



Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. NMS000101

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"), the co-permittees as listed below,

City of Albuquerque
Department of Municipal Development
P.O. Box 1293
Albuquerque, NM 87103

Albuquerque Metropolitan Arroyo Flood
Control Authority (AMAFCA)
2600 Prospect NE
Albuquerque, NM 87107

New Mexico Department of Transportation
District III
P.O. Box 91750
Albuquerque, NM 87199-1750

University of New Mexico
Department of Safety, Health and
Environmental Affairs
1801 Tucker Street N.E.
Albuquerque, NM 87131

are authorized to discharge from all portions of the Albuquerque Municipal Separate Storm Sewer System (MS4) owned or operated by any permittee listed above, to waters of the United States, in accordance with the Storm Water Management Program(s), effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, IV, V, VI, VII, and VIII herein.

This is a renewal NPDES permit issued for these portions of the municipal separate storm sewer system.

This permit shall become effective on March 1, 2012

This permit and the authorization to discharge shall expire the earlier of (1) ninety (90) days following the effective date of a watershed-based permit for the regulated Middle Rio Grande MS4s in the Albuquerque area or (2) at midnight February 28, 2017

Issued on January 31, 2012

Prepared by

William K. Honker, P.E.
Acting Director
Water Quality Protection Division

Suzanna M. Perea
Environmental Scientist
NPDES Permits and TMDLs Branch

ALBUQUERQUE MUNICIPAL SEPARATE STORM SEWER SYSTEM

Table of Contents

Cover Page

Part I INDIVIDUAL PERMIT CONDITIONS

- A. Discharges Authorized Under This Permit
- B. Special Conditions
- C. Stormwater Management Program (SWMP)

PART II NUMERIC DISCHARGE LIMITATIONS

- A. Discharge Limitations

PART III MONITORING AND REPORTING REQUIREMENTS

- A. Storm Event Discharge Monitoring
- B. Floatables Monitoring
- C. Industrial and High Risk Runoff Monitoring
- D. Toxicity Monitoring to Protect Listed T&E Species
- E. Wet Weather Screening of MS4
- F. Dry Weather Screening of MS4
- G. Impaired Receiving Waters Wet Weather Assessment of Potential Quality Impacts
- H. Annual Report
- I. Certification and Signature of Reports
- J. Reporting: Where and When to Submit

PART IV STANDARD PERMIT CONDITIONS

- A. Duty to Comply
- B. Penalties for Violations of Permit Conditions
- C. Duty to Reapply
- D. Need to Halt or Reduce Activity not a Defense
- E. Duty to Mitigate
- F. Duty to Provide Information
- G. Other Information
- H. Signatory Requirements
- I. Penalties for Falsification of Monitoring Systems
- J. Oil and Hazardous Substance Liability
- K. Property Rights
- L. Severability
- M. Requiring a Separate Permit
- N. State/Environmental Laws
- O. Proper Operation and Maintenance
- P. Monitoring and Records
- Q. Monitoring Methods
- R. Inspection and Entry
- S. Permit Actions
- T. Additional Monitoring by the Permittee(s)
- U. Archaeological and Historic Sites

PART V PERMIT MODIFICATION

- A. Modification of the Permit
- B. Termination of Coverage for a Single Permittee
- C. Modification of the SWMP(s)
- D. Changes in Representative Monitoring Sites

PART VI SCHEDULES FOR IMPLEMENTATION AND COMPLIANCE

- A. Implementation and Augmentation of the SWMP(s)
- B. Compliance with Effluent Limitations
- C. Reporting Compliance with Schedules
- D. Modification of the SWMP(s)

PART VII DEFINITIONS

APPENDICES CURRENT PERMITTEE SWMPs

PART I. INDIVIDUAL PERMIT CONDITIONS

A. DISCHARGES AUTHORIZED UNDER THIS PERMIT

1. **Permit Area.** This permit covers all areas within the corporate boundary of the City of Albuquerque served by, or otherwise contributing to discharges from the municipal separate storm sewer system (MS4) owned and/or operated by the permittees. For AMAFCA this also includes MS4s located in the Albuquerque urbanized area outside the Albuquerque corporate boundary. For purposes of this permit, "permittee," "permittees" and/or "co-permittees" may refer to the City of Albuquerque (COA), Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), New Mexico Department of Transportation (NMDOT), and University of New Mexico (UNM), as a group or as separate entities.
2. **Authorized Discharges.** This permit authorizes stormwater discharges to waters of the United States from all MS4s owned and/or operated within the corporate boundary of the City of Albuquerque served by, or otherwise contributing to discharges from the MS4.
3. **Authorized Non-Stormwater Discharges.** The following non-stormwater discharges need not be prohibited unless determined by the permittees, U.S. Environmental Protection Agency (EPA), or New Mexico Environment Department (NMED) to be significant contributors of pollutants to the municipal separate storm sewer system (MS4). Any such discharge that is identified as significant contributor pollutants to the MS4, or as causing or contributing to a water quality standards violation, must be addressed as an illicit discharge under the illicit discharge and improper disposal practices established pursuant to Part I.C.5.e of this permit. For all of the discharges listed below, not treated as illicit discharges, the permittee must document the reason these discharges are not expected to be significant contributors of pollutants to the MS4. This documentation may be based on either the nature of the discharge or any pollution prevention/treatment requirements placed on such discharges by the permittee.
 - a. potable water sources, including routine water line flushing;
 - b. lawn, landscape, and other irrigation waters provided all pesticides, herbicides and fertilizers have been applied in accordance with approved manufacturing labeling and any applicable permits for discharges associated with pesticide, herbicide and fertilizer application;
 - c. diverted stream flows;
 - d. rising ground waters;
 - e. uncontaminated groundwater infiltration (as defined at 40 CFR §35.2005 (20));
 - f. uncontaminated pumped groundwater;
 - g. foundation and footing drains;
 - h. air conditioning or compressor condensate;
 - i. springs;
 - j. water from crawl space pumps;
 - k. individual residential car washing;
 - l. flows from riparian habitats and wetlands;
 - m. dechlorinated swimming pool discharges;
 - n. street wash waters that do not contain detergents and where no un-remediated spills or leaks of toxic or hazardous materials have occurred;
 - o. discharges or flows from fire fighting activities (does not include discharges from fire fighting training activities); and,
 - p. other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes, etc.).

B. SPECIAL CONDITIONS

1. **Compliance with Water Quality Standards.** Pursuant to Clean Water Act §402(p)(3)(B)(iii) and 40 CFR §122.44(d)(1), this permit includes provisions to ensure that discharges from the permittee's MS4 do not cause or contribute to exceedances of applicable surface water quality standards, in addition to requirements to control discharges to the maximum extent practicable (MEP) set forth in Part I.C. Permittees shall address stormwater management through development of the Stormwater Management Program (SWMP) that shall include the following elements and specific requirements included in PART VI, Tables III, IV and V.
 - a. Permittee's discharges shall not cause or contribute to an exceedance of surface water quality standards (including numeric and narrative water quality criteria) applicable to the receiving

waters. In determining whether the SWMP is effective in meeting this requirement or if enhancements to the plan are needed, the permittee shall consider available monitoring data, visual assessment, and site inspection reports.

- b. Applicable surface water quality standards for discharges from the permittees' MS4 are those that are in place upon the effective date of this permit found at New Mexico Administrative Code §20.6.4. Discharges from various portions of the MS4 also flow downstream into waters with Pueblo of Isleta and Pueblo of Sandia Water Quality Standards;
- c. In the event that EPA determines that a discharge from the MS4 causes or contributes to an exceedance of applicable surface water quality standards and notifies the permittee of such an exceedance, the permittee shall, within sixty (60) days of notification, submit to EPA, NMED, Pueblo of Isleta and Pueblo of Sandia, a report that describes controls that are currently being implemented and additional controls that will be implemented to prevent pollutants sufficient to ensure that the discharge will no longer cause or contribute to an exceedance of applicable surface water quality standards. The permittee shall implement such additional controls upon notification by EPA and shall incorporate such measures into their SWMP as described in Part I.C of this permit. NMED or the affected Tribe may provide information documenting exceedances of applicable water quality standards caused or contributed to by the discharges authorized by this permit to EPA Region 6 and request EPA take action under this paragraph.d. Dissolved Oxygen: The permittees shall take measures to address concerns regarding discharges to receiving waters of the Rio Grande, including modifications to the North Diversion Channel, by developing and implementing a strategy to eliminate conditions that cause or contribute to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. The permittees shall, in accordance with schedules in Part VI, Table III:
 - (i) Identify structural elements, natural or man-made topographical and geographical formations, MS4 operations activities, or oxygen demanding pollutants contributing to reduced dissolved oxygen in the receiving waters of the Rio Grande. Both dry and wet weather discharges shall be addressed. . Assessment may be made using available data or collecting additional data;
 - (ii) Develop and implement controls, as necessary, to eliminate structural elements or the discharge of pollutants at levels that cause or contribute to exceedances of applicable water quality standards for dissolved oxygen in waters of the United States; and
 - (iii) Provide an initial progress report to EPA within six (6) months of the permit effective date. Subsequent progress reports shall be included in the Annual Report. Each progress report shall include the information in Part VI, Table III.
- e. PCBs in San Jose Drain and North Diversion Channel: The permittees shall address concerns regarding PCBs in the San Jose Drain and North Diversion Channel drainage areas by performing activities to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of applicable water quality standards in waters of the United States in accordance with the schedules in Part VI, Table IV.
- f. Temperature: The permittees shall take measures to address concerns regarding discharges to the Rio Grande, by developing and implementing a strategy to eliminate conditions that cause or contribute to exceedances of applicable temperature water quality standards in waters of the United States. The permittees shall, in accordance with schedules in Part VI, Table V:
 - (i) Identify structural elements, post construction design standards, or pollutants contributing to raised temperatures in the receiving waters of the Rio Grande. Both dry and wet weather discharges shall be addressed. Assessment may be made using available data or collecting additional data;
 - (ii) Develop and implement controls to eliminate structural elements, post construction design standards, or the discharge of pollutants at levels that cause or contribute to exceedances of applicable water quality standards for temperature in waters of the United States; and
 - (iii) Provide an initial progress report to EPA within six (6) months of the permit effective date. Subsequent progress reports shall be included in the Annual Report. Each progress report shall include the information in Part VI, Table V.

2. **Discharges to Impaired Waters.** Impaired waters are those that have been identified pursuant to Section 303(d) of the Clean Water Act as not meeting applicable surface water quality standards. This may include both waters with EPA-approved Total Maximum Daily Loads (TMDLs) and those for which a TMDL has not yet been approved. For the purposes of this permit, the conditions for discharges to impaired waters also extend to controlling pollutants in MS4 discharges to tributaries to the listed impaired waters in the proximity of Albuquerque.

- a. **Existing Discharges to an Impaired Water without an Approved TMDL.** If the permittee's MS4 discharges to an impaired water without an approved TMDL, the permittee shall comply with Parts I.B.1 and I.C of this permit and address in its SWMP and annual reports how the discharge of the pollutant(s) identified as causing the impairment will be controlled such that they do not cause or contribute to the impairment. The permittee shall:
 - (i) Evaluate the potential for discharges from the MS4 to impaired waters to contribute to the pollutant(s) of concern;
 - (ii) Identify additional or modified controls in the SWMP to ensure that discharges do not cause or contribute to the impairment; and
 - (iii) Implement identified additional controls and include the status of each in the annual report.
- b. **Existing Discharges to an Impaired Water with an Approved TMDL.** If the permittee's MS4 discharges to an impaired water with an approved TMDL and a waste load allocation (WLA) has been established that applies specifically to its MS4 discharges, or more generally to discharges from MS4s, the permittee shall comply with the requirements of Parts I.B.1 and I.C and specific controls to support the achievement of the WLA. The permittee shall include these controls in their SWMP and address in their SWMP and annual reports how the discharge of the pollutant(s) identified as causing the impairment will be controlled such that they comply with the requirements of Parts I.B.1 and I.C. If EPA determines more stringent requirements are necessary to support achievement of the WLA, EPA will incorporate such requirements through a modification to this permit pursuant to Part V of this permit or by incorporation into the next permit.
 - (i) If the approved TMDL does not include a WLA applicable to discharges from the permittee's MS4, the permittee shall comply with Parts I.B.1 and I.C of this permit and address in their SWMP and annual reports how the discharge of the pollutant(s) identified as causing the impairment will be controlled such that they do not cause or contribute to the impairment. Unless otherwise notified by EPA or NMED, compliance with the requirements of Parts I.B and I.C of this permit shall be presumed to be adequate to meet the requirements of the approved TMDL.
 - (ii) Applicable TMDLs for discharges from the permittee's MS4 are those that are approved by EPA as of the effective date of this permit. See also Part I.B.2.c below.
 - (iii) The permittee shall highlight in their annual reports all control measures currently being implemented or planned to be implemented to control the pollutants identified in approved TMDLs.
- c. **Bacteria TMDL.** The permittees shall implement measures necessary to bring MS4 discharges into compliance with the Middle Rio Grande Total Maximum Daily Load (TMDL) for Bacteria. Specific permit requirements to implement the TMDL are included in PART VI, Tables II.A and II.B.

A new bacteria TMDL for the Middle Rio Grande was approved by the New Mexico Water Quality Control Commission on April 13, 2010, and by EPA on June 30, 2010. The new TMDL modifies: 1) the indicator parameter for bacteria from fecal coliform to *E. coli*, and 2) the way the WLAs are assigned.

3. **U.S. Fish and Wildlife Service Biological Opinion.** To ensure actions required by this permit are not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat, permittees shall meet the following requirements, included in PART VI, Table VI, and include in the SWMP:

- a. Complete the remedial action selected for the North Diversion Channel Embayment within eighteen (18) months of this permit's effective date;
- b. Conduct continuous monitoring of dissolved oxygen (DO) and temperature in the North Diversion Channel Embayment and at one (1) location in the Rio Grande downstream of the mouth of the North Diversion Channel within the action area (e.g., Rio Bravo Bridge) to verify the remedial action is successful for the duration of the permit. It is recommended that continuous monitoring data be provided online for public review;
- c. Provide the FWS with the following data and information on all qualifying storm events: date of any qualifying stormwater event(s), DO value in Embayment, DO value at downstream monitoring station, flow rate in the North Diversion Channel, daily flow rate in the Rio Grande, and sum of silvery minnows taken;
- d. Describe, in annual reports, all standard operating procedures, quality assurance plans, maintenance, and implementation schedules to assure that timely and accurate water temperature, DO, oxygen saturation, and flow data are collected, summarized, evaluated and reported;
- e. Provide the FWS with electronic copies of all incidental take, interim, and annual reports required by this permit no later than March 31st for the preceding calendar year ending December 31st to nmesfo@fws.gov or by mail to the New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, New Mexico 87113; and,
- f. Participate with EPA and the FWS in an annual meeting (may be via teleconference) during the permit period to review the remedial action progress, information gathered, and incidental take estimates associated with qualifying storm events.

C. STORMWATER MANAGEMENT PROGRAM (SWMP)

1. **General Requirements.** The permittees shall continue implementation of the existing SWMP, and where necessary modify or revise existing elements and/or develop new elements to comply with all discharges from the MS4 authorized in Part I.A. The updated SWMP shall satisfy all requirements of this permit, and be implemented in accordance with Section 402(p)(3)(B) of the Clean Water Act (Act), and the Stormwater Regulations (40 CFR §122.26 and §122.34). This permit does not extend any compliance deadlines set forth in the previous permit effective December 1, 2003.
2. **Legal Authority.** Each permittee shall implement the legal authority granted by the State to control discharges to and from those portions of the MS4 over which it has jurisdiction. The difference in each co-permittee's jurisdiction and legal authorities, especially with respect to third parties, may be taken into account in developing the scope of program elements and necessary agreements (i.e. Joint Powers Agreement). Permittees may use a combination of statute, ordinance, permit, contract, order, interagency or inter-jurisdictional agreement(s) with co-permittees to:
 - a. Control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;
 - b. Control the discharge of stormwater and pollutants associated with land disturbance and development activities, both during the construction phase and after site stabilization has been achieved (post-construction), consistent with Part I.C.5.a and Part I.C.5.b.
 - c. Prohibit illicit discharges and sanitary sewer overflows to the MS4 and require removal of such discharges consistent with Part I.C.5.e;
 - d. Control the discharge of spills and prohibit the dumping or disposal of materials other than stormwater (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the MS4;
 - e. Control, through interagency or inter-jurisdictional agreements among permittees, the contribution of pollutants from one (1) portion of the MS4 to another;
 - f. Require compliance with conditions in ordinances, permits, contracts and/or orders; and
 - g. Carry out all inspection, surveillance and monitoring procedures necessary to maintain compliance with permit conditions.

