CITY OF ALBUQUERQUE

2014 ANNUAL REPORT

DUE APRIL 1, 2015

FOR NPDES PERMIT NMS000101

EFFECTIVE MARCH 1, 2012

INTRODUCTION

The City of Albuquerque (COA) and its three storm water partners were issued their first NPDES Municipal Separate Storm Sewer System (MS4) permit on December 1, 2003. The other partners are the Albuquerque Metropolitan Arroyo and Flood Control Authority (AMAFCA), the University of New Mexico (UNM) and the New Mexico Department of Transportation (NMDOT). That permit expired in November of 2008 and was extended administratively by the EPA until EPA issued a renewal permit on January 31, 2012 which became effective March 1, 2012. Each of the four MS4 partners has prepared an individual Storm Water Management Program (SWMP) and will submit individual annual reports. This document serves as the third annual report submitted by the COA under the permit issued on January 31, 2012.

PERMIT EXPIRATION DATE AND SUBMITTAL REQUIREMENT DATES

The current Phase 1 MS4 permit is scheduled to expire on June 20, 2015 which is one hundred and eighty days following December 22, 2014, the effective date of the new watershed-based permit (WBP) for the regulated Middle Rio Grande MS4s. The SWMP, submitted to EPA Region 6 on September 1, 2012 will continue for the duration of the current Phase 1 MS4 permit. Per the 2012 Phase 1 MS4 Permit requirements, Annual reports that include any revisions to the SWMP and summarize the progress towards measurable goals cited in the SWMP are to be submitted on April 1 of each year. This will be the last Annual Report submitted under the Phase 1 Permit. The COA plans to submit an electronic notice of intent (eNOI) application with EPA Region 6 in order to discharge its stormwater under the WBP. Upon acceptance under the WBP, the COA will meet the submittal dates specified therein.

GENERAL REQUIREMENTS

The SWMP and this Annual Report are in compliance with Permit NMS000101 and with Section 402(p)(3)(B) of the Clean Water Act and Storm Water regulations (40 CFR 122.26 and 122.34).

LEGAL AUTHORITY

The City of Albuquerque (COA) has prepared two separate ordinances for the control of storm water. The first ordinance, the Drainage Ordinance, dovetails with the existing drainage protocols specified in the COA's Development Process Manual (DPM) and includes controls over construction discharges as well as post construction runoff controls. The second ordinance is new and will be entitled "Stormwater Quality Ordinance" and will regulate the discharges of non-storm water.

The Drainage Ordinance was introduced to City Council in April 2013. Following the incorporation of comments from citizens over the course of several months, the Drainage Ordinance was passed by City Council on November 4, 2014. This ordinance has been

incorporated into the SWMP. The Stormwater Quality Ordinance has been drafted and is in the review process. It is hoped to introduce this ordinance to City Council late in 2015. A progress update has been provided in this report under items 1-5, Construction Site Storm Water Runoff Controls.

SHARED RESPONSIBILITY

The Albuquerque MS4 partners work cooperatively on joint efforts in the areas of education and outreach and compliance monitoring. Generally, the responsibility for implementation of storm water controls is based on property ownership. For instance, UNM is responsible for storm water controls on its various campuses but not outside the campus. Similarly, the NMDOT will control storm water runoff within its rights of way. AMAFCA and the City share a common responsibility for the operation of the flood control and storm water quality system as the areas of responsibility have large areas of overlap. The Albuquerque MS4 is mapped with AMAFCA and the City having primary responsibility of different channels and arroyos. That map is well known to the maintenance employees of each agency and is available in printed and online formats. In some cases, city storm drains discharge into AMAFCA facilities. Most often, AMAFCA maintains the larger collection systems such as channels and arroyos. The system has developed over time since the 60s when AMAFCA was formed as the primary agency with responsibility for storm water in the Albuquerque area.

The City is the unique MS4 partner in that it is the only partner that can make and enforce laws but cannot generally enforce those laws on UNM or NMDOT property. The SWMP submitted by the City takes that right and responsibility into consideration.

Note that this report includes a summary of the City's efforts towards improving storm water quality in calendar year 2014 as well as the joint activities carried out by the four partners in the areas of education and monitoring. Each of the three other partners may submit similar documentation of group efforts in individual agency annual reports.

MEASUREABLE GOALS AND PROGRESS TO DATE

The SWMP submitted to EPA Region 6 on September 1, 2012 included measurable goals as stated in Part I.C.5 "Control Measures". Progress to date on these measurable goals is summarized in this Annual Report. Relevant attachments are appended to the tabular summary which includes permit items, the proposed plan (SWMP), measurable goals, and progress to date. Note that the SWMP has been revised due to an error of omission in the previous submittal on September 1, 2012. Two tables: 1) U.S. Fish and Wildlife Service Biological Requirements and 2) Floatables Monitoring were inadvertently omitted. These tables, including the proposed plan and measurable goals, have been added.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROLS

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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: 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.	1), 2), 3) and 4) The City of Albuquerque (COA) Development Process Manual (DPM), Chapter 22, "Drainage, Flood Control, and Erosion Control" provides City regulatory guidance for public and private construction activities with regards to control of storm water runoff. Per the DPM, requests for approvals of development and/or platting proposals to the City Engineer must be accompanied by drainage control, flood control, stormwater quality control, and erosion control information and/or commitments. The particular nature, location and scope of the proposed development define the degree of detail. One or more of the following levels of submittal are generally required based on the following: Conceptual Grading and Drainage Plan, Drainage Plan, Drainage Report, Erosion and Sediment Control Plan (ESC Plan), all which address stormwater quality control. An Erosion and Sediment Control Permit (ESC Permit) will continue to be required for all construction, demolition clearing and grading operations within the COA that disturbs the soil on one half (1/2) acre or more of land. Per the DPM, the COA has encouraged and will continue to encourage active construction sites to utilize non-structural controls, such as phased construction, dust control, good housekeeping practices, and spill prevention and response. The COA is preparing two ordinances for enactment: one revising the existing Storm Drainage requirements and the second addressing Storm Water Quality concerns. These ordinances will contain policies, procedures, criteria, and requirements for stormwater drainage and quality. 5) Per the DPM, routine compliance self- inspection is required to review onsite and immediately adjacent property vegetation, erosion and sediment control measures and other protective measures identified in the ESC Plan and associated Permit. Until the site construction has been completed and the ESC Permit is closed out, the owner/developer or their representative are required to make inspections of their stormwater management system as approved by the City Engineer based on site conditions and project circumstances and after any precipitation event large enough to result in surface runoff from the site. These inspections are conducted during progress of the work, during work suspensions and until final acceptance of site stabilization by the City. Contractors are and will continue to be required to keep updated files onsite of records such as site reviews, inspections, inspection reports, warning letters, and other enforcement documents. Contractors are also to provide copies in closeout package. The COA is permitted to enter these construction sites at all reasonable times in, or upon, any private or public property for the purposes of inspecting and investigating conditions and practices which may be in violation of the drainage ordinance until the ESC Permit is closed out. Construction inspectors in the Planning Department inspect and review construction projects prior to acceptance of infrastructure. Inspectors with Construction Services Division inspect City construction projects and provide NPDES support.	For City sponsored construction projects, provide the COA Standard Specifications in the bid package for construction, safety, and environmental issues required for compliance, including: Fugitive Dust Control, adhering to the Erosion and Sediment Control plans, Solid Waste Control, Construction Wash-Off and other storm water pollution prevention issues to contractors. Inform the contractors of requirements and review documents necessary (i.e., erosion control plan, SWPPP/eNOI application and fugitive dust permit) during the Construction Document Review (90%) of design which occurs prior to construction. The COA will continue to comply with the Construction General Permit (CGP), including SWPPP preparation and eNOI application for all public projects.	Items A. 1-5 : The COA has prepared two draft ordinances: Storm Drainage, which addresses drainage control and runoff during construction activities, and Storm Water Quality, which addresses illicit discharges and post construction control runoff. The review process for the draft Storm Drainage Ordinance (Attachment 1) is nearly complete. It will be heard by the Finance and Government Operations Committee of the City Council on April 8 and heard by City Council on May 6. The draft Storm Water Quality Ordinance is currently being reviewed by stakeholders. Upon finalization, a draft of the Stormwater Quality Ordinance will be provided. Attachment 1, Draft Storm Drainage Ordinance The COA Planning Department has revised their ESC submittal process to require an ESC Permit prior to grading for all sites that require a SWPPP. Planning Department Construction Inspectors will conduct inspections of all ESC permitted sites once per year. In addition, the Construction Services Division (CSD) have been trained in the implementation of Stormwater Quality Best Management Practices (BMPs) and continue to conduct inspections for all construction projects falling under Capital Implementation Program (CIP). Attachment 2, Packet from Planning re: new requirements regarding ESC Permitting.	Items A. 1-5 : The Storm Drainage Ordinance (Attachment A.1) was heard by the Finance and Government Operations Committee of the City Council on April 8 and introduced to City Council on May 6. Following a review and comment period by the Council, other agencies, and local community groups, the Drainage Ordinance was approved by City Council on November 4, 2013. The draft Stormwater Quality Ordinance is currently being reviewed by stakeholders. Upon finalization, a draft of the Stormwater Quality Ordinance will be provided. It is hoped that this ordinance will be introduced to City Council at some time in 2014. Attachment A.1, Final Storm Drainage Ordinance The COA Planning Department has hired an Storm Water Quality Engineer to implement the portions of the MS4 permit requirements that are specific to the Planning Department, such as construction site inspections in the private sector, facilitation of low impact development, and tracking of added impervious area.	Items A.1-5: The DRAFT Stormwater Quality and Illicit Discharges Ordinance (Attachment A.1) continued to be reviewed by stakeholders. It is hoped to that this ordinance will be introduced to City Council in FY2016. Attachment A.1 DRAFT Storm-water Quality and Illicit Discharges Ordinance

