Runoff potential is minimal from the water used as ballast and could most likely occur at the point of transfer, which is typically confined to the surface of the finished hot-mix asphalt. Potential pollutants could be from the water source.
- 28. Discharge of water truck spray to cool the temperature of new hot-mix asphalt pavement to allow vehicular travel of the public to occur much sooner.** Sometimes lime is added to promote quicker stabilization of the hot-mix asphalt pavement. Typically, water is minimally applied as a light spray from a moving water truck. Runoff potential is minimal and would normally be limited to a very small shoulder area of the roadway and would not be a concentrated flow. Potential pollutants could be from the water source and lime.
- 29. Concrete flat work for rest areas and other concrete structures.** This involves water settling and preparation for pouring concrete as well as water application for curing. Used in this capacity, water is intended to enhance compaction of the soil base below the concrete as well as provide excess moisture to aid the curing process. Also, the added water is used to ensure that the soil base does not extract moisture from the plastic concrete during the heat of hydration and the curing process. Water used for these purposes is generally small in quantity. The most likely potential pollutant would be fine. However, runoff is unlikely due to absorption into the soil or evaporation.
- 30. Water used for water-settling bedding and backfill materials in trenches excavated for irrigation, electrical, sewer, and other utilities.** This is generally a small quantity of water jetted directly into the bedding or backfill material to aid in compaction, especially beneath utility pipes. If water from this operation were discharged from the site, the most likely potential pollutant would be soil carried along with it. However, since excessive water could have the opposite effect of creating material voids under the pipe, as well as flooding the trench and causing rework, contractors will probably ensure that such a situation does not occur. Therefore, there is little chance of runoff from this source leaving the project limits.
- 31. Application of water mixed with wood fiber mulch and tackifier and soil amendments associated with seeding or temporary soil stabilization processes.**

  - a. **Hydroseeding.** This activity has limited potential for De Minimus discharges. Typical application rates for the water used in hydroseeding range from 1,000 gallons per acre to 2,500 gallons per acre (0.2 to 0.5 gallon per square yard). The application of seed by hydroseeding is accomplished in two steps. The first step involves the seed and a limited amount of water and wood fiber mulch. The second step is the application of straw mulch followed by wood fiber with tackifiers for holding the straw in place, or where straw cannot be applied, with wood fiber and tackifier. Both provide

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stabilization until vegetation becomes established. The application is readily absorbed into the straw mulch or loosened soil, and water is quickly lost to evaporation. Soil amendments are added to the soil prior to hydroseeding (see next section).

- b. **Soil Amendments.** Prior to the application of seed for final stabilization, project specifications require construction of cut and fill slopes with tillage of 12 and 6 inches, respectively, with fertilizer and compost broadcast before final tillage so it is worked into the soil and benefits establishment of the seeding. Tillage of the slopes and incorporation of fertilizer, compost, and soil amendments minimizes any runoff from the slopes and reduces the potential for movement of nitrogen and phosphorus. Fertilizer has been changed to a three-part blended mixture of coated and slow-releasing and nonsoluble components. Fertilizer includes one part sulfur-coated urea 25-4-8, one part mon-ammonium phosphate 11-52-0, and one part methylene urea 38-0-0, resulting in a slow release blend of 24-18-2 to be applied at 200 pounds per acre. There is an additional 200 pounds of agricultural sulfur as a soil amendment required per acre. Use of this slow-release soil amendment mixture minimizes potential for storm water contamination.

**32. Construction site equipment washing to control invasive species.** The contractor's earthmoving equipment is pressure-washed on-site to combat the proliferation of invasive plant species. Although this activity is typically performed in predesignated and controlled areas, De Minimus discharges are possible, and appropriate BMPs are employed. There are too many variables involved to make any estimation of the quantity of water that may be used for cleaning equipment on a project. Potential pollutants include sediment and petroleum-based products.