3. **Shared Responsibility.**

- a. The SWMP, in addition to any interagency or inter-jurisdictional agreement(s) among permittees, (e.g., the Joint Powers Agreement to be entered into by the permittees), shall clearly identify the roles and responsibilities of each permittee.
- b. Implementation of the SWMP may be achieved through participation with other permittees, public agencies, or private entities in cooperative efforts to satisfy the requirements of Part I.C in lieu of creating duplicate program elements for each individual permittee.
 - (i) Implementation of one (1) or more of the control measures may be shared with another entity, or the entity may fully take over the measure. A permittee may rely on another entity only if:
 - (1) the other entity, in fact, implements the control measure;
 - (2) the control measure, or component of that measure, is at least as stringent as the corresponding permit requirement; or,
 - (3) the other entity agrees to implement the control measure on the permittee's behalf. Written acceptance of this obligation is expected. The permittee must maintain this obligation as part of the SWMP description. If the other entity agrees to report on the minimum measure, the permittee must supply the other entity with the reporting requirements in Part III.H of this permit. The permittee remains responsible for compliance with the permit obligations if the other entity fails to implement the control measure component.
- c. Each permittee shall provide adequate finance, staff, equipment, and support capabilities to fully implement its SWMP and all requirements of this permit.

4. **Measurable Goals.** The permittees shall control the discharge of pollutants from its MS4. The permittee shall implement the provisions set forth in Part I.C.5 below, and shall at a minimum incorporate into the SWMP the control measures listed in Part I.C.5 below. The SWMP shall include measurable goals, including interim milestones, for each control measure, and as appropriate, the months and years in which the MS4 will undertake the required actions and the frequency of the action.

5. **Control Measures.**

- a. **Construction Site Stormwater Runoff Control.** The permittees shall coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction activities within the permit area to ensure that the construction stormwater runoff control program controls or eliminates erosion and maintains sediment on site. Planning documents include, but are not limited to; comprehensive or master plans, subdivision ordinances, general land use plan, zoning code, transportation master plan, specific area plans, such as sector plan, site area plans, corridor plans, or unified development ordinances. The program shall address stormwater management during construction and include in the SWMP a description of the mechanism(s) utilized to comply with each of the following elements and the schedules contained in Table I.A:
 - (i) an ongoing program to assess, implement, and enforce the existing program to control stormwater discharges from construction activities that result in a land disturbance of greater than or equal to one (1) acre. Construction activities disturbing less than one (1) acre must be included in the program if that construction activity is part of a larger common plan of development or sale that may disturb one (1) acre or more. Permittees shall update the "NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook" to be consistent with promulgated construction and development effluent limitation guidelines;
 - (ii) a procedure or system to review, update, and/or enact an ordinance(s) or other appropriate legal authority mechanism, that addresses stormwater runoff from construction sites one (1) acre or greater, to require developers and construction site operators to implement an erosion and sediment control program, control waste and properly dispose of wastes, such as

discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

- (iii) procedures for review of all site plans and pre-construction review meetings that consider stormwater controls or management practices of potential water quality impacts and ensure consistency with local and State sediment and erosion control requirements. The site plan review must be conducted prior to commencement of construction activities, and include a review of the site design, the planned operations at the construction site, the planned control measures during the construction phase (including the technical criteria for selection of the control measures), and the planned controls to be used to manage runoff created after the development. The review procedure must incorporate procedures for the consideration of potential water quality impacts; procedures for pre-construction review; and, procedures for receipt and consideration of information submitted by the public. The site plan review procedure must also include evaluation of opportunities for use of green infrastructure practices and when the opportunity exists, encourage project proponents to incorporate such practices into the site design to mimic the pre-development hydrology of the previously undeveloped site. For purposes of this permit, monitoring pre-development hydrology shall be met by capturing the 90th percentile storm event runoff (consistent with any limitations on that capture). Include a reporting requirement of the number of plans had opportunities to implement GI and how many incorporated GI.
 - (iv) procedure for development of an application process whereby the construction site operator describes the sediment and erosion control measures to be taken on the site. The application shall include a listing of all water bodies into which the construction site will discharge and whether or not they are on the 303(d) list for impaired waters;
 - (v) procedures for site inspection (during construction) and enforcement of control measures, including provisions to ensure proper construction, operation, maintenance, and repair. The procedures must clearly define who is responsible for site inspections; who has the authority to implement enforcement procedures; and the steps utilized to identify priority sites for inspection and enforcement based on the nature of the construction activity. If a construction site operator fails to comply with procedures or policies established by the permittee, the permittee may request EPA enforcement assistance. Permittees shall:
 - (1) annually conduct site inspections of 100 percent of all construction projects cumulatively disturbing one (1) or more acres. Site inspections are to be followed by any necessary compliance or enforcement action. Follow-up inspections are to be conducted to ensure corrective maintenance has occurred; and, all projects must be inspected at completion for confirmation of final stabilization; and,
 - (2) describe sanctions and enforcement mechanism(s) for violations of permit requirements and penalties with detail regarding corrective action follow-up procedures, including enforcement escalation procedures for recalcitrant or repeat offenders.
 - (vi) procedure for providing education and training for permittee personnel involved in the planning, review, permitting, and/or approval of construction site plans, inspections and enforcement. Education and training shall also be provided for developers, construction site operators, contractors and supporting personnel, including requiring a stormwater pollution prevention plan for construction sites within the permittee's jurisdiction; and,
 - (vii) procedures for keeping records of and tracking all regulated construction activities within the MS4, i.e. site reviews, inspections, inspection reports, warning letters and other enforcement documents. A summary of the number and frequency of site reviews, inspections (including inspector's checklist for oversight of sediment and erosion controls and proper disposal of construction wastes) and enforcement activities that are conducted annually and cumulatively during the permit term shall be included in each annual report.
- b. Post-Construction Stormwater Management in New Development and Redevelopment. The permittees shall coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private new development and redevelopment projects/activities within the permit area to ensure the hydrology associated with new development and redevelopment sites mimic the pre-development hydrology of the previously undeveloped site, except in instances where the pre-development hydrology requirement conflicts

with state water rights appropriation requirements.. For purposes of this permit, monitoring pre-development hydrology shall be met by capturing the 90th percentile storm event runoff (consistent with any limitations on that capture) which under undeveloped natural conditions would be expected to infiltrate or evapotranspire on-site and result in little, if any, off-site runoff. (Note: This permit does not prevent permittees from requiring additional controls for flood control purposes. Planning documents include, but are not limited to: comprehensive or master plans, subdivision ordinances, general land use plan, zoning code, transportation master plan, specific area plans, such as sector plan, site area plans, corridor plans, or unified development ordinances.

The permittee shall protect the physical, chemical and biological integrity of receiving waters, and their designated uses from the impacts of stormwater discharges through the implementation of watershed protection elements and site and neighborhood design elements. The purpose of watershed protection elements is to manage the impacts of stormwater on receiving waters that occur because of regional or watershed-scale management decisions. The primary purpose of site and neighborhood design elements is to manage the impacts of stormwater on receiving waters that occur because of site and neighborhood design management decisions. The technical principles of these management practices have many complementary similarities, and must be implemented in tandem.

The program shall address post-construction stormwater management and include the following elements in the SWMP and comply with the schedules contained in Table I.B:

- (i) procedure or system to review and update, as necessary, the existing program to ensure that stormwater controls or management practices for new development and redevelopment projects/activities disturbing greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale, continue to meet the requirements and objectives of the permit;
- (ii) procedure or system to review, update, and/or enact an ordinance(s) or other appropriate legal authority mechanism, as necessary to ensure implementation of the SWMP.
- (iii) assessment of all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of green infrastructure practices. The permittee shall develop a report of the assessment findings, which is to be used to provide information to the permittee, of the regulation changes necessary to remove impediments and allow implementation of green infrastructure practices. The assessment shall include a list of the identified impediments, necessary regulation changes, and recommendations and proposed schedules to incorporate policies and standards to relevant documents and procedures to maximize infiltration, recharge, water harvesting, habitat improvement, and hydrological management of stormwater runoff;
- (iv) implementation and enforcement, via ordinance and/or other enforceable mechanism(s), of site design standards that capture the 90th percentile storm event runoff to ensure the hydrology associated with new development and redevelopment sites mimic the pre-development hydrology of the previously undeveloped site except in instances where full compliance with the pre-development hydrology requirement conflicts with state water rights appropriations requirements. Management of runoff volume may be achieved by canopy interception, soil amendments, rainfall harvesting, engineered infiltration, extended filtration, other appropriate techniques, and any combination of these practices. Pre-development runoff values may be achieved through on-site utilization of practices including dry swales, bioretention, rain tanks and cisterns, soil amendments, roof top disconnections, permeable pavement, porous concrete, permeable pavers, reforestation, grass channels, green roofs or other green infrastructure practices as appropriate.

For projects/activities that cannot meet the pre-development runoff values requirement on site, four (4) alternatives are available; off-site mitigation, payment in lieu, partial compliance with a determination that full compliance cannot be achieved consistent with state water rights appropriations requirements, and an alternative option submitted to and approved by EPA. If these alternatives are chosen, the permittee must develop and apply criteria for determining the circumstances under which these alternatives will be available. A

determination that standards cannot be met on site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria that rule out an adequate combination of the practices set forth in this section, such as: too small a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils; soil instability as documented by a thorough geotechnical analysis; a site use that is inconsistent with capture and reuse of stormwater; other physical conditions; or, to comply with state or local requirements for on-site flood control structures that leave insufficient area for use of green infrastructure techniques. This permit does not prevent imposition of more stringent requirements related to flood control. Where both the 90th percentile storm event capture requirement and flood control requirements on site cannot be met due to site conditions, the 90th percentile storm event capture requirements may be met through a combination of on-site and off-site controls. Where state water rights appropriations limit the ability to fully meet the 90th percentile standard on site, measures to minimize increased runoff consistent with requirements under water rights laws must still be implemented. In instances where an alternative to complete pre-development runoff values on site is chosen, technical justification as to the infeasibility of on-site management is required to be documented.

- (a) *Off-site mitigation.* Runoff practices achieving pre-development runoff values may be implemented at another location within the MS4 area, approved by the permittee. The permittee shall identify priority areas within the MS4 in which mitigation projects can be completed. Off-site mitigation must be for retrofit or redevelopment projects, and cannot be applied to new development. The permittee shall determine who will be responsible for long-term maintenance on off-site mitigation projects.
- (b) *Payment in lieu.* Payment in lieu may be made to the permittee, who will apply the funds to a public stormwater project. MS4s shall maintain a publicly accessible database of approved in lieu projects.
- (c) *Partial Implementation.* Partial compliance may be implemented given the permittee provides a written determination from the New Mexico Office of the State Engineer that full compliance cannot be achieved consistent with water rights appropriations requirements.
- (d) *Other.* In a situation where alternative options (a) through (c) above are not feasible, the permittees may submit to the EPA for approval, an alternative option that meets the 90th percentile pre-development hydrology values.
- (v) citations and descriptions of design standards for structural and non-structural controls to control pollutants in stormwater runoff, including discussion of the methodology used during design for estimating impacts to water quality and selecting structural and non-structural controls;
- (vi) estimation of the number of acres of impervious area (IA) and directly connected impervious area (DCIA). For the purpose of this part, IA includes conventional pavements, sidewalks, driveways, roadways, parking lots, and rooftops. DCIA is the portion of IA with a direct hydraulic connection to the permittee's MS4 or a waterbody via continuous paved surfaces, gutters, pipes, and other impervious features. DCIA typically does not include isolated impervious areas with an indirect hydraulic connection to the MS4 (e.g., swale or detention basin) or that otherwise drain to a pervious area. The permittee shall report the tabulated results and its estimation methodology in the first annual report. Beginning with the second year annual report and in each subsequent annual report, the permittee shall estimate the number of acres of IA and DCIA that have been added or removed during the prior year. The permittee shall include in its estimates the additions and reductions resulting from development, redevelopment, or retrofit projects undertaken directly by the permittee; or by private developers and other parties in a voluntary manner on in compliance with the permittee's regulations;
- (vii) an inventory and priority ranking of MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4. In determining the potential for retrofitting, the permittee shall consider factors such as the complexity and cost of implementation, public safety, access for maintenance purposes,

subsurface geology, depth to water table, proximity to aquifers and subsurface infrastructure including sanitary sewers and septic systems, and opportunities for public use and education. In determining its priority ranking, the permittee shall consider factors such as schedules for planned capital improvements to storm and sanitary sewer infrastructure and paving projects; current storm sewer level of service and control of discharges to impaired waters, first or second order streams, and critical receiving water (drinking water supply sources). A report on those MS4-owned properties and infrastructure that have been retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges shall be submitted beginning with the third year annual report and each subsequent annual report. The permittee may also include in its annual report non-MS4 owned property that has been retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges;

- (viii) incorporation of watershed protection elements into all relevant policy and/or planning documents as they come up for regular review. If a relevant planning document is not scheduled for review during the term of this permit, the permittee must identify the elements that cannot be implemented until that document is revised, and provide to EPA and NMED a schedule for incorporation and implementation not to exceed five years from the effective date of this permit. As applicable to each permittee's MS4 jurisdiction, policy and/or planning documents must include the following:
- (a) A description of master planning and project planning procedures to control the discharge of pollutants to and from the MS4.
 - (b) Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each watershed, by controlling the creation, extension and widening of parking lots, roads and associated development.
 - (c) Identify environmentally and ecologically sensitive areas that provide water quality benefits and serve critical watershed functions within the MS4 and ensure requirements to preserve, protect, create and/or restore these areas are developed and implemented during the plan and design phases of projects in these identified areas. These areas may include, but are not limited to critical watersheds, riparian corridors, headwaters, floodplains, wetlands, and areas with endangered species concerns and historic properties. Stakeholders shall be consulted as appropriate.
 - (d) Implement stormwater management practices that protect water quality impacts to streams, including disconnecting discharges to surface waters from impervious surfaces such as parking lots.
 - (e) Implement stormwater management practices that protect and enhance groundwater recharge.
 - (f) Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.
 - (g) Develop and implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.
- (ix) procedures for site inspection and enforcement to ensure proper long-term operation, maintenance, and repair of stormwater management practices that are put into place after the completion of construction projects/activities. Procedure(s) shall include the requirement that as-built plans be submitted within ninety (90) days of completion of construction projects/activities that include controls designed to manage the stormwater associated with the completed site (post-construction stormwater management). Procedure(s) may include the use of dedicated funds or escrow accounts for development projects or the adoption by the permittee of all privately owned control measures. This may also include the development of maintenance contracts between the owner of the control measure and the permittee. The maintenance contract shall include verification of maintenance practices by the owner, allows the MS4 owner/operator to inspect the maintenance practices, and perform maintenance if inspections indicate neglect by the owner. Include a summary and analysis of all maintenance, inspections and enforcement, and the number and frequency of inspections performed annually shall be included in each annual report;

- (x) procedure to develop and implement an educational program for project developers regarding designs to control water quality effects from stormwater, and a training program for plan review staff regarding stormwater standards, site design techniques and controls, including training regarding Green Infrastructure practices. Training may be developed independently or obtained from outside resources, i.e. federal, state, or local experts; and,
 - (xi) a cumulative listing of the annual modifications made to the Post-Construction Stormwater Management Program during the permit term, and a cumulative listing of annual revisions to administrative procedures made or ordinances enacted during the permit term shall be included in each annual report.
- c. Pollution Prevention/Good Housekeeping for Municipal/Co-permittee Operations. The permittee shall implement, review and enhance their current pollution prevention practices and develop and implement new source control procedures as detailed in this part to control the amount of pollutants in stormwater contributing to or discharging from its MS4. The permittee shall implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or controlling pollutant runoff from municipal operations due to activities, including but not limited to, park and open space maintenance, roadways and parking lots, fleet and building maintenance, new construction and land disturbances, operation and maintenance of industrial facilities owned and operated by permittees, and stormwater system maintenance. The program shall include the following elements and comply with the schedules contained in Part VI, Table I.C:
- (i) Maintenance activities, maintenance schedules, and long-term inspection procedures for measures to control floatables and other pollutants to the MS4. Permittees shall:
 - (1) provide an updated list of all stormwater quality facilities by drainage basin, including location and description;
 - (2) enhance the Inspection and Maintenance Program by coordinating with maintenance personnel to ensure that a target number of structures per basin are inspected and maintained per quarter; and,
 - (3) enhance the existing program to control the discharge of floatables and trash from the MS4 by implementing source control of floatable in industrial and commercial areas.
 - (ii) Measures to control or eliminate the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt and sand storage locations and snow disposal areas. Permittees shall modify the following as necessary:
 - (1) the existing operational manual for de-icing activities addressing alternate materials and methods to control impacts to stormwater quality;
 - (2) roadway, debris control and roadside vegetation management practices;
 - (3) the existing program to control pollution in stormwater runoff from equipment and vehicle maintenance yards and maintenance center operations located within the MS4;
 - (4) the street sweeping program. Assess possible benefits from changing frequency or timing of sweeping activities or utilizing different equipment for sweeping activities; and
 - (5) the description of procedures used by permittees to target roadway areas most likely to contribute pollutants to and from the MS4 (i.e., runoff discharges directly to sensitive receiving water, roadway receives majority of de-icing material, roadway receives excess litter, roadway receives greater loads of oil and grease).
 - (iii) Procedures to properly dispose of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris. Permittees shall modify the following as necessary:
 - (1) the standard operating procedures for collection of used motor vehicle fluids (at a minimum oil and antifreeze) and toxics (including paint, solvents, fertilizers, pesticides, herbicides, and other hazardous materials) used in permittee operations or discarded in the MS4, for recycle, reuse, or proper disposal;