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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. 8) update the "NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook" to be consistent with promulgated construction an development effluent limitation guidelines. 9) conduct construction site inspections of 100 percent of all installed control measures each year. 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.	6) The COA, co-permittees, and other local agencies have provided and will continue to provide training sessions for permittee personnel, developers, construction site operators, contractors and supporting personnel on SWPPP preparation, processes, and consequences for lack of implementation of BMPs. 7) When granted an ESC Permit, the Planning Department sends the contractor and design engineer a letter of notification of Construction General Permit (CGP) requirements, including application for a Notice of Intent (NOI). The Planning Department keeps record of these letters and sends copies to the Stormwater Drainage Department. 8) The New Mexico Department of Transportation (NMDOT) has contracted with a local consulting firm to update the NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook". The NMDOT and local agencies have updated the BMPs to incorporate practices that work well in arid climates in addition to LID features. To date, there are no effluent limitation guidelines to be incorporated. 9) Construction Services Division (CSD) inspectors will continue to oversee construction activities on public projects. Planning Department inspectors will continue to oversee construction activities on private projects prior to completion of infrastructure installation. 10) A summary of the number and frequency of site inspections and enforcement activities conducted annually will be provided in each Annual Report.	Submission of NPDES Guidelines for Construction and Industrial Activities upon completion. Discussion of any trainings held in Annual Report. Summary of construction activity during the year in each Annual Report.	Items A. 6-7: Addressed by planning packet and new draft ordinances Item A. 8: Completed by NMDOT. An electronic copy is posted on COA storm water design webpage. http://www.cabq.gov/municipaldevelopment/programs/national-pollutant-discharge-elimination-system-manual Items A. 9-10: CSD inspectors provided oversight for contractor biweekly inspections on approximately 15 CIP projects. Any complaints related to illicit discharges including construction related activities are tracked through a citizen 311 complaint system. There were no 311 complaints during the 2012 CY related to construction activities. The Fugitive Dust Division of the Air Quality Department tracks both private and public construction projects. A summary of the number of fugitive dust permits issued, inspections conducted and enforcement activities for CY 2012 are as follows: Fugitive Dust Control Permits issued – 157 Post Inspection Notifications - 6 Notice of Violations - 6 Complaint Inspections – 40 Routine Inspections – 781 Follow-up Inspections – 15 Total Inspections - 836	Items A. 9-10: CSD inspectors provided oversight for contractor biweekly inspections on approximately 15 CIP projects. Any complaints related to illicit discharges including construction related activities are tracked through a citizen 311 complaint system. There were no 311 complaints during the 2013 CY related to construction activities. The Fugitive Dust Division of the Air Quality Department tracks both private and public construction projects. A summary of the number of fugitive dust permits issued, inspections conducted and enforcement activities for CY 2013 are as follows: Fugitive Dust Control Permits issued – 147 Notice of Violations - 3 Total Inspections – 785 No. of Inspectors - 2	Items A. 9-10 CSD inspectors provided oversight for contractor biweekly inspections on CIP projects. The Planning Hydrology Department approved 41 Erosion and Sediment Control (ESC) Permits which regulate best management practices regarding construction activities in private development. Any complaints related to illicit discharges including construction related activities are tracked through a citizen 311 complaint system. There was 1 citizen complaint related to mud tracking off of a construction site. The Fugitive Dust Division of the Air Quality Department tracks both private and public construction projects. A summary of the number of fugitive dust permits issued, inspections conducted and enforcement activities for CY 2013 are as follows: Fugitive Dust Control Permits issued – 148 Notice of Violations - 2 Total Inspections – 370 No. of Inspectors - 2

POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND RE-DEVELOPMENT

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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: 1) procedure or system to review and update, as necessary, the existing program to ensure that storm water 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 storm water, and a training program for plan review staff regarding storm water standards, site design techniques and controls, including training regarding Green Infrastructure (GI) practices. 5) assessment of all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of green infrastructure practices.	1) and 2) The COA works with AMAFCA to prepare long term Master Drainage Planning studies that guide and direct the Capital Improvement Program (CIP) for planning and construction of drainage facilities. A Development Review Board (DRB) provides development and drainage review for all private development projects. The Design Review Committee (DRC) provides plan review for all public and private development projects as well as approval of new drainage system projects. Water quality impacts are considered during the review and approval process. The Drainage Review Section of the Planning Department reviews all construction plans for compliance with COA drainage regulations, including those in the DPM. All development projects that disturb 1 Acre (Ac) or greater trigger written notification of Construction General Permit (CGP) requirements including SWPPP preparation and eNOI application. The DPM, Chapter 22 "Drainage, Flood Control, and Erosion Control" provides regulatory guidance for construction projects including redevelopment projects. In addition, the COA is drafting a Storm Drainage Ordinance which specifies capture of 0.44 in. (90% of metropolitan area rain events). The COA is also preparing a draft Storm Water Quality Ordinance which will include policies, procedures, and compliance requirements for storm water quality. 3) In accordance with Chapter 22 of the DPM private storm water and post construction storm water quality control facilities are maintained by their owners to standards established by City Engineer. Periodic inspection and certifications are hereby required and are reported to the City Engineer on forms established by the City. Inspections and Certifications are required at least once every 3 years (from the date of the first Engineer Certification for Certificate of Occupancy) by a New Mexico Professional Engineer. 4) The COA is preparing a draft Storm Water Drainage ordinance which will provide incentives for GI practices. The COA will conduct workshops to inform developers of the merits of implementing the GI practices. In addition, the COA works with the MRGSWQT to provide funding for a local arid LID workshop. The development community is encouraged to attend these well publicized workshops held every other year in the Albuquerque Metropolitan area. 5) Impediments to GI practices include the existing water right laws enforced by the State Engineers Office, regulations promulgated by the Groundwater Quality Bureau (GWQB) of the NMED, and protests by the development community as to actual and/or perceived costs.	Submission of draft ordinances (Storm Drainage and Storm Water Quality) upon completion. Provide discussion of education and outreach activities geared toward LID implementation in the Annual Report. Submission of cumulative listing of changes in Post Construction Storm Water Management Program in Annual Reports.	Items A. 1-4: A draft of the Stormwater Drainage Ordinance is nearly complete and is attached (Attachment 1). This ordinance specifies capture of the 90th % storm event, or 0.44inches. The draft Storm Water Quality Ordinance, which addresses post construction requirements, is undergoing stakeholder review. Any construction retrofit projects with disturbed acreage exceeding 1 Ac are governed by the requirements discussed under Construction Site Storm Water Runoff Controls The COA has initiated 2 LID retrofit study projects on City properties: 1) Pino Yards, and 2) Highland Senior Center. The first of these 2 properties, located on roughly 35 Ac in an industrial section, serves as office space and maintenance yard for several City departments as well as the Water Utility Authority. The second, located on 1-2 Ac in a residential neighborhood, serves the senior citizen community. The purpose of these retrofit studies is 1) to provide information about the costs of LID specific BMPs in the Albuquerque area, 2) examine the potential for implementation of retrofits in appropriate areas as funds become available, and 3) educate City employees as well as the public about LID through practical examples. A draft of Task 2, Facility Managers Meeting and Field Reconnaissance Draft Report discusses the potential for LID for Pino yards. Note that this is yet a draft. Also, a final report will be prepared once modeling analysis is complete. Attachment 3, Task 2 – Facility Managers and Field Reconnaissance DRAFT report. Item A. 5: Office of the State Engineer (OSE) requirements regarding discharge of all runoff other than that captured from rooftops as well as a prohibition from retaining storm water for greater than 96 hours are impediments to the LID requirement. In addition, a NMED GWQB requirement to obtain a permit for infiltration of surface water in "engineered" devices such as trenches constitutes another impediment.	Items A. 1-4: The Stormwater Drainage Ordinance passed City Council on November 4, 2013 as discussed in the Construction Site table. This ordinance specifies capture of the 90th % storm event, or 0.44inches. The draft Storm Water Quality Ordinance, which addresses post construction requirements, is still undergoing stakeholder review. Items A. 5 and 7: The COA and partner agencies continue to work with the NMED GWQB regarding requirements to obtain a permit for infiltration of surface water in "engineered" devices such as trenches constitutes another impediment. Details regarding the type of permits required for various engineered features will be included in future SWMPs when finalized.	Items A. 1-4: The DRAFT Storm Water Quality and Illicit Discharge Ordinance, which addresses post construction requirements, continues to undergo stakeholder review. The COA has installed a LID project at its largest maintenance facility, Pino Yards, as part of a SEP for an AO received in 2013. A report regarding project progress was sent to EPA Region 6, Enforcement, in February 2015 and is included as Attachment A.1 Attachment A.1: SEP Completion Report for Pino Yards The COA met with engineers from the Planning Department and private sector development community from March 2014 through June 2014 in an effort to incorporate elements from the Drainage Ordinance into the DPM. The Storm Drainage Design Section has contracted with a local landscape architectural firm to prepare general design drawings and specifications for stormwater LID BMPs appropriate for arid climates. The LID BMPs will be incorporated into the COA's DMP upon finalization and subsequent review. Items A. 5 and 7: The COA and partner agencies continue to work on obstacles to the implementation of LID. Activities conducted the past year have focused upon education, such as hosting conferences, giving presentations, and contacting vendors to sponsor lunch'n learns.

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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 storm water 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 prevent an increase in the one-hundred-year (100-yr), two-hour (2-hr) peak runoff, a change in the time of the peak, or an increase in the total runoff from its pre-development values to ensure the hydrology associated new development and redevelopment sites mimic the pre-development hydrology of the previously undeveloped site. 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. 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. 12) report the tabulated results of the number of acres of IA and DCIA and its estimation methodology in the first annual report. 13) estimations of the number of acres of IA and DCIA 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. 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. 15) a cumulative listing of the annual modifications made to the Post-Construction Storm Water 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. 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.	6) Estimations of the IA and DCIA will be provided in the Annual Report. Areas of IA and DCIA added and removed will be provided in subsequent Annual Reports. 7) A letter report elaborating on the points made in item 5 will be elaborated upon and submitted. 8) The design, construction and maintenance of all drainage control, flood control, storm water quality control and erosion control facilities within the COA are performed in accordance with procedures, criteria and standards formulated by the City Engineer. Standard specifications may be found in the COA Specifications Manual. Many of the controls are site specific and may require specialized design. Models or visual observation of performance of features already installed may be used in designing new controls. 9) The COA is revising the current Storm Drainage Ordinance. This revision will specify capture of 0.44 in. (90% of metropolitan area rain events). 10) The Drainage Master Plan provides a ranking of MS4-owned property for flood control projects including retrofits. 11) The COA will provide a discussion of the maintenance and inspections of storm water controls in the Annual Report. 12) and 13) Estimations of the IA and DCIA will be provided in the Annual Report. Areas of IA and DCIA added and removed will be provided in subsequent Annual Reports. The methodology used will be provided in the first Annual Report. 14) The MS4 owned properties that have been retrofitted with control measures have been provided in annual reports. A summary of these items will be provided in the 3rd year Annual Report. 15) The COA will provide a cumulative listing of the modifications to the Post Construction SWMP during the permit term as well as a cumulative listing of revisions of administrative procedures or ordinances enacted in Annual Reports. 16) The COA will continue to incorporate watershed protection elements into relevant policy and/or planning documents as they come up for regular review.	Estimation of areas of IA and DCIA removed or added in Annual Reports. Discussion of maintenance and inspections of storm water control features in Annual Report. Listing of modifications to the Post Construction SWMP in Annual Reports. Submission of Storm Drainage Ordinance upon completion of finalized draft.	Items A. 6, 12, and 13: This is the first submission of estimates of IA and DCIA, as follows: IA= 47,600 Ac (74.4 sq miles), and DCIA= 30,300 AC (47.8 sq mi). The methodology and spreadsheet used to calculate these estimations is included in Attachment 4. The shape files used to calculate IA and DCIA are available upon request. Attachment 4, Methodology for Estimation of Impervious area (IA) and directly connected impervious area (DCIA). Items A. 8 and 9: The COA has prepared a DRAFT Storm Water Drainage Ordinance. See Attachment 1. A Stormwater Quality Ordinance that discusses post construction requirements has also been prepared. Stakeholders are involved in the comment process and items of concern continue to be addressed. A draft will provided once finalized. Item A. 10: A copy of the Drainage Master Plan is available upon request. Item A. 11: Arroyo maintenance, a section under the COA streets maintenance department, continues to maintain City storm drain system features. Inspections of jurisdictional dams are performed biannually (once before the “monsoon” season and once following it). Volumes of debris removed from the system are provided under the “Control of Flotables Discharges” requirements. The COA has initiated 2 LID retrofit study projects on City properties: 1) Pino Yards, and 2) Highland Senior Center. The first of these 2 properties, located on roughly 35 Ac in an industrial section, serves as office space and maintenance yard for several City departments as well as the Water Utility Authority. The second, located on 1-2 Ac in a residential neighborhood, serves the senior citizen community. The purpose of these retrofit studies is 1) to provide information about the costs of LID specific BMPs in the Albuquerque area, 2) examine the potential for implementation of retrofits in appropriate areas as funds become available, and 3) educate City employees as well as the public about LID through practical examples. A	Items A. 6, 12, and 13: Approximately 213 Impervious Acres were added in 2013: IA= 47,600 Ac (74.4 sq miles) + 213 Ac (0.33 sq miles) = 47,800 (74.7 sq miles). Of this, approximately 36% drains to ponds or backyards and is considered disconnected. Therefore DCIA= 30,300 Ac (47.8 sq mi) + 136 Ac (0.21 sq miles) = 30,400 Ac (48.0 sq miles). Attachment A.6, Impervious area (IA) and directly connected impervious area (DCIA) added in 2013. Items A. 8 and 9: The COA has passed Storm Water Drainage Ordinance. A Stormwater Quality Ordinance that discusses post construction requirements has also been prepared. Stakeholders are involved in the comment process and items of concern continue to be addressed. A draft will provided once finalized. Item A. 10: A copy of the Drainage Master Plan is available upon request. Item A. 11: Arroyo maintenance, a section under the COA streets maintenance department, continues to maintain City storm drain system features. Inspections of jurisdictional dams are performed biannually (once before the “monsoon” season and once following it). Volumes of debris removed from the system are provided under the “Control of Flotables Discharges” requirements. Item A.14: The COA has initiated 2 LID retrofit study projects on City properties: 1) Pino Yards, and 2) Highland Senior Center. Final reports have been submitted for each location and appropriate retrofits are under consideration pending funding and approval by pertinent City departments and local agencies. The final reports are included in Attachment A.14 Attachment A.14 City LID Retrofit	Items A. 6, 12, and 13: Approximately 238 Impervious Acres were added in 2013. Of this, approximately 36% drains to ponds or backyards and is considered disconnected. Therefore DCIA= 86 Acres and resulting IA when DCIA is subtracted is 152 Ac. Attachment A.6, Impervious Area (IA) Added in 2014. Items A. 8 and 9: The COA has passed Storm Water Drainage Ordinance. A Stormwater Quality Ordinance that discusses post construction requirements has also been prepared. Stakeholders are involved in the comment process and items of concern continue to be addressed. A draft will provided once finalized. Item A. 10: A copy of the Drainage Master Plan is available upon request. Item A. 11: Arroyo maintenance, a section under the COA streets maintenance department, continues to maintain City storm drain system features. Inspections of jurisdictional dams are performed biannually (once before the “monsoon” season and once following it). Volumes of debris removed from the system are provided under the “Control of Flotables Discharges” requirements. Item A.14: The COA has initiated 2 LID retrofit study projects on City properties: 1) Pino Yards, and 2) Highland Senior Center. Installation of permeable paving has been completed at Pino Yards. A report was submitted to the Enforcement Section at EPA Region 6 in February 2015 and is is included as Attachment A.1 Construction at Highland Senior Center was delayed due to unexpected increases in installation costs and change in funding. Flora Vista, an intersection prone

