Middle Rio Grande Watershed MS4 Permit

- MS4 stands for Municipal Separate Storm Sewer System - regulated under the Clean Water Act’s National Pollutant Discharge Elimination System
- The MS4 Permit applies to all centralized storm drainage systems within the Albuquerque Urbanized Area
- Other Permittees include Kirtland Air Force Base (KAFB), City of Albuquerque, Bernalillo County, Albuquerque Metropolitan Area Flood Control Authority, University of New Mexico, NM Department of Transportation, others
- MS4 Permit issued December, 2014; the permit term is 5 years. A new MS4 Permit will not be issued in 2019; the current permit will enter into administrative continuance until a new permit is issued
- Permit requires implementation of 7 control measure programs, water quality monitoring, and annual reporting

SNL/NM MS4

- SNL/NM MS4 includes TA-I, TA-II, and TA-IV. Total area = 742 acres
- 90% of SNL/NM MS4 drains south to Tijeras Arroyo
- 10% of MS4 drains west to KAFB, then north to KAFB detention basins
- 5 water quality monitoring locations
- 1 inflow location (SWSP-02)
- 4 discharge locations
MS4 Stormwater Permit

Control Measure Programs

The seven control measure programs are designed to prevent pollutants from entering the storm drain system and/or being discharged from the MS4.

Construction Site Runoff Control
- Compliance with Construction General Permit
- Stormwater Pollution Prevention Plans
- Conduct over 100 inspections each year within the MS4

Post-Construction Site Runoff Control
- Compliance with Energy Independence Security Act (EISA) Section 438
- Maintain pre-development hydrology
- Reduce and slow runoff using Green Infrastructure/Low Impact Development (GI/LID) practices and stormwater Best Management Practices (BMPs)

Pollution Prevention and Good Housekeeping
- Chemical inventory and tracking program
- Waste Management and Recycling Program
- Pest Management Plan and Gardener’s Manual
- Sediment Control Plan

Illicit Discharge Detection and Elimination
- Corporate policies, procedures, and training
- Regular screening and monitoring of MS4
- Coordination with Facilities Management and Operations to prevent Illicit Discharges

Control of Floatables
- Waste Management and Recycling Program
- Block & Gravel inlet protection
- Street sweeping plan
- Bi-weekly inspections and maintenance of outfalls

Public Education and Outreach
- Provide stormwater training to ~250 Sandia employees and contractors each year
- “Stormwater - Keep It Clean” campaign
- Watershed model presentations to local students

Public Involvement and Participation
- Annual Reports, Discharge Monitoring Reports, and Updated Stormwater Management Program Plan
- 30 day public review and comment period each year
- All EPA deliverables are available to the public through the UNM Digital Repository website: http://digitalrepository.unm.edu/snl_ms4/
- Participation in DoD/DOE public meetings
MS4 Stormwater Permit

Water Quality Monitoring

Water quality monitoring is conducted to identify pollutants entering the storm-drain system in order to guide improvements to the control measure programs.

MS4 Stormwater Quality Data Collected at SWSP-05 Since Permit Inception

- **pH**
- **Temperature**
- **Specific Conductance**
- **Dissolved Oxygen**
- **Gross Alpha**
- **Biochemical Oxygen Demand**
- **Chemical Oxygen Demand**
- **Dissolved Phosphorous**
- **Total Phosphorous**
- **Oil & Grease**
- **Total Kjeldahl Nitrogen (TKN)**
- **Nitrate + Nitrite**
- **Total Dissolved Solids (TDS)**
- **Total Suspended Solids (TSS)**
- **E. Coli (logarithmic scale)**
- **Total PCBs (logarithmic scale)**

PCB and E. Coli

- **Focused Pollutant Reduction Activities**
  - Additional Sediment Reduction BMPs
  - Microbial Source Tracking Investigation
  - PCB Source Tracking Investigation
  - Atmospheric PCB Deposition Monitoring

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