- (2) the standard operating procedures for the disposal of accumulated sediments, floatables, and other debris collected from the MS4 and during permittee operations to ensure proper disposal; and
 - (3) the existing litter source control program to include public awareness campaigns targeting the permittee audience.
- (iv) Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are re-assessed for incorporation of additional water quality protection devices or practices. The potential of retro-fitting existing structural flood control devices to provide additional pollutant removal from stormwater shall be evaluated routinely to ensure new and/or innovative practices are implemented where applicable. Structural controls for pollutant removal must be located offline or prior to a discharge entering a water of the United States and not built as a treatment unit located in a water of the United States. Permittees shall:
- (1) review and revise, as necessary, the technical criteria guidance document and program for the assessment of water quality impacts and incorporation of water quality controls into future flood control projects.
 - (a) Describe how new flood control projects are assessed for water quality impacts.
 - (b) Provide citations and descriptions of design standards that ensure water quality controls are incorporated in future flood control projects.
 - (c) Include method for permittees to update standards with new and/or innovative practices.
 - (d) Describe master planning and project planning procedures and design review procedures.
 - (2) review and revise, as necessary, the criteria, procedures and schedule to evaluate existing flood control devices, structures and drainage ways to assess the potential of retrofitting to provide additional pollutant removal from stormwater. Implement routine review to ensure new and/or innovative practices are implemented where applicable.
 - (3) include in each annual report, a cumulative summary of retrofit evaluations conducted during the permit term on existing flood control devices, structures and drainage ways to benefit water quality. Update the SWMP to include a schedule (with priorities) for identified retrofit projects.
- (v) Procedures to control the discharge of pollutants related to: 1) the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public right of ways, parks, and other municipal property; and 2) commercial application and distribution of pesticides, herbicides, and fertilizers where permittee(s) hold jurisdiction over lands not directly owned by that entity (e.g. incorporated city). Permittees shall:
- (1) review and revise, as necessary, the procedures and internal policies in place to ensure that herbicide and pesticide applicators doing business within the permittee's jurisdiction have been properly trained and certified, are encouraged to use the least toxic products, and control use and application rates according to applicable requirements; and
 - (2) provide an updated description of the data monitoring system for all permittee departments utilizing pesticides, herbicides and fertilizers.
- (vi) Procedures to control industrial runoff from facilities owned or operated by the permittees and ultimately discharge to the MS4. Monitoring shall comply with requirements found in Part I.C.5.d. Permittees shall include:
- (1) a list of municipal/permittee operations impacted by this program,
 - (2) a map showing the industrial facilities owned and operated by the MS4,
 - (3) a list of the industrial facilities (other than large construction activities defined as industrial activity) that will be included in the industrial runoff control program by category and by basin, and

- (4) the permit authorization number or a MSGP NOI form for each facility.
- (vii) Development and implementation of an employee training program to incorporate pollution prevention and good housekeeping techniques into everyday operations and maintenance activities. Develop a tracking procedure and ensure that employee turnover is considered when determining frequency of training.
- d. Industrial and High Risk Runoff. (Applicable to facilities other than those owned or operated by the permittee(s) (Part I.C.5.c)). The permittee shall continue implementation and enforcement of the Industrial and High Risk Runoff program, assess the overall success of the program, and document both direct and indirect measurements of program effectiveness in annual reporting required in Part III.H. (Note: If no such facilities are in a co-permittees jurisdiction, that co-permittee may certify that this program element does not apply.) The program shall include the following elements in the SWMP and comply with the schedules contained in Table I.D:
- (i) identify and control pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal and recovery facilities; facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee(s) determines are contributing a substantial pollutant loading to the MS4. The permittee shall modify the following as necessary:
- (1) the list of the facilities included in the program, by category and basin;
 - (2) the schedules and frequency of inspection for listed facilities. Facility inspections may be carried out in conjunction with other municipal programs (e.g. pretreatment inspections of industrial users, health inspections, fire inspections, etc.), but must include random inspections for facilities not normally visited by the municipality;
 - (3) the priorities for inspections and procedures used during inspections (e.g. inspection checklist, review for NPDES permit coverage; review of stormwater pollution prevention plan; etc.);
- (ii) describe the current monitoring program for stormwater discharges from the facilities identified in the program included in Part I.C.5.d, in accordance with Part III.C. The permittee shall modify the following as necessary:
- (1) monitoring frequency,
 - (2) parameters and
 - (3) entity performing monitoring and analyses (MS4 permittees or subject facility). The monitoring program may include a waiver of monitoring for parameters at individual facilities based on a "no-exposure" certification;
- (iii) establish and implement control measures for such discharges.
- e. Illicit Discharges and Improper Disposal. The permittees shall implement and enforce an Illicit Discharge Detection and Elimination (IDDE) program to systematically detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) entering the MS4, and to implement defined procedures to prevent illicit connections and illegal dumping into the MS4. Note that the term "illicit discharge" also covers illegal or improper disposal or dumping of wastes into the MS4. Illicit discharges into the MS4 shall be effectively prohibited and appropriate enforcement procedures and actions shall be implemented. Within three (3) years, the permittee shall enhance the existing program to utilize procedures and methodologies consistent with those described in "Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments," by The Center for Watershed Protection and R. Pitt, dated 2004, as a model for development and implementation of the Illicit Discharges and Improper Disposal Program. The following elements shall be included in the SWMP and comply with the schedules contained in Table I.E:
- (i) Illicit discharges to the MS4 are prohibited, and any such discharge subject to the NPDES permitting program violates the Clean Water Act §301(a) prohibition on discharge of pollutants without an NPDES permit and remains in violation until eliminated (or becoming authorized under an NPDES permit). The permittees shall prohibit through ordinance or

other regulatory mechanism, non-stormwater discharges into the stormwater system and implementation of appropriate enforcement procedures and actions (including enforcement escalation procedures for recalcitrant or repeat offenders). The program must include procedures for coordination with adjacent municipalities and/or state, tribal, or federal regulatory agencies to address situations where investigations indicate the illicit discharge originates outside the MS4s jurisdiction. If an illicit discharger fails to comply with procedures or policies established by the permittee, the permittee may rely on EPA and the state environmental agency for assistance in enforcement of this provision of the permit.

Upon detection (including receipt of notification by any party of an illicit discharge), the permittee shall investigate suspected significant and/or severe illicit discharges within forty-eight (48) hours and all other suspected illicit discharges at the earliest time practicable. The permittee shall eliminate such discharges as expeditiously as possible; and, require immediate cessation of illicit discharges upon confirmation of responsible parties in accordance with its legal authorities. Where elimination of an illicit discharge within thirty (30) days of its confirmation is not possible, the permittee shall establish an expeditious schedule for its elimination. No later than six (6) months after confirmation, such discharges shall be eliminated or appropriate enforcement actions shall be initiated by the permittee. In the interim, the permittee shall take all reasonable and prudent measures to control the discharge of pollutants to its MS4 from the identified illicit source(s).

- (ii) The sources of non-stormwater listed in Part I.A.3 of this permit need not be eliminated from discharging to the MS4 provided that the permittee determines that these discharges are not significant contributors of pollutants to the MS4. These non-stormwater discharges must not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the MS4 (e.g. a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies; controls on the wash water, etc.). Discharges regulated by a separate NPDES permit and discharges for which an NPDES permit application has been submitted need not be addressed as illicit discharges by the permittees nor prohibited from entering the Municipal Separate Storm Sewer System.
- (iii) The permittee shall review complaint records for the past permit term and develop a targeted source reduction program for those categories of illicit discharge/improper disposal incidents, that have occurred more than twice in two (2) or more years from different locations, e.g., for improper disposal of paint waste: provide targeted outreach to painting contractors, develop handout regarding proper brush cleaning to be provided to all building supply stores upon sale of paint and brushes; for improper used oil disposal: develop handout for auto parts stores to provide upon sale of oil filters and motor oil, etc.
- (iv) The permittee (NMDOT) shall review within six (6) months, and expeditiously revise as necessary, within no more than two (2) years, the existing permitting/certification program to ensure that any entity applying for the use of Right of Way implements controls in their construction and maintenance procedures to control pollutants entering the MS4.
- (v) The Illicit Discharge Detection and Elimination (IDDE) program shall be a written document revised as necessary to be inclusive of the elements described below. If the IDDE program does not contain all the elements outlined in this permit, the IDDE program shall include written documentation or rationale as to why an element is not applicable to the permittee. The permittee shall maintain all records used to develop the IDDE program as described in Part I.C.7.
 - (1) The permittee shall implement the IDDE program to prohibit illicit discharges and investigate suspected illicit discharges. The written IDDE program shall include a reference or citation of the authority the permittee will use to implement all aspects of the IDDE program. Failure to have exercised authority granted under State law (e.g., ability to pass ordinances) shall not be considered a lack of legal authority.
 - (2) The permittees shall maintain a map of their portion of the MS4 identifying all discharge points into waters of the United States and into major drainage channels draining more than twenty (20) percent of the MS4 area (City of Albuquerque only). To make the IDDE

system more effective and less costly to administer in the long term, the permittees are strongly encouraged to record the system map and basin delineation on a Geographic Information System (GIS) mapping system. Once delineated, each catchment or basin shall be assessed based on currently available data to determine the potential for illicit discharges.

If the boundaries of the catchment or basin extend beyond the boundaries of the MS4, the permittee is encouraged to work with neighboring MS4s to ensure an accurate assessment for potential illicit discharges.

The permittee shall delineate the MS4 into catchments or basins and assess the illicit discharge potential of all catchments or basins. The permittee may draw from existing information about the MS4 for initial characterization of the illicit discharge potential of all catchments or basins of the MS4. In the situation where there are known illicit discharges, the permittee shall identify these catchments or basins as Problem Catchments/Basins.

Within one (1) year, the permittee shall develop and submit to EPA and NMED (and Pueblo of Sandia for North Diversion Channel only) an initial priority ranking of the MS4 catchments or basins. EPA recommends that the permittee consider the perceived severity of the known or suspected pollution, the current or intended uses of receiving waters, and impairment status in the development of its priority ranking. For each Problem Catchment/Basin, the permittee shall provide all available documented evidence, including monitoring results, of illicit discharges and sewer overflows; completed, ongoing or planned corrective measures addressing the documented illicit discharges and sewer overflows; and, a schedule for completing and verifying measures correcting the documented illicit discharges and sewer overflows.

- (3) The permittee shall implement specific inspection, screening, monitoring and response/enforcement activities to support the permittee's required assessments of its SWMP, and to complete requirements of the IDDE Program.

Upon the effective date of this permit, the permittee shall begin implementation of activities described in this part. The permittee shall complete implementation of the IDDE activities, described in this part, for one-third (1/3) of its total MS4 service area no later than three (3) years from the effective date of this permit and for 100 percent of the MS4 within five (5) years from the effective date of this permit. The permittee shall cause the removal of all identified illicit discharges and sewer overflows pursuant to Part I.C.5.e of this permit. Within six (6) months, of the effective date of this permit, the permittee shall submit as part of its updated SWMP, a description of the means, methods, quality assurance and controls protocols, and schedule for successfully implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected.

- (a) The permittee shall update a written systematic procedure for system screening, follow-up activities to locate source of suspected illicit discharges, or improper disposal, eliminating or requiring elimination of illicit discharges (including enforcement procedures) and to document the elimination of the illicit connection or discharge. Screening frequencies for individual basins shall be based on the priority ranking within the MS4 system. Priorities for activities for further investigation and elimination of illicit discharges and improper disposal shall be based on the results of dry weather field screening, the magnitude and nature of the suspected discharge, the sensitivity of the receiving water, and/or other relevant factors. System screening procedures may be a combination of testing, visual monitoring and/or evaluation for basins with low potential based on past history and initial screening results. The permittee shall take into account any limitations regarding accessibility of the monitoring locations such as safety and access to private property when developing this procedure. The written systematic procedure shall be updated as soon as possible, but no later than six (6) months from the effective date of the permit.
- (b) The permittee shall begin systematically locating illicit discharges using the procedure developed in accordance with this part no later than one (1) year from the

effective date of the permit. The permittee is required to complete the IDDE activities implementation for Problem Catchments defined in Part I.C.5.e.(v)(2) within three (3) years and for the remainder of the system within five (5) years from the effective date of the permit.

- (4) Methods for informing the general public of hazards associated with illegal discharges and improper disposal of waste, including training for public employees.
- f. Control of Floatables Discharges (e.g. litter and other human-generated solid refuse). The floatables control program shall include source controls and, where necessary, structural controls. Permittees shall include the following elements in the SWMP and comply with the schedules contained in Table I.F:
- (i) synthesize findings from the 2005 AMAFCA/COA Floatable and Gross Pollutant Study to develop a schedule for implementation of controls or additional study; and
 - (ii) estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type.
- g. Waste Collection Programs. Programs to collect used motor vehicle fluids (at a minimum, oil and antifreeze) for recycle, reuse, or proper disposal, and to collect household hazardous waste materials (including paint, solvents, fertilizers, pesticides, herbicides, and other hazardous materials) for recycle, reuse, or proper disposal. Such programs shall be readily available to all private residents and shall be publicized and promoted on a regular basis. Where available, collection programs operated by third parties or co-permittees may be a component of the programs. Permittees shall enhance these programs by establishing the following elements as a goal in the SWMP and comply with the schedules contained in Table I.G:
- (i) Increasing the frequency of the collection days hosted;
 - (ii) Expanding the program to include commercial fats, oils and greases; and
 - (iii) Coordinating program efforts between applicable permittee departments.
- h. Spill Prevention and Response. The permittee shall continue implementation of the program to prevent, contain, and respond to spills that may discharge into the MS4, and enhance as necessary.
- (i) Where discharge of material resulting from a spill is necessary to prevent loss of life, personal injury, or severe property damage, the permittee(s) shall take, or insure the party responsible for the spill takes, all reasonable steps to control or prevent any adverse effects to human health or the environment.
 - (ii) The spill response program may include a combination of spill response actions by the permittee(s) (and/or another public or private entity), and legal requirements for private entities within the permittee's municipal jurisdiction.
- i. Public Education and Outreach on Stormwater Impacts. The permittees shall continue implementation of the joint public education program, assess the overall success of the program, and document both direct and indirect measurements of program effectiveness in annual reporting required in Part III.H. The program shall include the following elements in the SWMP and comply with the schedules contained in Table I.H:
- (i) increase public awareness about stormwater pollution including its causes and effects, and actions that citizens, commercial, industrial and institutional entities may take to control the impact of stormwater pollution on water quality;
 - (ii) promote, publicize and facilitate the various elements of the SWMP through varied public education and outreach methods including public websites. The permittee shall make information available for non-English speaking residents, where appropriate;
 - (iii) disseminate information to the general public regarding the proper handling, disposal and recycling of used motor vehicle fluids, household hazardous waste, grass clippings, car wash waters, and proper use of fertilizers, pesticides, and herbicides, and oil and toxics used on roadways, including information on the steps to report illicit discharges and/or improper disposal of materials;

- (iv) educate pet owners about proper disposal of pet waste; and
- (v) educate owners and operators of commercial, industrial, and institutional facilities regarding their responsibility to control pollutants in stormwater discharges from their property to the MS4;

Where necessary the existing program shall be modified or revised to include:

- (1) a detailed description of the program and outreach activities, including methods for disseminating information; target audiences; target pollutants and sources addressed in the program; how target pollutants and sources were selected; estimation of people with whom you intend to communicate; and a schedule and/or frequency of activities;
- (2) the development and implementation of a program to promote, publicize and facilitate the use of Green Infrastructure Practices;
- (3) an examination of impediments to implementing an integrated public education program (including all permittee departments and programs within the MS4) regarding litter reduction, recycling and proper disposal (including yard waste, HHW, and used motor vehicle fluids), and green infrastructure practices (including xeriscaping, reduced water consumption, and subsequent reduction in pesticide/herbicide use);
- (4) a plan to leverage resources by combining outreach efforts with small MS4s in the Albuquerque Urbanized area; and
- (5) a plan to target outreach to stakeholders such as the Middle Rio Grande Water Quality Work Group, the Middle Rio Grande Bosque Initiative, the Middle Rio Grande Endangered Species Act Collaborative Program, the Middle Rio Grande-Albuquerque Reach Watershed Group, as well as the Pueblos of Sandia and Isleta and Albuquerque Bernalillo County Water Utility Authority.