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			draft of Task 2, Facility Managers Meeting and Field Reconnaissance Draft Report discusses the potential for LID for Pino yards. Note that this is yet a draft. Also, a final report will be prepared once modeling analysis is complete. Attachment 3, Task 2 – Facility Managers and Field Reconnaissance DRAFT report. Item A. 14: Retrofits to City owned properties are discussed in Items 1-4 and Attachment 3. Item A. 15: As previously discussed, the draft ordinances which deal with this issue are currently being vetted.	Projects Item A. 15: As previously discussed, the Drainage Ordinance has been passed and the Stormwater Quality Draft Ordinance which deal is currently being vetted.	to flooding, was retrofitted with an shallow trench. Photos and the plan sheets are included as Atatchmenta A.14.b Attachment A.14: Flora Vista Photos and Plan Sheets Item A. 15: As previously discussed, the Drainage Ordinance has been passed and the Stormwater Quality Draft Ordinance which deal is currently being vetted.

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in Part I.C.5.c, the permittee shall implement, review and enhance their current pollution prevention practices and develop 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 (O&M) program that includes a training component and has the ultimate goal of preventing or controlling pollutant runoff from municipal operations. The program shall include the following elements: 1) Maintenance activities, schedules and long-term inspection procedures for measures to control pollutants from City facilities into the MS4. 2) Measures to control or eliminate the discharge of pollutants from streets, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt and sand storage locations.	1) Each department within the COA will develop site specific Storm Water Pollution Prevention Plan (SWPPP) which identifies possible issues concerning storm water quality and the means and methods to address the issues appropriately at each site. Each department will assign personnel to assure the SWPPP is being implemented. A local consulting firm is currently performing audits of City facilities with the highest pollution generation or discharge potential. Site specific training based upon audit findings will subsequently be conducted. Feedback on SWPPPs will also be provided. Departments will be responsible for future self-inspections. Storm water drainage staff will be available for consultation. 2) Potential discharges will be controlled through implementation of spill prevention practices, self-inspections, and employee training as documented in the respective facility SWPPPs.	Submission of annual progress updates in Annual Report.	Item A. 1: The Storm Drainage Department held training classes for department and facility managers during August to December 2010. The training included guidance on SWPPP preparation and each department was requested to prepare SWPPPs for their facilities. CDM Smith, a local consulting firm, was hired to conduct facility audits during the Summer of 2012. A total of 54 audits were conducted. Facilities were selected on the basis of activities conducted or representativeness of operational activities. A database of the facility audits including suggestions for improvements was prepared. Letters were sent to facility managers and directors summarizing audit results including items done well, those needing improvement, and suggestions for corrections. Copies of the database and template of the letter that summarized audit results are included in Attachment 5. Attachment 5: COA 2012 Facility Audits, Database and Summary Letter Template. Item A. 2: Addressed by item 1.	Item A.1 CDM Smith conducted Good Housekeeping training sessions for facilities that performed maintenance operations and/or dealt with chemicals on 3 separate dates in August and October 2013. Approximately 50 supervisors attended the training and will subsequently train their employees. The training presentation and sign in sheets are included under Item A.7. Item A.2 CDM Smith prepared SWPPPs for departments at Pino Yards and satellite facilities in conjunction with an Industrial eNOI application. These SWPPPs are included in Attachment A.2 Attachment A.2: SWPPPS at Pino Yards and Satellite Facilities	Items A.1-2 CDM Smith performed Good Housekeeping inspections at Pino Yards and Satellite facilities. CDM Smith prepared a SPCC plan for Fleet Operations at Pino Yards. The plan is included in Attachment A.1. Attachment A.1: SPCC Plan for Fleet at Pino Yards CDM Smith performed visual inspections at 4 facilities during storm events in the late summer of 2014. The protocol for these inspections as well as the results for 4 facilities, including photos are presented in Attachment A.2 Attachment A.2a: Visual Monitoring Protocol and Attachment A.2b: Inspection Results at 3 Facilities
3) Procedures to properly dispose of waste removed from the MS4 and municipal operations, e.g. those used for disposal of accumulated sediments, floatables, and other debris collected from the MS4.	3) Each department will properly dispose of wastes according to procedures discussed in their SWPPPs. Sediments, floatables and other debris collected from the MS4 by COA arroyo maintenance are ultimately disposed of in the landfill.	Tracking of annual waste quantities disposed from the MS4.	Item A. 3: Total volume of waste is reported under “Control of Floatables.	Item A. 3: Total volume of waste is reported under “Control of Floatables	Item A. 3: Total volume of waste is reported under “Control of Floatables
4) 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 features.	4) The COA strives to include the incorporation of water quality features in new and existing flood management projects, such as trash racks or ported risers in detention basins and water quality manholes and inlet markers on new inlets where appropriate and as funding becomes available.	Submission of documentation (photo, design, installation date) in Annual Report.	Item A.4: Ported risers, consisting of metal mesh towers that trap floatables and debris, were installed at the outlet structures to 4 detention ponds: Piedra Lisa, Odelia, Ladera, and Tierra Bayita. Additional erosion control features were added to the pond at Kirtland AFB. Attachment 6 includes a copy of a preliminary letter report that discusses the function and design of the ported risers. Additional photos of water quality improvements or features installed throughout the City in 2012 are also included in Attachment 6. Attachment 6, Water Quality Protection Features Installed in the COA in 2012	Item A.4: The COA finalized work on the latest Decade Plan and Master Drainage Plan update which include the design and installation of flood control projects that incorporate water quality protection features. In addition, the COA continues to partner with AMAFCA on projects involving both flood control and water quality improvement.	Item A.4 The COA continues to partner with AMAFCA on projects involving flood control and water quality improvement. For example, the COA installed water quality retrofits during storm drain construction in the downtown area of Stover and 8th St NW. These features and others are included in Attachment A.4 Attachment A.4: Stormwater Quality Features Installed in 2014