For the purposes of this permit:

- (vi) Traditional municipal entities such as cities, counties and tribes, etc. must address the general public being served by the MS4;
 - (vii) Nontraditional municipalities such as universities, hospital complexes, prisons, special districts, etc. and federal facilities must address the community served by the MS4. For example, a university must address the faculty, other staff, students, and visitors, while military base must address military personnel (and dependents), contractors, employees, tenants, visitors, etc; and
 - (viii) Departments of transportation must address the community working on or served by the transportation network within the MS4 including employees, contractors, and the general public.
- j. Public Involvement and Participation. The permittee shall develop and implement, within one (1) year, a plan to encourage public involvement and provide opportunities for participation in the review, modification and implementation of the SWMP; develop and implement a process by which public comments to the plan are received and reviewed by the person(s) responsible for the SWMP; and, make the SWMP available to the public and to the operator of any MS4 or Tribal authority receiving discharges from the MS4. The plan shall include the following elements in the SWMP and comply with the schedules contained in Table I.I:
- (i) a detailed description of the general plan for informing the public of involvement and participation opportunities, including types of activities; target audiences; how interested parties may access the SWMP; and how the public was involved in development of the SWMP;
 - (ii) the development and implementation of at least one (1) assessment of public behavioral change following a public education and/or participation event;
 - (iii) a process to solicit involvement by environmental groups and civic organizations interested in water quality-related issues, including but not limited to the Middle Rio Grande Water Quality Work Group, the Middle Rio Grande Bosque Initiative, the Middle Rio Grande Endangered Species Act Collaborative Program, the Middle Rio Grande-Albuquerque Reach Watershed

Group, the Pueblos of Sandia and Isleta, Albuquerque Bernalillo County Water Utility Authority, UNM Colleges and Schools, and Chartered Student Organizations; and,

- (iv) an evaluation of opportunities to utilize volunteers for stormwater pollution prevention activities and awareness throughout the metropolitan area.

6. **Stormwater Management Program Review and Modification.**

- a. **Program Review.** Each permittee shall participate in an annual review of its SWMP in conjunction with preparation of the annual report required in PART III.H. Results of the review shall be discussed in the annual report and shall include an assessment of:
 - (i) SWMP implementation, progress in achieving measurable goals, and compliance with program elements and other permit conditions;
 - (ii) the effectiveness of its SWMP, and any necessary modifications, in complying with the permit, including requirements to control the discharge of pollutants, and comply with water quality standards and any applicable approved TMDLs; and the adequacy of staff, funding levels, equipment, and support capabilities to fully implement the SWMP and comply with permit conditions.
 - (1) Project staffing requirements, in man hours, for the implementation of the MS4 program during the upcoming year.
 - (2) Staff man hours used during the previous year for implementing the MS4 program. Man hours may be estimated based on staff assigned, assuming a forty (40) hour work week.
- b. **Program Modification.** The permittee(s) may modify its SWMP with prior notification or request to the EPA and NMED in accordance with this section.
 - (i) Modifications adding, but not eliminating, replacing, or jeopardizing fulfillment of any components, controls, or requirements of its SWMP may be made by the permittee(s) at any time upon written notification to the EPA.
 - (ii) Modifications replacing or eliminating an ineffective or unfeasible component, control or requirement of its SWMP, including monitoring and analysis requirements described in Part V, may be requested in writing at any time. If request is denied, the EPA will send a written explanation of the decision. Modification requests shall include the following:
 - (1) a description of why the SWMP component is ineffective, unfeasible (including cost prohibitions), or unnecessary to support compliance with the permit;
 - (2) expectations on the effectiveness of the proposed replacement component; and
 - (3) an analysis of how the proposed replacement component is expected to achieve the goals of the component to be replaced.
 - (iii) Modifications resulting from schedules contained in PART VI may be requested following completion of an interim task or final deadline.
 - (iv) Modification requests or notifications shall be made in writing, signed in accordance with PART IV.H by all directly affected permittees, and include a certification that all permittees were given an opportunity to comment on the proposed modification prior to submittal to the EPA.
- c. **Program Modifications Required by EPA.** Modifications requested by EPA shall be made in writing, set forth the time schedule for the permittee(s) to develop the modifications, and offer the permittee(s) the opportunity to propose alternative program modifications to meet the objective of the requested modification. The EPA may require changes to the SWMP as needed to:
 - (i) Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;
 - (ii) Include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements; or
 - (iii) Include such other conditions deemed necessary by the EPA to comply with the goals and requirements of the Clean Water Act.

- d. Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation: The permittee(s) shall implement the SWMP:
- (i) On all new areas added to their portion of the MS4 (or for which they become responsible for implementation of stormwater quality controls) as expeditiously as possible, but not later than one (1) year from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately;
 - (ii) Within ninety (90) days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the permittee(s) shall have a plan for implementing the SWMP on all affected areas. The plan may include schedules for implementation; and
 - (iii) Information on all new annexed areas and any resulting updates required to the SWMP shall be submitted in the annual report.

7. Retention of Program Records. The permittee shall retain SWMP records developed in accordance with Part I.D and Part VI for at least five (5) years after coverage under this permit terminates.

PART II. NUMERIC DISCHARGE LIMITATIONS

A. DISCHARGE LIMITATIONS: Reserved

PART III. MONITORING AND REPORTING REQUIREMENTS

A. STORM EVENT DISCHARGE MONITORING

1. **Representative Monitoring.** Monitoring shall be conducted on representative outfalls, internal sampling stations, and/or in-stream monitoring locations to characterize the quality of stormwater discharges from the MS4.
 - a. Monitoring Requirements: Refer to Tables XII.A and XII.B
 - b. Monitoring Location Descriptions: Refer to Table XII.C
 - c. Alternate representative monitoring locations may be substituted for just cause during the term of the permit. Requests for approval of alternate monitoring locations shall be made to the EPA in writing and include the rationale for the requested monitoring station relocation. Unless disapproved by the EPA, use of an alternate monitoring location (except for those with numeric effluent limitations) may commence thirty (30) days from the date of the request. For monitoring locations where numeric effluent limitations have been established, the permit must be modified prior to substitution of alternate monitoring locations. Six (6) samples shall be collected during the first year of monitoring at substitute monitoring locations.
2. **Representative Monitoring - Rapid Bioassessment Option.** The permittee(s) has the option of developing and implementing a rapid bioassessment monitoring program.
 - a. The permittee(s) shall obtain all necessary aquatic wildlife collection permits from appropriate State, Tribal and/or Federal agencies.
 - b. Permittee(s) utilizing the rapid bioassessment monitoring option shall conduct monitoring of the separate storm sewer system as described in Part III.A.1, except bacteria.
 - c. If the permittee(s) elects to develop and implement a rapid bioassessment monitoring program, the permittee(s) shall submit an approvable monitoring program to EPA no later than one (1) year from the effective date of this permit. An approvable program must include:
 - i. Monitoring of at least two (2) locations in the Rio Grande receiving, directly or indirectly, stormwater discharges from the MS4 plus a reference site located within the same ecological region as the MS4; and
 - ii. Monitoring of each station at least twice per year, with monitoring conducted at essentially the same time periods each year.
 - d. Unless disapproved by the EPA within sixty (60) days, a proposed rapid bioassessment monitoring plan meeting the criteria herein shall be deemed approved and the permittee(s) may implement the alternate rapid bioassessment program.
 - e. The permittee(s) shall notify the EPA and NMED (addresses provided in Part III.J, in writing, at least fourteen (14) days prior to commencing an alternate rapid bioassessment monitoring program.
3. **Additional Monitoring Sites.** Within six (6) months of the permit effective date, the permittee(s) shall develop a plan utilizing wet and dry weather screening, industrial and high risk monitoring, and representative monitoring results to identify at least three (3) additional monitoring sites within the MS4.
 - a. Additional monitoring sites shall be located at sensitive areas or areas indicated as potential sources of pollution to the MS4.
 - b. Monitoring may be for specific pollutants and for abbreviated periods of time.
 - c. The SWMP shall be updated to include the additional monitoring sites identified. Monitoring of pollutants listed at Tables XII.A and XII.B shall comply with the required monitoring frequency beginning with the subsequent monitoring period or follow the monitoring strategy (pollutants and

monitoring frequency) developed in accordance with Part III.A.3.b above. Monitoring results shall be reported in the Annual Report.

4. **Storm Event Data.** For Part III.A.1 and any additional sampling conducted for Part III.A.3, quantitative data shall be collected to estimate pollutant loadings and event mean concentrations for each parameter sampled. Records shall be maintained of all analytical results, the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

5. **Sample Type, Collection, and Analysis.** The following requirements apply only to storm event discharge samples collected for Parts III.A.1 and III.A.3.

a. **Composite Samples:** Flow-weighted composite samples shall be collected as follows:

- i. **Composite Method** – Flow-weighted composite samples may be collected manually or automatically. For both methods, equal volume aliquots may be collected at the time of sampling and then flow-proportioned and composited in the laboratory, or the aliquot volume may be collected based on the flow rate at the time of sample collection and composited in the field.
- ii. **Sampling Duration** – Samples shall be collected for at least the first three (3) hours of discharge. Where the discharge lasts less than three (3) hours, the entire discharge must be sampled.
- iii. **Aliquot Collection** – A minimum of three (3) aliquots per hour, separated by at least fifteen (15) minutes, shall be collected. Where more than three (3) aliquots per hour are collected, comparable intervals between aliquots shall be maintained (e.g. six aliquots per hour, at least seven (7) minute intervals).

b. **Grab Samples:** Grab samples shall be taken during the first two (2) hours of discharge.

c. **Representative Storm Events:** Samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least seventy-two (72) hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

The required seventy-two (72) hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge. The required seventy-two (72) hour storm event interval is also waived where the permittee(s) documents that less than a seventy-two (72) hour interval is representative for local storm events during the season when sampling is being conducted.

d. **Analytical Methods:** Analysis and collection of samples shall be done in accordance the methods specified at 40 CFR §136. Where an approved 40 CFR §136 method does not exist, any available method may be used unless a particular method or criteria for method selection (such as sensitivity) has been specified in the permit. The minimum quantification levels (MQLs) at Table XII.B are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

6. **Seasonal Loadings and Event Mean Concentrations.** All necessary sampling data shall be collected to provide estimates for each major outfall (or appropriate sub-watershed) of seasonal pollutant loadings and event mean concentrations for a representative storm event for the parameters listed in Table XII.A - Representative Monitoring Annual Requirements and XII.B – Representative Monitoring Biennial Requirements. This information may be estimated from the representative monitoring locations and shall take into consideration land uses and drainage areas for the outfall. A cumulative estimate of seasonal loadings and event mean concentrations shall be developed each year and reported in each annual report.

B. FLOATABLES MONITORING. The permittees shall establish locations for monitoring floatable material in discharges to and/or from their MS4. Floatable material shall be monitored at least twice per year, as described at Part VI, Table VII and below, and the amount of collected material shall be estimated in cubic yards.

1. Albuquerque/AMAFCA - two (2) stations (one (1) station should be located in the North Diversion Channel system above the Pueblo of Sandia), and
2. NMDOT and UNM - one (1) station each.

C. INDUSTRIAL AND HIGH RISK RUNOFF MONITORING. Each permittee shall monitor stormwater discharges from Type 1 and 2 industrial facilities which discharge to the MS4 provided such facilities are located in their jurisdiction. (Note: If no such facilities are in a co-permittee's jurisdiction, that co-permittee may certify that this program element does not apply.) Permittees shall:

1. Conduct analytical monitoring of Type 1 facilities that discharge to the MS4. Type 1 facilities are municipal landfills; hazardous waste treatment, disposal and recovery facilities; facilities that are subject to EPCRA Title III, Section 313; and industrial facilities the permittee(s) determines are contributing a substantial pollutant loading to the MS4.
 - a. The following parameters shall be monitored:
 - any pollutants limited in an existing NPDES permit for a subject facility;
 - oil and grease;
 - chemical oxygen demand (COD);
 - pH;
 - biochemical oxygen demand, five-day (BOD₅);
 - total suspended solids (TSS);
 - total phosphorous;
 - total Kjeldahl nitrogen (TKN);
 - nitrate plus nitrite nitrogen;
 - any discharge information required under 40 CFR §122.21(g)(7)(iii) and (iv);
 - total cadmium;
 - total chromium;
 - total copper;
 - total lead;
 - total nickel;
 - total silver;
 - total zinc; and,
 - PCBs.
 - b. Frequency of monitoring shall be established by the permittee(s), but may not be less than once per year;
 - c. In lieu of the above parameter list, the permittee(s) may alter the monitoring requirement for any individual Type 1 facility:
 - i. To coincide with the corresponding industrial sector-specific monitoring requirements of the 2008 Multi-Sector General Stormwater Permit or any applicable general permit issued after September 2008. This exception is not contingent on whether a particular facility is actually covered by the general permit; or
 - ii. To coincide with the monitoring requirements of any individual permit for the stormwater discharges from that facility, and
 - iii. Any optional monitoring list must be supplemented by pollutants of concern identified by the permittee(s) for that facility.
2. Conduct appropriate monitoring (e.g. analytic, visual), as determined by the permittee(s), at Type 2 facilities that discharge to the MS4. Type 2 facilities are other municipal waste treatment, storage, or disposal facilities (e.g. POTWs, transfer stations, incinerators) and industrial or commercial facilities the permittee(s) believed contributing pollutants to the MS4. The permittee shall include in

each annual report, a list of parameters of concern and monitoring frequencies required for each type of facility;

3. May use analytical monitoring data, on a parameter-by-parameter basis, that a facility has collected to comply with or apply for a State or NPDES discharge permit (other than this permit), so as to avoid unnecessary cost and duplication of effort;
4. May allow the facility to test only one (1) outfall and to report that the quantitative data also apply to the substantially identical outfalls if:
 - a. A Type 1 or Type 2 industrial facility has two (2) or more outfalls with substantially identical effluents, and
 - b. Demonstration by the facility that the stormwater outfalls are substantially identical, using one (1) or all of the following methods for such demonstration. The NPDES Stormwater Sampling Guidance Document (EPA 833-B-92-001), available on EPA's website at [provides detailed guidance on each of the three options: \(1\) submission of a narrative description and a site map; \(2\) submission of matrices; or \(3\) submission of model matrices.](#)
5. May accept a copy of a "no exposure" certification from a facility made to EPA under 40 CFR §122.26(g), in lieu of analytic monitoring.

D. TOXICITY MONITORING TO PROTECT LISTED THREATENED AND ENDANGERED SPECIES (24-HOUR ACUTE NOEC FRESHWATER). It is unlawful and a violation of this permit for a permittee or a designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA or NMED.

1. Conduct monitoring to collect samples and test stormwater for its toxic effects on the fathead minnow (*Pimephales promelas*) and *daphnia pulex*. The monitoring strategy shall include all elements of Part III.D and specific requirements in Part VI, Table VIII:
 - a. include monitoring of one (1) storm event per year, at minimum, for the NPDES permit term,
 - b. comply with EPA 24-hour LC₅₀ acute toxicity monitoring and testing described below,
 - c. provide EPA with monitoring data, in accordance with the annual reporting requirements in PART III.H,
 - d. notify the EPA immediately upon the detection of any toxicity (addresses provided in Part III.J). Toxicity is defined as an LC₅₀ of <100 percent effluent, and
 - e. compile a final report to be submitted to EPA four (4) years and six (6) months from the effective date of that permit that contains:
 - i. all results of toxicity testing,
 - ii. an evaluation of the toxicants (if any), and
 - iii. the permittees actions to eliminate that toxicity, including activities ongoing during the current permit term and any needed activities which would extend past the five (5) year permit term.

2. Scope and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO:	North Diversion Channel where it enters the main channel of the Rio Grande, with permission of the Pueblo of Sandia
CRITICAL DILUTION (%):	100%
EFFLUENT DILUTION SERIES (%):	0%, 12.5%, 25%, 50% 75%, 100%
SAMPLE TYPE:	Grab

TEST SPECIES/METHODS:

40 CFR §136

Daphnia pulex acute static non-renewal 24-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static non-renewal 24-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The LC₅₀ is defined as the effluent concentration which causes fifty (50) percent or greater mortality at the end of the exposure period. Test failure is defined as a demonstration fifty (50) percent or greater mortality at test completion (24 hours).
- c. This permit may be reopened to require whole effluent toxicity limitations, chemical specific effluent limitations, additional testing, and/or other appropriate actions to address toxicity.
- d. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report (addresses provided in Part III.G) the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within five (5) business days of notification the test failure. EPA will determine appropriate action if necessary.

3. **Required Toxicity Testing Conditions**

- a. Test Acceptance: The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:
 - i. Each toxicity test control (0% effluent) must have a survival equal to or greater than ninety (90) percent.
 - ii. The percent coefficient of variation between replicates shall be forty (40) percent or less in the control (0% effluent) for: *Daphnia pulex* survival test; and Fathead minnow survival test.
 - iii. The percent coefficient of variation between replicates shall be forty (40) percent or less in the critical dilution, unless significant lethal effects are exhibited for: *Daphnia pulex* survival test; and Fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than forty (40) percent. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

- b. Statistical Interpretation: For the *Daphnia pulex* survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the LC₅₀ EPA-821-R-02-012 or the most recent update thereof.
- c. Samples and Composites
 - i. The permittee shall collect one (1) grab composite sample from the monitoring location listed at Item 2.a above.
 - ii. The maximum holding time for any effluent sample shall not exceed thirty-six (36) hours. The toxicity test must be initiated within thirty-six (36) hours after the collection of grab sample. Samples shall be chilled to six (6) degrees Centigrade during collection, shipping, and/or storage.
 - iii. The permittee must collect samples such that the effluent samples are representative of any periodic storm event discharged on an intermittent basis.

4. Reporting

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA-821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART IV.P of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- b. A valid test for each species must be reported during each reporting period specified in PART III.H of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE (1) set of biomonitoring data for each species is to be recorded for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached for review.
- c. The permittee shall report the following results of each valid toxicity test. Submit retest information, if required, clearly marked as such. Only results of valid tests are to be reported.
 - i. *Pimephales promelas* (Fathead minnow)
 - 1) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution.
 - 2) Report the NOEC value for survival.
 - 3) Report the highest (critical dilution or control) Coefficient of Variation.
 - ii. *Daphnia pulex*
 - 1) If the NOEC for survival is less than the critical dilution.
 - 2) Report the NOEC value for survival.
 - 3) Report the highest (critical dilution or control) Coefficient of Variation.

E. WET WEATHER SCREENING OF MS4. Each permittee shall identify, investigate, and address areas within its jurisdiction that may be contributing excessive levels of pollutants to the Municipal Separate Storm Sewer System as a result of wet weather discharges. Results of the wet weather screening shall be provided in each annual report. The wet weather screening program shall be described in the SWMP and comply with the schedules contained in Table IX:

1. shall screen one-third (1/3) of the drainage area of MS4 within three (3) years of the effective date of this permit and complete screening 100 percent of the MS4 within five (5) years;
2. shall include sufficient screening points to adequately assess pollutant levels from all areas of the MS4 and at least five (5) screening points along each major drainage channel that drains 20 percent or more of the land area within the City of Albuquerque;
3. shall screen for BOD₅, sediment or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil and Grease, nutrients, and any pollutant that has been identified as a cause of impairment of a waterbody receiving discharges from that portion of the MS4;
4. shall specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes. Sample collection and analysis need not conform to the requirements of 40 CFR Part 136;
5. An assessment of wet weather screening results (including data from the previous permit term) shall be performed and benchmarked against national stormwater databases and data collected for the representative monitoring program;
6. Wet weather monitoring shall be performed only when the predicted (or actual) rainfall magnitude of a storm event is greater than 0.25 inches and an antecedent dry period of at least forty-eight (48)

hours after a rain event greater than 0.1 inch in magnitude is satisfied. Monitoring methodology will consist of collecting a minimum of four (4) grab samples spaced at a minimum interval of fifteen (15) minutes each commencing as soon as practicable after discharge commences. Individual grab samples shall be preserved and delivered to the laboratory where samples will be combined into a single composite sample from each monitoring location; and,

7. At the time of sampling, the permittee shall record any observed erosion of stream banks, scouring or sedimentation in streams, such as sand bars or deltas.

F. DRY WEATHER DISCHARGE SCREENING OF MS4. Each permittee shall identify, investigate, and address areas within its jurisdiction that may be contributing excessive levels of pollutants to the Municipal Separate Storm Sewer System as a result of dry weather discharges (i.e., discharges from separate storm sewers that occur without the direct influence of runoff from storm events, e.g. illicit discharges, allowable non-stormwater, groundwater infiltration, etc.). Results of the assessment shall be provided in each annual report. This program may be coordinated with the illicit discharge detection and elimination program. The dry weather screening program shall be described in the SWMP and comply with the schedules contained in Table X:

1. shall screen one-third (1/3) of the drainage area of MS4 within three (3) years of the effective date of this permit and complete screening 100 percent of the MS4 within five (5) years;
2. shall include sufficient screening points to adequately assess pollutant levels from all areas of the MS4 and at least five (5) screening points along each major drainage channel that drains 20 percent or more of the land area within the City of Albuquerque;
3. shall screen for, at a minimum, BOD₅, sediment or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil and Grease, nutrients, and any pollutant that has been identified as a cause of impairment of a waterbody receiving discharges from that portion of the MS4;
4. shall specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes. Sample collection and analysis need not conform to the requirements of 40 CFR Part 136; and,
5. shall be performed only when an antecedent dry period of at least seventy-two (72) hours after a rain event greater than 0.1 inch in magnitude is satisfied. Monitoring methodology shall consist of collecting a minimum of four (4) grab samples spaced at a minimum interval of fifteen (15) minutes each. Grab samples will be combined into a single composite sample from each station, preserved, and delivered to the laboratory for analysis. A flow weighted automatic composite sample may also be used.

G. IMPAIRED RECEIVING WATERS WET WEATHER ASSESSMENT OF POTENTIAL WATER QUALITY IMPACTS. The permittees shall conduct wet weather monitoring to gather information on the response of impaired receiving waters to wet weather discharges from the MS4. Results of the assessment shall be provided in each annual report. The receiving water impact assessment program shall be described in the SWMP and comply with the schedules contained in Table XI:

1. shall perform annual in-stream wet weather monitoring for all constituents listed at Part VI, Tables XII.A and XII.B at all locations tributary to impaired waters (at the point where they enter the Rio Grande and if originating outside the MS4, where it enters the MS4) listed under CWA §303(d), plus one (1) location located upstream of the MS4. Specific monitoring locations shall be established by the permittee and may take advantage of monitoring stations/efforts utilized by the permittees or others and data collected at such stations to satisfy part, or all, of this requirement provided the data collection by that party meets the requirements of this part;
2. shall perform annual in-stream wet weather monitoring for the impaired water pollutant(s) of concern at one (1) location upstream of the MS4 and one (1) downstream of the last MS4 drainage area entering the impaired water;

3. shall perform wet weather monitoring for the impaired water pollutant(s) of concern at 100 percent of the MS4 drainage areas tributary to the impaired waterbody within five (5) years from the effective date and for at least one-third (1/3) of those MS4 areas within three (3) years;
4. wet weather monitoring shall be performed only when the predicted (or actual) rainfall magnitude of a storm event is greater than 0.25 inches and an antecedent dry period of at least forty-eight (48) hours after a rain event greater than 0.1 inch in magnitude is satisfied. Monitoring methodology will consist of collecting a minimum of four (4) grab samples spaced at a minimum interval of fifteen (15) minutes each. Individual grab samples shall be preserved and delivered to the laboratory where samples will be combined into a single composite sample from each monitoring location.
5. monitoring methodology at each MS4 monitoring location shall consist of a minimum of four (4) grab samples spaced at a minimum interval of fifteen (15) minutes each (or a flow weighted automatic composite), collected during any portion of the monitoring location's discharge hydrograph (i.e. first flush, rising limb, peak, and falling limb) after a discernable increase in flow at the tributary inlet. In order to accommodate the timely completion of all required monitoring, no minimum rainfall magnitude or antecedent dry period criterion need be established beyond the requirement that qualifying storm events be sufficient in magnitude to generate stormwater runoff and resultant discharge at the monitoring locations or discernable increased flow at tributary inlets to be monitored.

H. ANNUAL REPORT. Each permittee shall contribute to the preparation of an annual system-wide report to be submitted by no later than **April 1st**. The report shall cover the previous year from **January 1st to December 31st** and include the below separate sections, with an overview for the entire MS4 and subsections for each permittee. Additionally, the year one (1) and year four (4) annual report shall include submittal of a complete SWMP revision.

1. **SWMP(s) status of implementation:** shall include the status of compliance with all schedules established under this permit and the status of actions required in Parts I, III, and VI.
2. **SWMP revisions:** shall include revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application under 40 CFR §122.26(d)(2)(iv), §122.26(d)(2)(v), and §122.34 are to be included, as well as a cumulative list of all SWMP revisions during the permit term.
3. **Performance assessment:** shall include:
 - a. an assessment of performance in terms of measurable goals, including, but not limited to, a description of the number and nature of enforcement actions and inspections, public education and public involvement efforts;
 - b. a summary of the data, including monitoring data, that is accumulated throughout the monitoring year (**October 1 to September 30**); actual values of representative monitoring results shall be included, if results are above minimum quantification level (MQL); and
 - c. an identification of water quality improvements or degradation.
4. **Annual expenditures:** for the reporting period, with a breakdown for the major elements of the stormwater management program and the budget for the year following each annual report.
5. **Annual Report Responsibilities:** Preparation and submittal of a system-wide report shall be coordinated by the City of Albuquerque. The report shall indicate which, if any, permittee(s) have failed to provide the required information on the portions of the MS4 for which they are responsible to the City of Albuquerque.
 - a. Joint responsibility for report submission shall be limited to participation in preparation of the overview for the entire system and inclusion of the identity of any permittee who failed to provide input to the annual report.
 - b. Individual permittees shall be individually responsible for content of the report relating to the portions of the MS4 for which they are responsible and for failure to provide information for the system-wide annual report no later than March 1st of each year. The annual report shall be signed and certified, in accordance with Part IV.H and include a statement or resolution that the

permittee's governing body or agency (or delegated representative) has reviewed or been apprised of the content of the Annual Report. Annual report shall be due no later than April 1st of each year.

I. CERTIFICATION AND SIGNATURE OF REPORTS. All reports required by the permit and other information requested by the EPA shall be signed and certified in accordance with Part IV.H.

J. REPORTING: WHERE AND WHEN TO SUBMIT

1. Representative monitoring results (Part III.A.1) and toxicity monitoring results (Part III.D.1) obtained during the reporting period running from **October 1st to September 30th** shall be submitted on discharge monitoring report (DMR) forms along with the annual report required by Part III.H. For the representative monitoring results, a separate DMR form is required for each monitoring period (season) specified in Part III.A.1.

2. Signed copies of DMRs required under Part III, the Annual Report required by Part III.H, and all other reports required herein, shall be submitted to:

U.S. EPA, Region 6
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-WC)
1445 Ross Avenue
Dallas, Texas 75202-2733

3. Requests for SWMP updates, modifications in monitoring locations, or application for an individual permit shall, be submitted to:

U.S. EPA, Region 6
Water Quality Protection Division
Operations Support Office (6WQ-O)
1445 Ross Avenue
Dallas, Texas 75202-2733

4. Additional Notification. Permittee(s) shall also provide copies of DMRs, annual reports, requests for SWMP updates, items for compliance with permit requirements for TMDL implementation (Tables I, II.A, II.B.1 and 2, II.C, III, IV, and V), programs or changes in monitoring locations, and all other reports required herein, to:

New Mexico Environment Department
Surface Water Quality Bureau
1190 St. Francis Drive
P.O. Box 5469
Santa Fe, New Mexico 87502

Scott Bulgrin, Water Quality Manager
Pueblo of Sandia
481 Sandia Loop
Bernalillo, NM 87004

Natural Resources Department Director
Pueblo of Isleta
P.O. Box 1270
Isleta, NM 87022

PART IV. STANDARD PERMIT CONDITIONS

A. DUTY TO COMPLY. The permittee(s) must comply with all conditions of this permit insofar as those conditions are applicable to each permittee, either individually or jointly. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS. The EPA will adjust the Civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (Federal Register: Dec. 31, 1996, Volume 61, No. 252, pages 69359-69366, as corrected, March 20, 1997, Volume 62, No. 54, pages 13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every four years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties listed below were adjusted for inflation starting in 1996.

1. Criminal Penalties.

- a. **Negligent Violations:** The Act provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one (1) year, or both.
- b. **Knowing Violations:** The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than three (3) years, or both.
- c. **Knowing Endangerment:** The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than fifteen (15) years, or both.
- d. **False Statement:** The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two (2) years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both. (See Section 309(c)(4) of the Act).

2. **Civil Penalties.** The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$27,500 per day for each violation.

3. **Administrative Penalties.** The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

- a. **Class I penalty:** Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27,500.
- b. **Class II penalty:** Not to exceed \$11,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$137,500.

C. DUTY TO REAPPLY. If the permittee wishes to continue an activity regulated by this permit after the permit expiration date, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit. The EPA may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR §122.6 and any subsequent amendments.

D. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. DUTY TO MITIGATE. The permittee(s) shall take all reasonable steps to control or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. DUTY TO PROVIDE INFORMATION. The permittee(s) shall furnish to the EPA, within a time specified by the EPA, any information which the EPA may request to determine compliance with this permit. The permittee(s) shall also furnish to the EPA upon request copies of records required to be kept by this permit.

G. OTHER INFORMATION. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the EPA, he or she shall promptly submit such facts or information.

H. SIGNATORY REQUIREMENTS. For a municipality, State, or other public agency, all DMRs, SWMPs, reports, certifications or information either submitted to the EPA or that this permit requires be maintained by the permittee(s), shall be signed by either a:

1. principal executive officer or ranking elected official; or
2. duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the EPA.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
3. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written authorization satisfying the requirements of this paragraph must be submitted to the EPA prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification: Any person signing documents under this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I. PENALTIES FOR FALSIFICATION OF MONITORING SYSTEMS. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the Act.

J. OIL AND HAZARDOUS SUBSTANCE LIABILITY. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act or section 106 of CERCLA.

K. PROPERTY RIGHTS. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

L. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

M. REQUIRING A SEPARATE PERMIT.

1. The EPA may require any co-permittee authorized by this permit to obtain a separate NPDES permit. Any interested person may petition the EPA to take action under this paragraph. The Director may require any co-permittee authorized to discharge under this permit to apply for a separate NPDES permit only if the co-permittee has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form (as necessary), a statement setting a deadline for the co-permittee to file the application, and a statement that on the effective date of the separate NPDES permit, coverage under this permit shall automatically terminate. Separate permit applications shall be submitted to the address shown in Part III.J. The EPA may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit, prior to the deadline of the time extension, a separate NPDES permit application as required by the EPA, then the applicability of this permit to the co-permittee is automatically terminated at the end of the day specified for application submittal.

2. Any co-permittee authorized by this permit may request to be excluded from the coverage of this permit by applying for a separate permit. The co-permittee shall submit a separate application as specified by 40 CFR §122.26(d) with reasons supporting the request to the Director. Separate permit applications shall be submitted to the address shown in Part III.J. The request may be granted by the issuance of a separate permit if the reasons cited by the co-permittee are adequate to support the request.

N. STATE / ENVIRONMENTAL LAWS.

1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the Act.

2. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

O. PROPER OPERATION AND MAINTENANCE. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of stormwater management programs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

P. MONITORING AND RECORDS.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation,

copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the EPA at any time.

3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The time(s) analyses were initiated;
 - e. The initials or name(s) of the individual(s) who performed the analyses;
 - f. References and written procedures, when available, for the analytical techniques or methods used; and
 - g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

Q. MONITORING METHODS. Monitoring must be conducted according to test procedures approved under 40 CFR §136, unless other test procedures have been specified in this permit. The minimum quantification levels (MQLs) at Table XI.B are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

R. INSPECTION AND ENTRY. The permittee shall allow the EPA or an authorized representative of EPA, or the State, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substance or parameters at any location.

S. PERMIT ACTIONS. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

T. ADDITIONAL MONITORING BY THE PERMITTEE(S). If the permittee monitors more frequently than required by this permit, using test procedures approved under 40 CFR §136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

U. ARCHEOLOGICAL AND HISTORIC SITES. This permit does not authorize any stormwater discharges nor require any controls to control stormwater runoff which are not in compliance with any historic preservation laws.

1. In accordance with the Albuquerque Archaeological Ordinance (Section 2-12-2, 14-16-5, and 14-14-3-4), an applicant for either:
 - a. A preliminary platt for any subdivision that is five acres or more in size; or

- b. A site development plan or master development plan for a project that is five acres or more in size on property that is zoned SU-1 Special Use, IP Industrial Park, an SU-2 zone that requires site plan review, PC Planned Community with a site, or meets the Zoning Code definition of a Shopping Center must first obtain either a Certificate of No Effect or a Certificate of Approval from the City Archaeologist. Details of the requirements for a Certificate of No Effect or a Certificate of Approval are described in the ordinance. Failure to obtain a certificate as required by ordinance shall subject the property owner to the penalties of §1-1-99 ROA 1994.
2. If municipal excavation and/or construction projects implementing requirements of this permit will result in the disturbance of previously undisturbed land, and the project is not required to have a separate NPDES permit (e.g. general permit for discharge of stormwater associated with construction activity), then the permittee may seek authorization for stormwater discharges from such sites of disturbance by:
 - a. Submitting, thirty (30) days prior to commencing land disturbance, the following to the State Historic Preservation Officer (SHPO) and to appropriate Tribes and Tribal Historic Preservation Officers for evaluation of possible effects on properties listed or eligible for listing on the National Register of Historic Places:
 - i. A description of the construction or land disturbing activity and the potential impact that this activity may have upon the ground, and
 - ii. A copy of a USGS topographic map outlining the location of the project and other ancillary impact areas.
 - iii. The addresses of the SHPO and Sandia Pueblo are:

State Historic Preservation Officer
New Mexico Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, Ste. 236
Santa Fe, New Mexico 87501

Scott Bulgrin, Water Quality Manager
Pueblo of Sandia
481 Sandia Loop
Bernalillo, New Mexico 87004

Natural Resources Department Director
Pueblo of Isleta
P.O. Box 1270
Isleta Pueblo, New Mexico 87022
3. If the permittee receives a request for an archeological survey or notice of adverse effects from the SHPO, the permittee shall delay such activity until:
 - a. A cultural resource survey report has been submitted to the SHPO for a review and a determination of no effect or no adverse effect has been made, and
 - b. If an adverse effect is anticipated, measures to minimize harm to historic properties have been agreed upon between the permittee and the SHPO.
4. If the permittee does not receive notification of adverse effects or a request for an archeological survey from the SHPO within thirty (30) days, the permittee may proceed with the activity.
5. Alternately, the permittee may obtain authorization for stormwater discharges from such sites of disturbance by applying for a modification of this permit. The permittee may apply for a permit modification by submitting the following information to the Permitting Authority 180 days prior to commencing such discharges:

- a. A letter requesting a permit modification to include discharges from activities subject to this provision, in accordance with the signatory requirements in Part IV.H.
- b. A description of the construction or land disturbing activity and the potential impact that this activity may have upon the ground; County in which the facility will be constructed; type of facility to be constructed; size area (in acres) that the facility will encompass; expected date of construction; and whether the facility is located on land owned or controlled by any political subdivision of New Mexico; and
- c. A copy of a USGS topographic map outlining the location of the project and other ancillary impact areas.