Permit Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
5) Procedures to control the discharge of pollutants related to: storage and application of pesticides, herbicides, and fertilizers applied by the permittee's employees or contractors to municipal property and commercial application and distribution of pesticides, herbicides, and fertilizers where permittees hold jurisdiction over lands not directly owned by that entity.	5) Each department that applies pesticides and herbicides will document procedures for use and training of these materials in their SWPPPs. All storage, handling, and application of pesticides will be in compliance with policies and regulations of the New Mexico Department of Agriculture (NMDA). Commercial distributors and applicators are listed in a COA database and have been notified that they need to be in compliance with NMDA regulations is required.	Submission of annual progress updates in Annual Report.	Item A.5: CDM-Smith conducted 54 facility audits in the Summer of 2012. These inspections included an examination of pesticide, herbicide and fertilizer storage and application processes. City facilities which stored and used these products were provided with suggestions for improvement, as needed.	Item A.5: Procedures to control the discharge of pollutants related to storage and application of pesticides is discussed in the SWPPPs for the pertinent departments. Training is discussed under item A.7. See Attachment A.2 for copies of the SWPPPs (particularly Parks). A Parks and Recreation manager held 3 training sessions in November 2013 regarding the handling of hazardous materials. About 350 employees attended the training. Two SWPPP training sessions were held in December with an attendance of approximately 140 personnel. See Attachment A.5 for sign in sheets. Attachment A.5 Sign in Sheets for Hazardous Materials Handling Training	Item A.5 City departments that use and apply pesticides and fertilizers, such as Parks and Recreation, Open Space, Clean Cities, and Solid Waste held trainings for applicable employees.
6) Procedures to control industrial runoff from facilities owned or operated by the permittees which discharge to the MS4.	6) Non-allowable discharges will be controlled through spill prevention, inspections, and employee training as documented in each facility SWPPP.	Submission of annual progress updates in Annual Report.	Item A.6: CDM-Smith conducted 54 facility audits in the Summer of 2012. These audits examined spill prevention practices in place as well as areas for improvements. Results were summarized in a database and sent to department heads and facility contacts. See response to items 1 and 2.	Item A.6: See discussion of training, implementation of SWPPPs, includind site inspection as discussed under previous and subsequent items.	Item A.6: CDM-Smith was contracted to continue to perform Good Housekeeping inspections. Departments were informed of infractions, if any, and tasked with improving BMPs to come into compliance.
7) Development and implementation of an employee training program to incorporate pollution prevention and good housekeeping techniques into everyday O&M activities, including development of a tracking procedure.	7) A local consulting firm is currently performing audits of City facilities with the highest pollution generation or discharge potential. Site specific training based upon audit findings will subsequently be conducted. Department personnel designated in the facility specific SWPPP will be responsible for training of new employees. Annual refresher training will be provided on a rotating basis by experienced consultant.	Document all training sessions and attendees in SWPPPs. Provide information on training in Annual Report.	Item A.7: CDM-Smith will conduct site specific training for City employees based on operational practices conducted at their facilities. Training will be conducted during the Summer of 2013. In addition, 16 CSD inspectors for CIP projects completed Storm Water Compliance Training programs in February and March 2013. Certificates are included in Attachment 7. Attachment 7, Construction Services Division (CSD) Storm Water Quality Training Certificates.	Item A.7: CDM Smith conducted pollution prevention training for City maintence staff. Three separate sessions were held in August and October 2013. Approximately 50 employees attended the training and received additional instructional materials on CD. See Attachment A.7 for copies of the presentations and sign in sheets. Attachment A.7 Maintenance Employee Training	Item A.7: Superviors were responsible for training employees with supplied the pollution prevention information supplied by CDM-Smith.

INDUSTRIAL AND HIGH RISK RUNOFF

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part I.C.5.d**, the permittee shall: 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.	The COA has no High Risk Facilities as defined on Page 14, Part I of the permit. However, the COA has implemented a program to track industries with Standard Industrial Classification (SIC) codes subject to the Multi Sector General Permit (MSGP) and notify such industries of compliance requirements. A list of facilities requiring registration in the pretreatment program by the Water Utility Authority (WUA) has been shared with a consultant as a starting place for inspections of applicable industries.	Preparation and submission of list of facilities with SIC codes requiring compliance with the MSGP upon completion of task by consultant. Progress on task will be provided in Annual Report.	Items A.1, 2, and 3: CDM-Smith has been tasked with categorizing businesses in the metropolitan area as "high", "medium", and "low" with respect to potential to impact storm water quality. Businesses associated with chemicals, vehicle maintenance, or fuel stations, metal fabrication, and junk/recycle yards were designated as "high". Hospitals, health centers, and those businesses with a high probability of indoor operations were classed as "low. A database of these businesses was compiled using the Harris database (a business listing database) and the pre-treatment list from the Albuquerque Bernalillo County Water Utility Authority (ABCWUA). The high, medium, and low risk counts are as follows: High: 237 Medium: 360 Low: 864 CDM-Smith will then use Google-Earth to re-asses potential based upon the visual look of each outside area using a graded approach: High: Examine all businesses Medium: Examine 25% of each MSGP category Low: Examine 5% of each MSGP category CDM-Smith will contact approximately 130 facilities to schedule site visits the week of March 18, 2013. Electronic copies of the industrial database to date and a list of the facilities to be contacted are included in Attachment 8. Attachment 8, Industrial Database and List of Facilities to be Contacted	Items A.1, 2, and 3: CDM Smith completed the first COA IDDE report in July 2013. A copy is included in Attachment A.1. CDM Smith will continue to visit new sites as well as follow up on selected existing facilities to review progress. Attachment A.1 2013 Industrial and High Risk Facilities	Items A.1, 2, and 3: CDM –Smith is currently conducting inspections at 38 facilities. A list of the facilities is included in Attachment A.1. A report summarizing the results will be included with next years' Annual Report. Attachment A.1 2014 List of Industrial and High Risk Facilities to be Inspected.