PART V. PERMIT MODIFICATION

A. MODIFICATION OF THE PERMIT. The permit may be reopened and modified, in accordance with 40 CFR §122.62, §122.63, and §124.5, during the life of the permit to address:

1. Changes in the State's Water Quality Management Plan, including Water Quality Standards;
2. Changes in applicable water quality standards, statutes or regulations;
3. A new permittee who is the owner or operator of a portion of the MS4;
4. Changes in portions of the SWMP that are considered permit conditions;
5. Construction activities implementing requirements of this permit that will result in the disturbance of previously undisturbed land and not required to have a separate NPDES permit; or
6. Other modifications deemed necessary by the EPA to meet the requirements of the Act.

B. TERMINATION OF COVERAGE FOR A SINGLE PERMITEE. Permit coverage may be terminated, in accordance with the provisions of 40 CFR §122.64 and §124.5, for a single permittee without terminating coverage for other permittees.

C. MODIFICATION OF THE SWMP(s). Only those portions of the SWMPs specifically required as permit conditions shall be subject to the modification requirements of 40 CFR §124.5. Addition of components, controls, or requirements by the permittee(s); replacement of an ineffective or infeasible control implementing a required component of the SWMP with an alternate control expected to achieve the goals of the original control; and changes required as a result of schedules contained in Part VI shall be considered minor changes to the SWMP and not modifications to the permit. (See also Part I.C.6)

D. CHANGES IN REPRESENTATIVE MONITORING SITES. Changes in monitoring sites, other than those with specific numeric effluent limitations (as described in Part III.A.1.c), shall be considered minor modifications to the permit and shall be made in accordance with the procedures at 40 CFR §122.63.

PART VI. SCHEDULES FOR IMPLEMENTATION AND COMPLIANCE.

A. IMPLEMENTATION AND AUGMENTATION OF THE SWMP(s). The permittee(s) shall comply with all elements identified in Parts I and III, and the schedules contained in Tables I.A, I.B, I.C, I.D, I.E, I.F, I.G, I.H, I.I, II.A, II.B, II.C, III, IV, V, VI, VII, VIII, IX, X, XI, XII.A., XII.B, and XII.C for SWMP implementation and augmentation, and permit compliance. The EPA shall have sixty (60) days from receipt of a modification or augmentation made in compliance with Part VI to provide comments or request revisions. During the initial review period, EPA may extend the time period for review and comment. The permittee(s) shall have thirty (30) days from receipt of the EPA's comments or required revisions to submit a response. All changes to the SWMP or monitoring plans made to comply with schedules in Tables I.A, I.B, I.C, I.D, I.E, I.F, I.G, I.H, I.I, II.A, II.B, II.C, III, IV, V, VI, VII, VIII, IX, X, XI, XII.A, XII.B, and XII.C must be approved by EPA prior to implementation.

B. COMPLIANCE WITH EFFLUENT LIMITATIONS. Reserved.

C. REPORTING COMPLIANCE WITH SCHEDULES. No later than fourteen (14) days following a date for a specific action (interim milestone or final deadline) identified in the Part VI schedule(s), the permittee(s) shall submit a written notice of compliance or noncompliance to the EPA in accordance with Part III.J.

D. MODIFICATION OF THE SWMP(s). The permittee(s) shall modify its SWMP, as appropriate, in response to modifications required in Part VI.A. Such modifications shall be made in accordance with Part V.C.

TABLE I.A: Construction Site Stormwater Runoff Control

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.a, the permittee shall, in the Construction Site Stormwater Runoff Control Program, coordinate all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction activities within the permit area to ensure that the program controls or eliminates erosion and maintains sediment on site. The program shall address stormwater management during construction and include in the SWMP a description of the mechanism(s) utilized to comply with each of the following elements:</p> <ol style="list-style-type: none"> 1) an ongoing program to assess, implement, and enforce the existing program to control stormwater discharges from construction activities that result in a land disturbance of greater than or equal to one (1) acre. 2) a procedure or system to review, update, and/or enact an ordinance(s) or other appropriate legal authority mechanism, that addresses stormwater runoff from construction sites one (1) acre or greater, to require developers and construction site operators to implement an erosion and sediment control program, control waste and properly dispose of wastes. 3) procedures for review of all site plans and pre-construction review meetings that consider stormwater controls or management practices of potential water quality impacts and ensure consistency with local and State sediment and erosion control requirements. 4) a procedure for development of an application process whereby the construction site operator describes the sediment and erosion control measures to be taken on the site. 5) procedures for site inspection (during construction) and enforcement of control measures, including provisions to ensure proper construction, operation, maintenance, and repair. 6) a procedure for providing education and training for permittee personnel, developers, construction site operators, contractors and supporting personnel. 7) procedures for keeping records of and tracking all regulated construction activities within the MS4, i.e. site reviews, inspections, inspection reports, warning letters and other enforcement documents. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of permit effective date</p>
<p>8) update the "NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook" to be consistent with promulgated construction and development effluent limitation guidelines.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of issuance of the new Construction General Permit</p>
<p>9) conduct construction site inspections of 100 percent of construction projects each year. These inspections may be a component of a normal building inspection and may be tailored to the size and nature of the construction project. 10) include in each annual report, a summary of the number and frequency of site reviews, inspections and enforcement activities that are conducted annually and cumulatively during the permit term.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>
<p>B. Implementation of the program elements listed at A.1) through 10) above.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within one (1) year of permit effective date</p>

TABLE I.B: Post-Construction Stormwater Management in New Development and Redevelopment

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.b, the permittee shall, in the Post-Construction Stormwater Management in New and Redevelopment Program, coordinate all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private new development and redevelopment projects/activities within the permit area to ensure the hydrology associated with new development and redeveloped sites mimic the pre-development hydrology of the previously undeveloped site. The program shall address post-construction stormwater management and include the following elements in the SWMP:</p> <ol style="list-style-type: none"> 1) procedure or system to review and update, as necessary, the existing program to ensure that stormwater controls or management practices for new development and redevelopment practices/activities disturbing greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale, continue to meet the requirements and objectives of the permit. 2) procedure or system to review, update, and/or enact an ordinance(s) or other appropriate legal authority mechanism, as necessary to ensure implementation of the SWMP. 3) procedures for site inspection and enforcement to ensure proper long-term operation, maintenance, and repair of stormwater management practices that are put into place after the completion of construction projects/activities. 4) procedure to develop and implement an educational program for project developers regarding designs to control water quality effects from stormwater, and a training program for plan review staff regarding stormwater standards, site design techniques and controls, including training regarding Green Infrastructure practices. 5) assessment of all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of green infrastructure practices. 6) estimation of the number of acres of impervious area (IA) and directly connected impervious area (DCIA). 7) report of the assessment findings, which is to be used to provide information to the permittee, of the regulation changes necessary to remove impediments and allow implementation of green infrastructure practices. 8) citations and descriptions of design standards for structural and non-structural controls to control pollutants in stormwater runoff. Include discussion regarding methodology used during design for estimating impacts to water quality and for selecting appropriate structural and non-structural controls. 9) implementation and enforcement, via ordinance and/or other enforceable mechanism(s), of site design standards that capture the 90th percentile storm event runoff to ensure the hydrology associated with new development and redevelopment sites mimic the pre-development hydrology of the previously undeveloped site except in instances where compliance with the pre-development hydrology conflicts with state water rights appropriations requirements. 10) an inventory and priority ranking of MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within one (1) year of permit effective date</p>
<p>4) procedure to develop and implement an educational program for project developers regarding designs to control water quality effects from stormwater, and a training program for plan review staff regarding stormwater standards, site design techniques and controls, including training regarding Green Infrastructure practices.</p> <p>5) assessment of all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of green infrastructure practices.</p> <p>6) estimation of the number of acres of impervious area (IA) and directly connected impervious area (DCIA).</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within eighteen (18) months of permit effective date</p>
<p>7) report of the assessment findings, which is to be used to provide information to the permittee, of the regulation changes necessary to remove impediments and allow implementation of green infrastructure practices.</p> <p>8) citations and descriptions of design standards for structural and non-structural controls to control pollutants in stormwater runoff. Include discussion regarding methodology used during design for estimating impacts to water quality and for selecting appropriate structural and non-structural controls.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within two (2) years of permit effective date</p>
<p>9) implementation and enforcement, via ordinance and/or other enforceable mechanism(s), of site design standards that capture the 90th percentile storm event runoff to ensure the hydrology associated with new development and redevelopment sites mimic the pre-development hydrology of the previously undeveloped site except in instances where compliance with the pre-development hydrology conflicts with state water rights appropriations requirements.</p> <p>10) an inventory and priority ranking of MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within thirty (30) months of permit effective date</p>

<p>11) a summary and analysis of all maintenance, inspections and enforcement, and the number and frequency of inspections performed annually shall be included in each annual report.</p> <p>12) report the tabulated results of the number of acres of IA and DC/IA and its estimation methodology in the first annual report.</p> <p>13) estimations of the number of acres of IA and DC/IA that have been added or removed during the prior year shall be submitted beginning with the second year annual report and each subsequent annual report.</p> <p>14) a report on those MS4-owned properties and infrastructure that have been retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges shall be submitted beginning with the third year annual report and each subsequent annual report.</p> <p>15) a cumulative listing of the annual modifications made to the Post-Construction Stormwater Management Program during the permit term, and a cumulative listing of annual revisions to administrative procedures made or ordinances enacted during the permit term shall be included in each annual report.</p> <p>16) incorporation of watershed protection elements into all relevant policy and/or planning documents as they come up for regular review, yet no more than five years from the permit effective date.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>
--	---	-------------------------------

TABLE I.C: Pollution Prevention/Good Housekeeping for Municipal/Co-permittee Operations

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.c, the permittee shall review and enhance their current pollution prevention practices and develop new source control procedures to control the amount of pollutants in stormwater contributing to or discharging from its MS4. The program shall include the additional requirements listed in Part I.C.5.c for each of the below SWMP elements:</p> <ol style="list-style-type: none"> 1) maintenance activities, maintenance schedules, and long-term inspection procedures for measures to control floatables and other pollutants. 2) measures to control or eliminate the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt and sand storage locations and snow disposal areas. 3) procedures to properly dispose of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris. 4) procedure to insure that new flood management projects are assessed for impacts on water quality and existing projects are re-assessed for incorporation of additional water quality protection devices or practices. 5) procedures to control the discharge of pollutants related to: 1) the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public right-of-ways, parks, and other municipal property; and 2) commercial application and distribution of pesticides, herbicides, and fertilizers where permittee(s) hold jurisdiction over lands not directly owned by that entity (e.g. incorporated city). 6) procedures to control industrial runoff from facilities owned or operated by the permittees and ultimately discharge to the MS4. 7) development and implementation of an employee training program to incorporate pollution prevention and good housekeeping techniques into everyday operations and maintenance activities, including development of a tracking procedure. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within one (1) year of permit effective date</p>
<p>B. The permittee shall implement new program requirements listed in Part I.C.5.c, for the above-mentioned SWMP elements.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within eighteen (18) months of permit effective date</p>

TABLE I.D: Industrial and High Risk Runoff (Note: If no such facilities are in a co-permittee's jurisdiction, that co-permittee may certify that this program element does not apply.)

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.d, the permittee shall:</p> <ol style="list-style-type: none"> 1) continue implementation and enforcement of the Industrial and High Risk Runoff program; 2) assess the overall success of the program; and, 3) document both direct and indirect measurements of program effectiveness in annual reporting required in Part III.H. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>With each Annual Report during the permit term</p>

TABLE I.E: Illicit Discharges and Improper Disposal

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.e, the permittees shall implement and enforce an illicit discharge detection and elimination (IDDE) program to systematically detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) entering the MS4, and to implement defined procedures to prevent illicit connections and illegal dumping into the MS4. The program shall include the following elements in the SWMP:</p> <ol style="list-style-type: none"> 1) prohibition, through ordinance or other regulatory mechanism, of non-stormwater discharges into the stormwater system. 2) implementation of appropriate enforcement procedures and actions (including enforcement escalation procedures for recalcitrant or repeat offenders). 3) procedures for coordination with adjacent municipalities and/or state, tribal, or federal regulatory agencies to address situations where investigations indicate the illicit discharge originates outside the MS4 jurisdiction. 4) investigation of suspected significant/severe illicit discharges within forty-eight (48) hours of detection and all other discharges as soon as practicable; elimination of such discharges as expeditiously as possible; and, requirement of immediate cessation of illicit discharges upon confirmation of responsible parties. 5) review complaint records for the past permit term and develop a targeted source reduction program for those illicit discharge/improper disposal incidents that have occurred more than twice in two (2) or more years from different locations. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of permit effective date</p>
<p>6) review the existing permitting/certification program to ensure that any entity applying for the use of Right of Way implements controls in their construction and maintenance procedures to control pollutants entering the MS4.</p>	<p>NMDOT</p>	<p>Within six (6) months of permit effective date</p>
<p>B. As described in Part I.C.5.e(v), the permittee shall, in the IDDE Program:</p> <ol style="list-style-type: none"> 1) maintain adequate legal authority to implement the IDDE program to prohibit illicit discharges and investigate suspected illicit discharges. 2) maintain a map of their portion of the MS4 identifying all discharge points into waters of the United States and into major drainage channels draining more than twenty (20) percent of the MS4 area. 3) delineate the MS4 into catchments or basins; assess the illicit discharge potential of all catchments or basins; and begin 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Upon permit effective date</p>

<p>implementation of activities described in Part I.C.5.e(v)(3), unless otherwise noted, 4) implement methods for informing the general public of hazards associated with illegal discharges and improper disposal of waste, including training for public employees.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of permit effective date</p>
<p>5) submit as part of its updated SWMP, a description of the means, methods, quality assurance and controls protocols, and schedule for successfully implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected. 6) update a written systematic procedure as soon as possible, but no later than six (6) months, for system screening, follow-up activities to locate source of suspected illicit discharges, or improper disposal, eliminating or requiring elimination of illicit discharges and to document the elimination of the illicit connection or discharge.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within one (1) year of permit effective date</p>
<p>7) develop and submit to EPA and NMED (and Pueblo of Sandia for North Diversion Channel), an initial priority ranking of the MS4 catchments or basins. 8) begin systematically locating illicit discharges using the procedure developed in accordance with Part I.C.5.e.(v)(3)(b).</p>	<p>NMDOT</p>	<p>During the permit term</p>
<p>9) expeditiously revise as necessary, within no more than two (2) years, the existing permitting/certification program to ensure that any entity applying for the use of Right of Way implements controls in their construction and maintenance procedures to control pollutants entering the MS4. 10) enhance the existing program, within three (3) years, to utilize procedures and methodologies consistent with those described in "illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments." 11) complete implementation of the IDDE activities, described in Part I.C.5.e(v) for one-third of (1/3) its total MS4 service area no later than three (3) years from the permit effective date, and for 100 percent for the MS4 within five (5) years. 12) complete the IDDE activities implementation for Problem Catchments defined in Part I.C.5.e(v)(2) within three (3) years and for the remainder of the system with five (5) years from the effective date of the permit.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>

TABLE I.F: Control of Floatables Discharges

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.f, the permittee shall: 1) synthesize findings from the 2005 AMAFCA/COA Floatable and Gross Pollutant Study to develop a schedule for implementation of controls or additional study. 2) estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of permit effective date</p>

TABLE I.G: Waste Collection Programs

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.g, the permittee shall enhance programs for collecting motor vehicle fluids and household hazardous waste materials by:</p> <ol style="list-style-type: none"> 1) increasing the frequency of collection days hosted. 2) expanding programs to include commercial fats, and oils and greases. 3) coordinating program efforts between applicable permittee departments. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within two (2) years of permit effective date</p>

TABLE I.H: Public Education and Outreach on Stormwater Impacts

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.i, the existing Public Education and Outreach Program shall be modified to include:</p> <ol style="list-style-type: none"> 1) a detailed description of the program and outreach activities, including methods for disseminating information; target audiences; target pollutants and sources addressed in the program; how target pollutants and sources were selected; estimation of people with whom you intend to communicate; and a schedule and/or frequency of activities. 2) a plan to target outreach to stakeholders listed in Part I.C.5.i(v)(5). 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within six (6) months of permit effective date</p>
<ol style="list-style-type: none"> 3) the development and implementation of a program to promote, publicize and facilitate the use of green infrastructure practices. 4) an examination of impediments to implementing an integrated public education program regarding litter reduction, recycling and proper disposal, and green infrastructure practices. 5) a plan to leverage resources by combining outreach efforts with small MS4s in the Albuquerque Urbanized area. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within eighteen (18) months of permit effective date</p>

TABLE I.I: Public Involvement and Participation

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part I.C.5.j, the permittee shall:</p> <ol style="list-style-type: none"> 1) develop and implement a plan to encourage public involvement and provide opportunities for participation in the review, modification and implementation of the SWMP. 2) develop and implement a process by which public comments to the plan are received and reviewed by person(s) responsible for the SWMP. 3) make the SWMP available to the public and to the operator of any MS4 or Tribal Authority receiving discharges from the MS4. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within one (1) year of permit effective date</p>

TABLE II.A: Discharges to Impaired Waters – Implementation of New Bacteria TMDL, Approved by EPA on June 30, 2010

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. <u>Revision of Bacteria Target Values for Consistency with the New TMDL.</u> Review the current bacteria reduction program for consistency with new TMDL requirements and allocations. In consultation with NMED and EPA Region 6, revise target values included in the bacteria control plan, as necessary, based on the new TMDL. Adopt the new <i>E. coli</i> waste load allocations as measurable goals for the SWMP.</p> <p>1) Submit certification of completion of review and revisions.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within three (3) months of permit effective date</p>
<p>B. <u>Revision of Monitoring Program</u> In consultation with NMED and EPA Region 6, revise the bacteria monitoring program as necessary for consistency with the new TMDL.</p> <p>The revised monitoring program must:</p> <ol style="list-style-type: none"> 1) Use <i>E. coli</i> as the indicator parameter. 2) Provide information on discharges from all portions of the MS4 assigned a Waste Load Allocation (WLA) under the TMDL. The monitoring program may be a cooperative effort with other MS4 operators affected by the TMDL, may sample a portion of the system each year, and may include in-stream measurements as a component of the monitoring effort. The monitoring program must provide information on the entire system over the term of the permit sufficient to determine compliance with applicable WLAs and consistency with TMDL assumptions. Should the EPA-approved TMDL assign a WLA to the MS4 on a system-wide or area basis, the monitoring program may adopt a method for dividing the total WLA into an approximate partial allocation for comparison with data from the portion of the system being monitored (e.g. percent of total WLA compared to percentage of total area in the drainage being monitored). 3) Submit certification of completion of review and revisions. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>Within three (3) months of permit effective date</p>
<p>C. <u>Implementation of Revised Monitoring Program</u> Commence monitoring under the replacement <i>E. coli</i> TMDL monitoring program.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>With First year and subsequent Annual Reports</p>
<p>D. <u>Annual TMDL Progress Reports.</u> The permittees shall submit annual reports describing progress on the activities required in Table II.A to comply with the Bacteria TMDL. The reports shall follow the requirements included in Part III. Results of the monitoring program shall be summarized in the Annual TMDL Progress Report, and shall include graphic representation of bacteria trends, along with computations of annual percent reductions achieved from the baseline loads and comparisons with the target loads.</p>	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>With First year and subsequent Annual Reports</p>

TABLE II.B: Discharges to Impaired Waters -- TMDL Waste Load Allocations (WLA)² for *E. coli*: Rio Grande¹

Rio Grande Assessment Unit	FLOW CONDITIONS & ASSOCIATED WLA (cfu/day) ³			
	High	Moist	Mid-Range	Low
Isleta Pueblo boundary to Alameda Street Bridge (based on flow at USGS Station NM08330000)	3.36 x 10 ¹¹ >3360 cfs	8.41 x 10 ¹⁰ 929-3360 cfs	5.66 x 10 ¹⁰ 664-929 cfs	2.09 x 10 ¹⁰ 319-664 cfs
non-Pueblo Alameda Bridge to Angostura Diversion (based on flow at USGS Station NM08329928)	5.25 x 10 ¹⁰ >3670 cfs	1.52 x 10 ¹⁰ 922-3670 cfs	- 647-922 cfs	5.43 x 10 ⁹ 359-647 cfs

Formula to Compare Actual Loadings to Target Values

The resultant formula for Bacteria TMDL should be used to address *E. coli* loadings:

$$C \text{ as cfu/100 ml} * 1000 \text{ ml/1 L} / 0.264 \text{ gallons} * Q = \text{cfu/day}$$

Where:

- C = water quality standard criterion for bacteria
- Q = stream flow in million gallons per day (mgd)

¹ Total Maximum Daily Load for the Middle Rio Grande Watershed, NMED, 2010.
² The WLAs for the stormwater MS4 permit was based on the percent jurisdiction area approach. Thus, the MS4 WLAs are a percentage of the available allocation for each hydrologic zone, where the available allocation = TMDL - WLA - MOS.
³ Flow conditions relate to percent of days the flow in the Rio Grande at a USGS Gauge exceeds a particular level: High 0-10%; Moist 10-40%; Mid-Range 40-60%; Dry 60-90%; and Low 90-100%. (Source: Figures 4.3 and 4.4 in 2010 Middle Rio Grande TMDL)

TABLE III: Compliance with Water Quality Standards Requirement – Dissolved Oxygen

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. Develop and implement a strategy to reduce the discharge of pollutants entering the receiving waters of the Rio Grande that cause or contribute to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. Ensure the strategy complies with requirements in Part I.B.1.d.</p>	<p>Albuquerque AMAFCA</p>	<p>Initiate within two (2) months of effective date of permit</p>
<p>B. Submit schedule for the following activities:</p> <ol style="list-style-type: none"> 1) Identification of pollutants contributing to DO reductions in the receiving waters of the Rio Grande (and its tributaries within the City of Albuquerque) utilizing existing data and/or additional monitoring. 2) Development and implementation of controls to eliminate the discharge of pollutants entering the receiving waters of the Rio Grande (and its tributaries within the City of Albuquerque) that cause or contribute to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. <p>C. Provide status reports to EPA.</p> <ol style="list-style-type: none"> 1) Initial report to include: <ol style="list-style-type: none"> i. Findings regarding MS4 conveyed discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. ii. Conclusions drawn, including support for any determination. iii. Activities undertaken to eliminate MS4 conveyed discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. iv. Plan for stakeholder involvement. 	<p>Albuquerque AMAFCA</p>	<p>Within two (2) months of effective date of permit</p>
<ol style="list-style-type: none"> 2) Subsequent progress reports to include: <ol style="list-style-type: none"> i. Adherence to schedule. ii. Activities undertaken to identify MS4 discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. iii. Conclusions drawn, including support for any determinations. iv. Activities undertaken to eliminate MS4 discharge contribution to exceedances of applicable dissolved oxygen water quality standards in waters of the United States. v. Accounting of stakeholder involvement. 	<p>Albuquerque AMAFCA</p>	<p>With Second year and subsequent Annual Reports</p>
<p>D. Provide support for toxicity study as agreed upon by co-permittees.</p>	<p>UNM NMDOT</p>	<p>As needed</p>

TABLE IV: Compliance with Water Quality Standards – Investigation and Reduction of PCBs in the San Jose Drain and North Diversion Channel⁵

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. Address concerns regarding PCBs in North Diversion Channel conveyed discharges by developing a strategy to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of applicable water quality standards in waters of the United States. Ensure the strategy complies with requirements in Part I.B.1.e.</p> <p>1) For the initial progress report, permittees shall:</p> <ul style="list-style-type: none"> i. Conduct an evaluation regarding controllable sources of PCBs in the North Diversion Channel. ii. Design and implement a monitoring study and perform analytical monitoring to evaluate presence and magnitude of PCB levels in stormwater discharges to and within the North Diversion Channel. iii. Report on results of the monitoring study to EPA, NMED, and the Pueblos of Isleta and Sandia. iv. Should results of the monitoring study confirm levels of PCBs in North Diversion Channel discharges contain levels of PCBs that would cause or contribute to exceedances of applicable water quality standards in waters of the United States, commence activities to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of applicable water quality standards in waters of the United States. 	<p>Albuquerque AMAFCA</p>	<p>Within three (3) months of permit effective date</p>
<p>2) Initial progress report shall include:</p> <ul style="list-style-type: none"> i. Findings regarding controllable sources of PCBs in the North Diversion Channel drainage area that cause or contribute to exceedances of applicable water quality standards in waters of the United States via the discharge of municipal stormwater. ii. Conclusions drawn, including support for any determinations. iii. Activities undertaken to eliminate controllable sources of PCBs in the North Diversion Channel drainage areas that cause or contribute to exceedances of applicable water quality standards in waters of the United States via the discharge of municipal stormwater including activities that extend beyond the five (5) year permit term. iv. Account of stakeholder involvement in the process. 	<p>Albuquerque AMAFCA</p>	<p>With First year Annual Report</p>
<p>B. Address concerns regarding San Jose Drain conveyed discharges by performing activities to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of applicable water quality standards in waters of the United States.</p> <p>1) Initial progress report shall include:</p> <ul style="list-style-type: none"> i. Findings regarding controllable sources of PCBs in the San Jose Drain drainage area that cause or contribute to exceedances of applicable water quality standards in waters of the United States via the discharge of municipal stormwater. ii. Conclusions drawn, including support for any determinations. iii. Activities undertaken to eliminate controllable sources of PCBs in the San Jose Drain drainage areas that cause or contribute to exceedances of applicable water quality standards in waters of the United States via the discharge of municipal stormwater including activities that extend beyond the five (5) year permit term. iv. Account of stakeholder involvement in the process. 	<p>Albuquerque AMAFCA</p>	<p>With First year Annual Report</p>
<p>C. Subsequent progress reports to include:</p> <ul style="list-style-type: none"> i. Activities undertaken to identify controllable sources of PCBs in San Jose Drain and North Diversion Channel drainage discharges that cause or contribute to exceedances of applicable water quality standards in waters of the United States via discharge of municipal stormwater. 	<p>Albuquerque AMAFCA</p>	<p>With Second year and subsequent Annual Reports</p>

- ii. Conclusions drawn, including support for any determinations.
- iii. Activities undertaken to eliminate controllable sources of PCBs in the San Jose Drain and North Diversion Channel drainage areas that cause or contribute to exceedances of applicable water quality standards in waters of the United States.
- iv. Accounting of stakeholder involvement.

5 By letter dated April 20, 2010, NMED notified EPA that pursuant to Section 401 of the Clean Water Act, the use of EPA Method 1668: Chlorinated Biphenyl Congeners in Water, Soil, Sediment and Tissue by HRGC/HRMS for PCB monitoring under this permit will be a condition for certification of the permit. Permittee PCB monitoring detection levels shall be consistent with those used in the NMED/DOE Oversight Bureau PCB study.

TABLE V: Compliance with Water Quality Standards Requirement -- Temperature

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. Develop and implement a strategy to reduce the effects of MS4 discharges on the temperature of receiving waters of the Rio Grande that cause or contribute to exceedances of applicable temperature water quality standards in waters of the United States. Ensure the strategy complies with requirements in Part I.B.1.f.</p>	Albuquerque AMAFCA	Initiate within two (2) months of effective date of permit
<p>B. Submit schedule for the following activities:</p> <ul style="list-style-type: none"> 1) Identification of potential for MS4 discharges to contribute to raised temperatures in the receiving waters of the Rio Grande utilizing existing data and/or additional monitoring. 2) Development and implementation of controls to reduce the effects of MS4 discharges on the temperature of receiving waters of the Rio Grande that cause or contribute to exceedances of applicable temperature water quality standards in waters of the United States. 	Albuquerque AMAFCA	Within two (2) months of effective date of permit
<p>C. Provide status reports to EPA.</p> <ul style="list-style-type: none"> 1) Initial report to include: <ul style="list-style-type: none"> i. Findings regarding Rio Grande conveyed discharge contribution to exceedances of applicable temperature water quality standards in waters of the United States. ii. Conclusions drawn, including support for any determination. iii. Activities undertaken to reduce MS4 discharges contribution to exceedances of applicable temperature water quality standards in waters of the United States. iv. Plan for stakeholder involvement. 2) Subsequent progress reports to include: <ul style="list-style-type: none"> i. Adherence to schedule. ii. Activities undertaken to identify MS4 discharge contribution to exceedances of applicable temperature water quality standards in waters of the United States. iii. Conclusions drawn, including support for any determinations. iv. Activities undertaken to reduce MS4 discharge contribution to exceedances of applicable temperature water quality standards in waters of the United States. v. Accounting of stakeholder involvement. 	Albuquerque AMAFCA	With Second year and subsequent Annual Reports

TABLE VI: U.S. Fish and Wildlife Service Biological Opinion Requirements

Activity	Responsible Permittee(s)	Compliance Due Date
<p>To ensure actions required by this permit are not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat, permittees shall meet the following requirements, included in PART I.B.3.</p> <p>A. Conduct continuous monitoring of dissolved oxygen (DO) and temperature in the North Diversion Channel Embayment and at one (1) location in the Rio Grande downstream of the mouth of the North Diversion Channel within the action area (e.g., Rio Bravo Bridge) to verify the remedial action is successful for the duration of the permit. It is recommended that continuous monitoring data be provided online for public review.</p>	<p>Albuquerque AMAFCA UNM NMDOT</p>	<p>Within two (2) months of effective date of permit</p>
<p>B. Participate with EPA and the FWS in an annual meeting (may be via teleconference) during the permit period to review the remedial action progress, information gathered, and incidental take estimates associated with qualifying storm events</p>	<p>Albuquerque AMAFCA UNM NMDOT</p>	<p>Annually, upon effective date of permit</p>
<p>C. Provide the FWS with the following data and information on all qualifying storm events: date of any qualifying stormwater event(s), DO value in Embayment, DO value at downstream monitoring station, flow rate in the North Diversion Channel, daily flow rate in the Rio Grande, and sum of silvery minnows taken.</p>	<p>Albuquerque AMAFCA UNM NMDOT</p>	<p>With First Year and subsequent Annual Reports</p>
<p>D. Describe, in annual reports, all standard operating procedures, quality assurance plans, maintenance, and implementation schedules to assure that timely and accurate water temperature, DO, oxygen saturation, and flow data are collected, summarized, evaluated and reported.</p>		
<p>E. Provide the FWS with electronic copies of all incidental take, interim, and annual reports required by this permit no later than March 31st for the preceding calendar year ending December 31st to nmesfo@fws.gov or by mail to the New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, New Mexico 87113; and</p>		
<p>F. Complete the remedial action selected for the North Diversion Channel Embayment.</p>	<p>Albuquerque AMAFCA UNM NMDOT</p>	<p>Within eighteen (18) months of permit effective date</p>

TABLE VII: Floatables Monitoring

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part III.B, the permittee shall monitor, at least two (2) times per year, floatable material and the amount collected (estimated in cubic yards) at:</p> <ol style="list-style-type: none"> 1) Albuquerque/AMAFCA – two (2) stations (one (1) station should be located in the North Diversion Channel System above the Pueblo of Sandia); and, 2) NMDOT – one (1) station each. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>

TABLE VIII: Toxicity Monitoring to Protect Listed Threatened and Endangered (T&E) Species – Implementation of 4-Year Toxicity Testing

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. Toxicity monitoring shall be conducted to protect T&E species. Ensure that the monitoring program complies with requirements in Part III.D.</p> <p>B. Sampling Locations</p> <ol style="list-style-type: none"> 1) Collect stormwater at North Diversion Channel where it enters the main channel of the Rio Grande, with permission from the Pueblo of Sandia. 2) Use laboratory synthetic water for the test controls. <p>C. Sampling Frequency</p> <ol style="list-style-type: none"> 1) At least one (1) storm event per year throughout the term of the permit. <p>D. Sample Size</p> <ol style="list-style-type: none"> 1) Sample volumes will be approximately ten (10) gallons. Verify with NELAC certified laboratory performing sample analysis of the appropriate volume prior to implementation of Toxicity Testing. <p>E. Sample Analysis</p> <ol style="list-style-type: none"> 1) Perform chemical analysis of stormwater and river water samples. 	<p>Albuquerque AMAFCA</p>	<p>Annually, upon effective date of permit</p>
<p>F. Toxicity Testing</p> <ol style="list-style-type: none"> 1) Collected samples shall be analyzed by a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory. 2) Samples shall be analyzed for the Acute 24-hour LC50 test and follow guidelines as defined in the <i>Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms</i> (Fifth Edition, October 2002). 3) Stormwater sample dilutions: 0%, 12.5%, 25%, 50%, 75%, 100% 4) Samples shall be checked for chlorine and ammonia prior to toxicity testing. If chlorine is detected, adjust with thiosulfate. 5) Utilize fathead minnow (<i>Pimephales promelas</i>) and <i>Daphnia pulex</i> species for toxicity testing. 	<p>Albuquerque</p>	<p>Annually, upon effective date of permit</p>