ILLICIT DISCHARGES AND IMPROPER DISPOSAL

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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: 1) prohibition, through ordinance or other regulatory mechanism, of non-stormwater discharges into the sewer 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 illicit discharges within forty-eight (48) hours of detection; 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. 6) review (NMDOT) within six (6) months 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.	1) The COA has instituted a 311 call in-program. This program includes citizen calls regarding illicit discharges. The COA is preparing a storm water discharge ordinance which makes non-allowable discharges to the storm drain system illegal. The ordinance will include escalating penalties for repeat illicit discharge offenders. 2) The COA and its partners have procedures in place for the notification of illicit discharges between these agencies. The COA also has procedures in place for notification of other agencies should an illicit discharge occur outside of its jurisdiction. 3) The COA will continue to update the existing database for illicit discharges which includes location of illicit discharge, parties responsible, address, date, known contaminants, and previous violations, if any. 4) The COA will attempt to investigate suspected illicit discharges within 48 hours of notification of the discharge during normal work day operations. Should calls occur over weekends or holidays, investigation will occur within 2 business days. Cessation of discharge, should one exist, will be required. 5) The COA has implemented and will continue to expand a targeted source reduction program. Potential future targets include mobile pet grooming services and carpet cleaners. 6) Not Applicable	Discussion of number and type of calls submitted in Annual Reports. Submission of draft storm water ordinance upon finalization. Discussion of source reduction program in Annual Report.	Items A.1, 2, 4, and 5: Storm drainage department staff addressed roughly 100 complaints. Personnel visited 50 of the sites, distributed educational brochures to offenders and nearby neighbors and filled out field forms (see Attachment 9). About 30 complaints were addressed by phones. Another 20 complaint recipients were sent informational letters with suggestions for BMPs and brochures. Complaints are stored in an Access Database. A breakdown of the type of discharge is as follows: Automotive fluids (oil, hydraulic fluid, antifreeze): 90%, Vegetative material: 3%, Carpet Cleaners: 4%, Dog Waste: 3% Personnel from the Environmental Health Department (EHD) responded to about 20 spill complaints ranging in size from 1 gal to 25 gal. The EHD department paid for the $1900 clean up cost resulting from a 25 gal diesel spill in April 2012. Attachment 9: 311 Complaint Field Log Item A.3: The COA continues to address an Administrative Order (AO), CWA-06-2012-1776, received on April 5, 2012 for discharges made by EXPO NM into the COA's MS4 system. Contingents from the COA, AMAFCA, and the EXPO met with EPA staff on November 2, 2012 to discuss resolution. The COA will install storm drain in 2 streets (Louisiana and Lomas) bordering the fairgrounds, thereby separating its flows from discharges within state (EXPO) property. Cost of the project is estimated at $4M. The Albuquerque Bernalillo County Water Utility Authority (WUA) continues to work with the COA in the elimination of cross connections between the sanitary and storm drain system. In late 2011 and early 2012, 3 cross connections in the Barelas area were detected and eliminated during installation of new storm line. In addition, per a new Corrective Action Plan (CAP), implemented by the WUA in Sept 2012 and documented in a letter response to EPA on Nov 19, 2012, WUA staff continue to notify COA storm drainage personnel of sanitary overflows as they occur and submit monthly Data Monitoring Reports (DMRs).	Items A.1, 2, 4, and 5: Storm drainage department staff continue to address 311 complaints. More than 100 complaints were addressed in 2013. An engineer visited roughly 50 locations and distributed educational brochures. A map and site inspection forms documenting the complaints of the visited locations is attached (see Attachment A.4). The remaining complaints were addressed through phone calls or mailing of literature. Attachment A.4 311 Complaint Map and Field Log Personnel from the Environmental Health Department addressed an additional 60 complaints dealing with the spilling of fluids onto COA right of way. Item A.3: The COA continues to work with EXPO NM to address AO CWA-06-2012-1776. Efforts to install additional storm drainage piping will begin late in the spring of 2014. The COA continues to receive documentation of sanitary overflows as they occur as well as monthly DMRs from the WUA. COA and WUA staff met several times in 2013 to discuss the WUA's CAP. Of note, a "natural" cross connection due to leakage from old sanitary pipe through soils and into storm drain system near the Broadway Pump Station was detected and repaired in the Fall of 2013.	Items A.1, 2, 4, and 5: Storm drainage department staff continue to address 311 complaints. More than 90 complaints were addressed in 2013. An engineer visited roughly 70 locations and distributed educational brochures. A map and site inspection forms documenting the complaints of the visited locations is attached (see Attachment A.4). The remaining complaints were addressed through phone calls or mailing of literature. Attachment A.4 311 Complaint Map and Field Log Personnel from the Environmental Health Department addressed an additional 50 complaints dealing with the spilling of fluids onto COA right of way. Item A.3: The COA continues to work with EXPO NM to address AO CWA-06-2012-1776. Additional storm drainage piping is currently being installed by the COA through the EXPO to keep residential flows separate from discharges from the EXPO. The COA continues to receive documentation of sanitary overflows as they occur as well as monthly DMRs from the WUA. COA and WUA staff met several times in 2013 to discuss the WUA's CAP. Of note, a "natural" cross connection due to leakage from old sanitary pipe through soils and into storm drain system near High Street was detected and repaired in the Spring of 2014. A cross connection at the North Valley Community Center was discovered late in 2014 and repairs are currently underway.
B. As described in **Part I.C.5.e(v)**, the permittee shall, in the IDDE Program**:** 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	1) The COA has prepared draft storm drainage and storm water quality ordinances which should facilitate implementation of the IDDE program. 2 and 3) The COA has prepared a map that identifies discharge points within City boundaries. The COA has contracted with consultants to investigate illicit discharges and prepare reports that discuss illicit discharge potential. One report regarding discharges into the NDC (DBS&A, 2009) has been submitted.	Submission of draft ordinances upon completion. Submission of report upon completion of investigation of study (Fall 2014). Continued updates in	Item B.1: The COA has drafted a storm water quality ordinance and presented it to the public for comments. Input from stakeholders is being incorporated. A more final version will be sent to EPA upon completion. Items B.2 and 3: The COA submitted a report to EPA Region 6 in March 2010 that examined the	Item B.1: The draft storm water quality ordinance is being reviewed and vetted by various community organizations. It is hoped that the ordinance will be introduced to City Council later in 2014.	Item B.1: The DRAFT Storm water Quality and Illicit Discharge Ordinance is being reviewed and vetted by various community organizations. It is hoped that the ordinance will be introduced to City Council in late 2015.