<p>G. Reporting</p> <p>1) Provide annual testing results and sample analysis on DMR forms and in each annual report as required in Part III.H.</p>	<p>Albuquerque AMAFCA</p>	<p>With First Year and subsequent Annual Reports</p>
<p>2) Notify EPA immediately (addresses provided in Part III.J) upon detection of any toxicity. Toxicity is defined as an LC50 of <100 percent effluent.</p>	<p>Albuquerque AMAFCA</p>	<p>As necessary</p>
<p>3) Compile a final report to be submitted to EPA. Include:</p> <ul style="list-style-type: none"> i. All toxicity testing results, ii. An evaluation of toxicants (if any), and iii. Any actions taken to eliminate toxicity, including activities ongoing during the permit term and any needed activities that would extend beyond the five year permit term. 	<p>Albuquerque AMAFCA</p>	<p>Four (4) years and six (6) months from permit effective date</p>
<p>H. Provide support for toxicity study as agreed upon by co-permittees.</p>	<p>UNM NMDOT</p>	<p>As needed</p>

TABLE IX: Wet Weather Screening of MS4

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part III.E, the wet weather screening program shall:</p> <ul style="list-style-type: none"> 1) screen one-third (1/3) of the drainage area of MS4 within three (3) years of the effective date of this permit and complete screening 100 percent of the MS4 within five (5) years; 2) include sufficient screening points to adequately assess pollutant levels from all areas of the MS4 and at least five (5) screening points along each major drainage channel that drains 20 percent or more of the land area within the City of Albuquerque; 3) screen for BODs, sediment or a parameter addressing sediment (e.g., TSS or turbidity), <i>E. coli</i>, Oil and Grease, nutrients, and any pollutant that has been identified as a cause of impairment of a waterbody receiving discharges from that portion of the MS4; 4) specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes; 5) assess wet weather screening results (including data from the previous permit term) and benchmark against national stormwater databases and data collected for the representative monitoring program; and, 6) record any observed erosion of stream banks, scouring or sedimentation in streams, such as sand bars or deltas. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>

TABLE X: Dry Weather Discharge Screening of MS4

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part III.F, the dry weather screening program shall:</p> <ol style="list-style-type: none"> 1) screen one-third (1/3) of the drainage area of MS4 within three (3) years of the effective date of this permit and complete screening 100 percent of the MS4 within five (5) years; 2) include sufficient screening points to adequately assess pollutant levels from all areas of the MS4 and at least five (5) screening points along each major drainage channel that drains 20 percent or more of the land area within the City of Albuquerque; 3) screen for, at a minimum, BOD₅, sediment or a parameter addressing sediment (e.g., TSS or turbidity), <i>E. coli</i>, Oil and Grease, nutrients, and any pollutant that has been identified as a cause of impairment of a waterbody receiving discharges from that portion of the MS4; 4) specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>

TABLE XI: Impaired Receiving Waters Wet Weather Assessment of Potential Water Quality Impacts

Activity	Responsible Permittee(s)	Compliance Due Date
<p>A. As described in Part III.G, the receiving water assessment program shall:</p> <ol style="list-style-type: none"> 1) perform annual in-stream wet weather monitoring for all constituents listed at Part VI, Tables XII.A and XII.B at all locations tributary to impaired waters (at the point where they enter the Rio Grande and if originating outside the MS4, where it enters the MS4) listed under CWA §303(d), plus one (1) location located upstream of the MS4. To avoid duplication of effort, this program may be coordinated with the wet weather characterization and/or screening programs; 2) perform annual in-stream wet weather monitoring for the impaired water pollutant(s) of concern at one (1) location upstream of the MS4 and one (1) downstream of the last MS4 drainage area entering the impaired water; 3) perform wet weather monitoring for the impaired water pollutant(s) of concern at 100 percent of the MS4 drainage areas tributary to the impaired waterbody within five (5) years from the effective date and for at least one-third (1/3) of those MS4 areas within three (3) years; 4) specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes; 5) assess wet weather screening results (including data from the previous permit term) and benchmark against national stormwater databases and data collected for the representative monitoring program; and, 6) record any observed erosion of stream banks, scouring or sedimentation in streams, such as sand bars or deltas. 	<p>Albuquerque AMAFCA NMDOT UNM</p>	<p>During the permit term</p>

TABLE XII.A - Representative Monitoring Annual Requirements: Monitoring Locations ML1 - ML5 ⁷

PARAMETERS ⁸	REPORT FOR EACH MONITORING PERIOD (each sample type)			SAMPLE TYPE(S)		MONITORING FREQUENCY
	Minimum	Average	Maximum	Grab	Composite	
		Yes	Yes			
1. Dissolved Oxygen (DO) (mg/l)	Yes	Yes		Yes ¹¹		1 event/ wet season; 1 event/ dry season ⁶
2. Biochemical Oxygen Demand (BOD ₅) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
3. Chemical Oxygen Demand (COD) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
4. Total Suspended Solids (TSS) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
5. Total Dissolved Solids (TDS) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
6. Total Nitrogen (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
7. Total Kjeldahl Nitrogen (TKN) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
8. Total Phosphorus (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
9. Dissolved Phosphorus (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
10. Total Cadmium (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
11. Dissolved Cadmium (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
12. Total Copper (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
13. Dissolved Copper (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
14. Total Lead (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
15. Dissolved Lead (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
16. Total Zinc (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
17. Dissolved Zinc (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
18. Mercury (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
19. Chromium III (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
20. Chromium VI (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
21. Arsenic (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
22. Thallium (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶

PARAMETERS ⁸	REPORT FOR EACH MONITORING PERIOD (each sample type)			SAMPLE TYPE(S)		MONITORING FREQUENCY
	Minimum	Average	Maximum	Grab	Composite	
23. Chlorides (as Cl) (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
24. Nitrate (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
25. pH (S.U.)	Yes		Yes	Yes ¹¹		1 event/ wet season; 1 event/ dry season ⁶
26. Sulfates (mg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
27. Conductivity (micromho/cm)		Yes	Yes	Yes ¹¹		1 event/ wet season; 1 event/ dry season ⁶
29. <i>E coli</i> ⁹		Yes	Yes	Yes ¹⁰		4 events/ wet season ⁶ ; minimum of 2 events/ quarter during dry season
30. Oil and Grease (mg/l)		Yes	Yes	Yes		1 event/ wet season; 1 event/ dry season ⁶
31. Total Phenols (µg/l)		Yes	Yes		Yes	1 event/ wet season; 1 event/ dry season ⁶
32. Hardness (as CaCO ₃) (mg/l)	Yes	Yes	Yes	Yes		1 event/ wet season; 1 event/ dry season ⁶
33. Temperature (°C)	Yes	Yes	Yes	Yes ¹¹		1 event/ wet season; 1 event/ dry season ⁶

⁶ Seasonal monitoring periods are: Wet Season: June 1 through September 30; Dry Season: October 1 through May 31.

⁷ Monitoring frequency for each year for Monitoring Locations ML 1-5. Monitoring for Monitoring Locations ML 1-ML5 is to commence on the effective date of this permit.

⁸ If any individual analytical test result is less than the minimum quantification level (MQL) listed for that parameter, then a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements. The annual report shall include the actual value obtained, if test result is less than the MQL.

⁹ Monitoring results for bacteria shall also be submitted with the Annual TMDL Progress Report required in Tables II.A and II.C. Bacteria Loadings for each monitoring location shall be estimated and reported in the Annual TMDL Progress Report.

¹⁰ May consist of multiple grab samples weighted for an event mean concentration.

¹¹ Parameters shall be analyzed in the field within fifteen (15) minutes of sample collection.

TABLE XII.B – Representative Monitoring Biennial Requirements: Monitoring Locations ML1 – ML5 ¹²

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thallium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury ¹³	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Chlorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

POLLUTANTS	MLL µg/l	POLLUTANTS	MLL µg/l
BASE/NEUTRAL			
Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronaphthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		

PESTICIDES AND PCBS

Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs ⁵	-
Alpha-Endosulfan	0.01	Toxaphene	0.3

(MLL's Revised November 1, 2007)

- ¹² Parameters included in Table XII.B are to be monitored biennially (every other year). Seasonal monitoring periods are: Wet Season: June 1 thru September 30; Dry Season: October 1 through May 31. Monitoring Frequency: one (1) event/wet season and one (1) event/dry season, using composite sampling. Average and maximum values are reported each monitoring period. Monitoring requirements commence on the effective date of permit and shall continue on the every other year schedule established by prior permit.

If any individual analytical test result is less than the minimum quantification level (MLL) listed for that parameter, a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements.

- ¹³ Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.

TABLE XII.C - Representative Monitoring Site Descriptions

MONITORING LOCATIONS	SITE NO.	LOCATION	DESCRIPTION	RESPONSIBLE PERMITTEE
ML1	9900	North Floodway Channel near Alameda (USGS Station No. 08329900)	Station located on concrete lined channel. Drains approximately 92 sq.mi. Land use is: 41%residential; 36%agricultural; 15% commercial; 4%industrial; 4%open space	Albuquerque/ AMAFCA
ML2	200	South Diversion Channel above Tijeras Arroyo near Albuquerque (USGS Station No. 08330775)	Station located on natural unlined channel. Drains approximately 11 sq.mi. Land use is: 30% agricultural; 28% commercial 21% industrial; 13% residential; 8% open space	Albuquerque/ AMAFCA
ML3	500	San Jose Drain at Woodward Road at Albuquerque (USGS Station No. 08330200)	Station located on concrete lined channel. Drains approximately 2 sq.mi. Land use is: 41% residential; 30% commercial; 18% agricultural; 9% industrial; 2% open space	Albuquerque/ AMAFCA
ML4	330600	Tijeras Arroyo near Albuquerque (USGS Station No. 08330600)	Station located on concrete lined channel. Drains approximately 135 sq.mi. Land use is: 1.2 % residential; <1 % commercial; <1 % industrial; >97% undeveloped	Albuquerque/ AMAFCA
ML5	300A	Mariposa Diversion of San Antonio Arroyo at Albuquerque (USGS Station No. 083299375)	Station located on natural unlined channel. Drains approximately 31 sq.mi.. Land use is: 73% agricultural; 14% industrial; 11% residential; 1% commercial; 1% open space	Albuquerque/ AMAFCA

PART VII. DEFINITIONS

All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified, additional definitions of words or phrases used in this permit are as follows:

- (1) **Bioretention** means the water quality and water quantity stormwater management practice using the chemical, biological and physical properties of plants, microbes and soils for the removal of pollution from stormwater runoff.
- (2) **Canopy Interception** means the interception of precipitation, by leaves and branches of trees and vegetation that does not reach the soil.
- (3) **Controls** or **Control Measures** or **Measures** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or control the pollution of waters of the United States. Controls also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- (4) **CWA** or **The Act** means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.
- (5) **Co-permittee** means a permittee to a NPDES permit that is only responsible for permit conditions relating to the discharge for which it is operator.
- (6) **Core Municipality** means, for the purpose of this permit, the municipality whose corporate boundary (unincorporated area for counties and parishes) defines the municipal separate storm sewer system. (ex. City of Dallas for the Dallas Municipal Separate Storm Sewer System, Harris County for unincorporated Harris County).
- (7) **Direct Connected Impervious Area (DCIA)** means the portion of impervious area with a direct hydraulic connection to the permittee's municipal separate storm sewer system or a waterbody via continuous paved surfaces, gutters, pipes, and other impervious features. Direct connected impervious area typically does not include isolated impervious areas with an indirect hydraulic connection to the municipal separate storm sewer system (e.g., swale or detention basin) or that otherwise drain to a pervious area.
- (8) **Director** means the Regional Administrator or an authorized representative.
- (9) **Discharge** for the purpose of this permit, unless indicated otherwise, means discharges from the municipal separate storm sewer system.
- (10) **Engineered Infiltration** means an underground device or system designed to accept stormwater and slowly exfiltrates it into the underlying soil. This device or system is designed based on soil tests that define the exfiltration rate.
- (11) **Evaporation** means rainfall that is changed or converted into a vapor.
- (12) **Evapotranspiration** means the sum of evaporation and transpiration of water from the earth's surface to the atmosphere. It includes evaporation of liquid or solid water plus the transpiration of plants.
- (13) **Extended Filtration** means a structural stormwater practice which filters stormwater runoff through vegetation and engineered soil media. A portion of the stormwater runoff drains into an underdrain system which slowly releases it after the storm is over.
- (14) **Flood Control Projects** mean major drainage projects developed to control water quantity rather than quality, including channelization and detention.

- (15) **Flow-weighted composite sample** means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.
- (16) **Green Infrastructure** means an array of products, technologies, and practices that use natural systems – or engineered systems that mimic natural processes – to enhance overall environmental quality and provide utility services. As a general principal, Green Infrastructure techniques use soils and vegetation to infiltrate, evapotranspire, and/or recycle stormwater runoff. When used as components of a stormwater management system, Green Infrastructure practices such as green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition to effectively retaining and infiltrating rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits.
- (17) **Hydromodification** means the alteration of the natural flow of water through a landscape, and often takes the form of channel straightening, widening, deepening, or relocating existing, natural stream channels. It also can involve excavation of borrow pits or canals, building of levees, streambank erosion, or other conditions or practices that change the depth, width or location of waterways. Hydromodification usually results in water quality and habitat impacts.
- (18) **Illicit connection** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.
- (19) **Illicit discharge** means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.
- (20) **Impervious Area (IA)** means conventional pavements, sidewalks, driveways, roadways, parking lots, and rooftops.
- (21) **Individual Residence** means, for the purposes of this permit, single or multi-family residences. (e.g. single family homes and duplexes, town homes, apartments, etc.)
- (22) **Infiltration** means the process by which stormwater penetrates the soil.
- (23) **Land application unit** means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
- (24) **Landfill** means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
- (25) **Land Use** means the way in which land is used, especially in farming and municipal planning.
- (26) **Large or medium municipal separate storm sewer system** means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendix F of 40 CFR §122); or (ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers are located in the incorporated places, townships, or towns within such counties (these counties are listed in Appendices H and I of 40 CFR §122); or (iii) owned or operated by a municipality other than those described in Paragraph (i) or (ii) and that are designated by the Regional Administrator as part of the large or medium municipal separate storm sewer system.
- (27) **Municipal Separate Storm Sewer (MS4)** means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to paragraphs 40 CFR §122.26(b)(4), (b)(7), and (b)(16), or designated under paragraph 40 CFR §122.26(a)(1)(v).
- (28) **Outfall** means a *point source* as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which

connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

- (29) **Permittee** refers to any person (defined below) authorized by this NPDES permit to discharge to Waters of the United States.
- (30) **Person** means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.
- (31) **Point Source** means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.
- (32) **Pre-development Hydrology**, for the purposes of this permit, means capturing the 90th percentile storm event runoff (consistent with any limitations on that capture).
- (33) **Rainfall and Rainwater Harvesting** means the collection, conveyance, and storage of rainwater. The scope, method, technologies, system complexity, purpose, and end uses vary from rain barrels for garden irrigation in urban areas, to large-scale collection of rainwater for all domestic uses.
- (34) **Soil amendment** means adding components to in-situ or native soils to increase the spacing between soil particles so that the soil can absorb and hold more moisture. The amendment of soils changes various other physical, chemical and biological characteristics so that the soils become more effective in maintaining water quality.
- (35) **Storm drainage projects** include stormwater inlets, culverts, minor conveyances and a host of other structures or devices.
- (36) **Storm sewer**, unless otherwise indicated, means a municipal separate storm sewer.
- (37) **Stormwater** means stormwater runoff, snow melt runoff, and surface runoff and drainage.
- (38) **Stormwater Discharge Associated with Industrial Activity** means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant (See 40 CFR §122.26(b)(14) for specifics of this definition).
- (39) **Stormwater Management Program (SWMP)** means a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system. For the purposes of this permit, the Stormwater Management Program is considered a single document, but may actually consist of separate programs (e.g. "chapters") for each permittee.
- (40) **Time-weighted composite** means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.
- (41) **Total Maximum Daily Load (TMDL)** means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL is the sum of individual wasteload allocations for point sources (WLA), load allocations for non-point sources and natural background (LA), and must consider seasonal variation and include a margin of safety. The TMDL comes in the form of a technical document or plan.
- (42) **Toxicity** means an LC50 of <100% effluent.
- (43) **Waste load allocation (WLA)** means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.
- (44) **Wetlands** means those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(45) **Whole Effluent Toxicity (WET)** means the aggregate toxic effect of an effluent measured directly by a toxicity test.