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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 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. 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. 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). 9) expeditiously revise (NMDOT) 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.	The scope of work for a report addressing IDDE potential in other basins is being prepared. 4) Education programs for the general public (see Education and Outreach) have been implemented. Those for public employees have also been implemented (see Good Housekeeping). 5)and 6) Dry Weather Field Screening also serves to identify any illicit discharges. The COA will continue to conduct field screening at 17 locations in the Albuquerque Metropolitan Area: 1) San Jose Drain @Woodward, 2) Broadway Pond Inflow Channel, 3) Menaul Pond Inflow Channel (representative of NMDOT inflow), 4) Barelas Pumping Station Inflow, 5) Kirtland AFB Channel @ South Diversion Channel, 6) San Antonio Arroyo@ USGS gage, 7) Calabacillas Arroyo @Rio Grande, 8) Hahn Arroyo @Carlisle, 9) Embudo Arroyo @Pennsylvania, 10) Highlands System Outfall @UNMH (representative of UNM inflow), 11) Bear Canyon Arroyo @North Diversion Channel, 12) South Pino Arroyo @Washington, 13) North Pino Arroyo @North Diversion Channel, 14) South Domingo Baca Arroyo @Washington, 15) Amole del Norte Channel @ Blake Road, 16) West Bluff Outfall @Rio Grande, and 17) Snow Vista Arroyo @Sage Rd. Screening will occur on an annual basis during the Fall dry season (typically November through early December). Sites will be visually observed and photographed. Should discharge be present, flow rate, turbidity, pH, total conductance, DO, and visible gross pollutants will be recorded. Suspicious discharges will be noted and traced to their origin. Additional tests, if needed will be used to confirm the source of the observed flow and/or suspected pollutants. 7) and 8) The COA has hired a firm to investigate illicit discharges in the MS4 basins as well as prioritize additional work needed should any areas of concern be noted. The results of the study will be shared with the agencies required by this permit. A report prepared by Daniel B. Stephens & Associates entitled "North Diversion Channel Illicit Discharge Investigation" was submitted in 2009 and summarizes sources of storm water pollutants into the Channel. 9) NA 10) ,11), and 12) The COA will continue to enhance its existing IDDE program. Enhancements could include educational outreach targeted at "problem industries", incentives or recognition programs for "green" businesses. IDDE activities have already been and will continue to be implemented according to the schedule indicated in this permit. GIS maps of the drainage basins have been prepared. These drainage basins have been assessed for IDDE potential during the previous permit cycle. However, all basins will be re-examined during the investigation listed in 7) and 8). Areas with the highest potential (e.g. industrial zoned areas) will be the focus of subsequent investigations.	Annual Reports on the IDDE program, including education and outreach efforts for public employees and the general public. Continued submission of Dry Weather Screening Logs in Annual Reports. Continued submission of follow up reports, should any discharges be discovered and tracked. Submission of ranking of MS4 catchments upon completion (Fall 2014). Updates on activities conducted will be provided in Annual Reports.	potential for discharges into the North Diversion Channel (NDC), particularly those causing DO depletion, such as oil and grease (see Attachment 10). CDM-Smith, a local consulting firm , has been hired to provide support for the City's IDDE program. Following completion of the inspection program discussed under Industrial and High Risk Discharges, CDM-Smith will assess the potential for discharges into drainage basins. Attachment 10: NDC Illicit Discharge Study, DBS&A, Dec 2009 Item B.4: Members of the general public and public employees are informed of pollution prevention practices as incidents occur through letters, brochures, and verbal discussions. Additional efforts are described under Public Education and Outreach. Items B.5 and 6: Dry weather screening at the 17 locations listed occurred from November to December 2012. No discharges were evident at 9 of the locations. Nuisance flows were detected at 8 locations. Samples were collected and analyzed for e-coli, fecal coliform, and total bacteria as well as for nutrients (ammonia, total kjeldahl nitrogen , nitrate + nitrite, and phospohorous). Field forms including sampling results are included in Attachment 11. Attachment 11: Dry Weather Screening Results Items B.7, 8, and 9: The COA has hired a local consulting firm, CDM-Smith to visit industrial sites with a high potential for discharge. They will note areas of concern and prioritize basins based upon the results of this investigation. Items B.10, 11, and 12: Discussed under items 7, 8, and 9.	Items B.2 and 3: The COA continues to maintain a current map of discharge points into the MS4. Illicit discharges continue to be addressed through 311 complaints, site visits, and educational programs. Item B.4: Education programs, including employee training, continue to be implemented. Items B.5 and B.6: Dry weather screening at 17 locations was performed in late fall of 2013. No discharges were observed at 12 locations. Nuisance flows were detected at 5 locations and analyzed for selected contaminants. Results are included on the inspection forms (see Attachment A.5) Attachment B.5: 2013 Dry Weather Screening Results Items 7. And 8: A map completed by CDM Smith of potentially high risk dischargers (see Figure 3.1, Attachment A.1 in Industrial and High Risk Runoff) indicates clusters of activity between I-25 and Broadway. Other potential hot spots can be seen on east and west Central. These areas will be the focus of attention in subsequent inspection efforts. Note that the Dry Weather Screening sites currently focus on these areas of industrial activity. See discussion of Items 7 and 8.	Items B.2 and 3: The COA continues to maintain a current map of discharge points into the MS4. Illicit discharges continue to be addressed through 311 complaints, site visits, and educational programs. Item B.4: Education programs, including employee training, continue to be implemented. Items B.5 and B.6: Dry weather screening at 17 locations was performed in late fall of 2013. No discharges were observed at 13 locations. Nuisance flows were detected at 4 locations and analyzed for selected contaminants. Results are included on the inspection forms (see Attachment A.5). Two of the nuisance flows have been tracked to releases from a boiler system, an allowable discharge that has been tested. The other 2 nuisance flows are due to over irrigation and/or ground water discharges into the storm sewer system. Attachment B.5: 2013 Dry Weather Screening Results Items 7. And 8: A map completed by CDM Smith of potentially high risk dischargers (see Figure 3.1, Attachment A.1 in Industrial and High Risk Runoff) indicates clusters of activity between I-25 and Broadway. Other potential hot spots can be seen on east and west Central. These areas continue to be the focus of attention in subsequent inspection efforts. Note that the Dry Weather Screening sites currently focus on these areas of industrial activity. See discussion of Items 7 and 8.

CONTROL OF FLOATABLES DISCHARGES

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part I.C.5.h**, 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.	1 and 2) The COA has synthesized the findings from the Floatables Study and will continue to install storm water quality features, such as ported risers, trash racks, and screened inlets in both new construction and retrofits where appropriate as funding is identified.	Design and installation of at least one ported riser between 2012 and 2014. Include discussion of volume and type of trash removed in Annual Reports.	Item A.1: Ported risers, consisting of metal mesh towers that trap floatables and debris, were installed at the outlet structures to 4 detention ponds: Piedra Lisa, Odelia, Ladera, and Tierra Bayita. Additional erosion control features were added to the pond at Kirtland AFB. See Attachment 6 for a copy of a preliminary letter report that discusses the function and design of the ported risers. Additional photos of water quality improvements or features installed throughout the City in 2012 are also included in Attachment 6. Item A.2: Approximately 7,400 cubic yards (5700 tons) of dirt and debris were removed from COA streets during the 2012 CY. An additional 2600 cu yd (2000 tons) of dirt and debris, including vegetative matter, were removed from the storm drainage system by COA arroyo maintenance staff.	Item A.1: Ported riser installation at the 4 designate ponds is complete. The COA will continue to install water quality features such as ported risers, trash racks, and water quality manholes at facilities as they are constructed. Item A.2: Approximatly 8000 cubic yards (7400 tons) of dirt and debris, including floatables, were removed for COA streets during 2013. An additional 2100 cubic yards (1580 tons) of material such as vegetation, dirt, and debris were removed from the storm drainage system by COA staff. A total of 10,000 cubic yards (8980 tons) were removed from the COA MS4.	Item A.1: The COA installed water quality features during a retrofit at Stover and 8th St in 2014. The City continues to install water quality features during retrofits as appropriate for the site. Item A.2: Approximatly 3200 cubic yards of dirt and debris, including floatables, were removed for COA streets during 2014. An additional 2700 cubic yards of material such as vegetation, dirt, and debris were removed from the storm drainage system by COA staff. A total of 5900 cubic yards were removed from the COA MS4. Attachment A.2a. and A.2.b Materials Removed from COA Arroyos and Materials Removed from COA Streets in 2014 Street maintenance reports indicate that COA streest are swept approximately 3 to 4 times per year. Roughly 43,000 miles are swept each year.

WASTE COLLECTION PROGRAMS

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part I.C.5.i**, the permittee shall enhance programs for collecting motor vehicle fluids and household hazardous waste materials by: 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.	1 - 3) Foster greater communication with and perhaps funding to the Environmental Health Division (EHD) for the Household Hazardous Waste Collection program. Obtain information from the Water Utility Authority, if possible, regarding grease/septage hauler records.	Incorporation of Household Hazardous Waste location/schedule information on MRGSWQT brochures.	Items A.1 and 2: Educational brochures with household pollution prevention tips have not been re-printed. Information on the HHW location and schedule will be included when additional brochures are ordered. EHD staff report that during the 2012 CY, approximately 120,000 gal (950,000 lb) of used motor fluids were collected at the HHW Center. About 10,611 individuals participated in the program at a cost of $650,000. In addition, EHD personnel collected over 725 gal of used motor fluids from oil recycling centers throughout the City. Item A.3: The Storm Drainage Department contributed $20K to the HHW program in 2012 in an effort to add an additional collection day (Mondays). An additional $30K will be contributed to the program in 2013 to conduct 2 semi-annual electronic recycling events in areas of town where dumping has been an issue.	Items A.1, 2, and 3: The HHW program transferred from EHD to Solid Waste in late spring of 2013. An e-waste recycling event held in an underserved area in Albuquerque (SE heights, formerly known as the “War Zone” but now referred to as the “International Zone”) had over 100 participants. Solid Waste staff report that during CY 2013, approximately 9200 individuals from the COA and 1800 individuals from Bernalillo County participated in the program. Program cost for CY 2013 was estimated at almost $700,000. The COA continues to support the Water Utility Authority in their pollution prevention efforts regarding proper disposal of commercial fats, oils and greases.	Items A.1, 2, and 3: Solid Waste held a HHW recycling event held in an underserved area in Albuquerque (near NE heights at The Armory”). Nearly 600 individuals participated in the event. Solid Waste staff report that during CY 2014, approximately 10,900 individuals from the COA and 1780 individuals from Bernalillo County participated in the program. Program cost for CY 2014 was estimated at almost $700,000. Information regarding the number of participants and costs is included in Attachment A.1 Attachment A.1 Household Hazardous Waste Collection Reports and Costs Approximately 350,000 lbs of hazardous waste were diverted from the landfill in CY2014. Monthly weights of HHW waste diverted from the landfill is included in Attachment A.3 Attachment A.3 Waste Diverted and Material Reuse The COA continues to support the Water Utility Authority in their pollution prevention efforts regarding proper disposal of commercial fats, oils and greases.

PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part I.C.5.k**, the existing Public Education and Outreach Program shall be modified 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) a plan to target outreach to stakeholders listed in Part I.C.5.k(v)(5).	1) and 2) The COA will continue to participate in the Middle Rio Grande Storm Water Quality Team (MRGSWQT), an interagency education and outreach program geared towards providing information about storm water quality issues. Target pollutants include pet waste and trash/debris. These pollutants were chosen on the basis of studies conducted in the previous permit cycle. Currently, the MRGSWQT funds classroom and field education programs, media campaigns, production of brochures and giveaways, display booths (including one in design at the Natural History Museum), and a website (Keeptherivergrand.org). This ensures that information is disseminated to all ages of the population. Last year, due in large part to an extensive media campaign, over outreach activities extended to over 2 million individuals in the Albuquerque Metropolitan area. During years with limited media campaigns, the MRGSWQT expects to reach over 3,000 grade school students and 20,000 individuals of all ages through existing programs listed above. In addition to activities conducted as part of the MRGSWQT, the COA will continue to participate in community outreach efforts such as presentations at neighborhood association meetings, booths at community fairs, and sponsoring installation of storm inlet markers to local service groups.	Outcomes report, prepared by local public relations firm hired by the MRGSWQT will be submitted in Annual Reports. This report will listing outreach method and estimated number of individuals reached. Discussion of additional education and outreach activities performed by COA staff will be provided in Annual Reports.	Items A.1 and 2: The COA efforts, along with 6 other agencies (AMAFCA, Bernalillo County, Cuidad Soil and Water Conservation District, NMDOT, SSCAFCA, and UNM) that participate in the MRGSWQT, are summarized by the Outcomes report prepared by Cooney-Watson, a local public relations firm (see Attachment 12). More than 15,000 people were reached in CY 2012 with a storm water quality/pollution prevention message. COA staff participated in 2 Dia del Rio clean up events and distributed storm water quality/pollution prevention brochures at 3 community events. Personnel also gave presentations regarding storm water quality features, information on the COA's MS4 permit, and the importance of protecting storm water quality at 8 events (conferences, luncheons, neighborhood association meetings) throughout the 2012 CY. Attachment 12: Cooney Watson Educational Outcomes Report and River Xchange 2012 Report and February 2013 Update	Items A.1 and 2: The COA continues to participate and contribute to the MRGSWQT. This Team meets bimonthly with the primary purpose of planning outreach activities. Attachment A.1 summarizes the activities conducted and individuals targeted in CY 2013. This attachment includes an Educational Outcomes report as well as summary tables and reports from River Xchange, and BEMP, two groups with a primary focus on education in the public school system. Attachment A.1: 2013 Educational Activities	Items A.1 and 2: The COA continues to participate and contribute to the MRGSWQT. This Team meets monthly with the primary purpose of planning outreach activities. Attachment A.1 summarizes the activities conducted and individuals targeted in CY 2014. This attachment includes an Educational Outcomes report as well as summary tables and reports from River Xchange, and BEMP, two groups with a primary focus on education in the public school system. The COA supplied funding to 2 organizations, The Nature Conservancy and Earth Force, to conduct education and outreach activities (field trips and monitoring), in FY2015. Attachment A.1: Educational Outcomes Report
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.	3) The COA and MRGSWQT will continue to promote LID. Use of GI will be promoted in the proposed ordinance. Educational brochures will continue to emphasize the importance of source reduction and LID practices. Both the COA and MRGSWQT will continue to support the annual Arid LID conference which promotes understanding and use of LID in arid regions. 4) The COA Solid Waste Department is currently expanding its curbside recycling program. A report that examined particular GI practices perceived to fail in dusty, arid climates (e.g. permeable paving on roadways, green roofs) has already been prepared. Public education and outreach efforts regarding litter reduction and proper disposal continue to be addressed through informational brochures and media campaigns. 5) The MRGSWQT combines the outreach efforts of 7 agencies. Participation by small MS4 organizations in the Albuquerque Urbanized Area is strongly encouraged by existing members, including the COA.	Outreach efforts will continue to be summarized in Annual Reports.	Item A.3: As discussed in Item 4 under Post Construction, the COA has begun to study LID retrofit possibities at it's largest maintenance yard and at a senior center. In addition, the Planning Department has begun to examine possible incentives for LID/GI incorporation in new projects as well as retrofits. Item A.4: The COA has begun to implement a curbside recycling program. The public seems receptive to ideas to reduce the volume of litter as well as to other GI practices. As with any project, lack of funding is an impediment. Item A.5: The COA and members of the MRGSWQT continue to encourage agencies in the Watershed Based Pilot Program to participate in the education and outreach program.	Item A.3 See discussion under Post Construction. The COA continues to incorporate LID in it's capital projects as well as facilitate GI/LID projects in the private sector. City staff continue to promote GI/LID educational efforts through participation and speaking engagements in local conferences. Item A.4: The COA Solid Waste Department has distributed waste recycling containers to all residents. Flyers have been included with local billings to encourage participation in the program. Item A. 5: The COA and members of the MRGSWQT continue to reach out to smaller agencies in an effort to increase membership. A meeting to target potential participants was held in mid January 2014. Details will be included in next year's report. A flyer distributed to potential recipients sent in December 2013 is included in Attachment A.5 Attachment A.5 New Member Recruitment Handout	Item A.3 See discussion under Post Construction. The COA continues to incorporate LID in it's capital projects as well as facilitate GI/LID projects in the private sector. City staff continue to promote GI/LID educational efforts through participation and speaking engagements in local conferences. Item A.4: Citizens in the COA continue to recycle waste using the container distributed by SW in 2012-2013. Item A. 5: The MRGSWQT membership has expanded to include future WBP agencies, including the Town of Bernalillo, Sandoval County, Rio Rancho, Village of Los Ranchos, and ESCAFCA

PUBLIC INVOLVEMENT AND PARTICIPATION

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part I.C.5.I**, the permittee shall: 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.	1) and 2) Make SWMP, ordinance (when completed), storm water quality information available on the COA webpage. Provide similar information or links to the COA webpage on the Keeptheriogrande.org site. The Keeptheriogrande.org webpage could be redesigned to provide a survey to assess public interest. Contact information of team members could be provided to allow for public comment and input. 3) The Pueblos of Isleta and Sandia will be included on the distribution list for all reports sent to the EPA.	Discussion of public input, and their comments will be provided in Annual Report.	Items A.1 and 2: The 2012 MS4 Permit is available online at the COA's storm water webpage. Plans are underway to add the SWMP and ordinances (upon City Council approval). The COA convened a "Blue Ribbon Task Force Committee" to comment on the MS4 permit and SWMP obligations. Meetings were conducted throughout 2012. Unfortunately momentum was lost due to a lack of consensus by committee members on recommendations to be made to the City. The COA has encouraged public participation in the vetting process of the two ordinances, Storm Drainage and Storm Water Quality. Review of the update to the Storm Drainage Ordinance, that includes capture of the first flush (0.44 in) is nearly complete and has been introduced to City Council. The review process for the Storm Water Quality Ordinance is still underway. Meetings with stakeholders continue as well as revisions to the draft as comments are addressed. Item A.3: The COA included the Pueblos of Isleta and Sandia on the the distribution list for all reports that were sent to EPA, Region 6.	Items A.1 and 2: The MS4 permit and SWMP have been added to the Storm Drainage COA webpage. The Storm Drainage Ordinance was passed on November 4, 2013, almost 6 months after it's introduction to a City Council committee. During this period, the public commented on the ordinance. Many of these comments were incorporated into the final ordinance. The Stormwater Quality Ordinance has been drafted and is currently undergoing review and comment by various public agencies. Item A.3: The COA continues to include the Pueblos of Isleta and Sandia on it's distribution list for reports sent to the EPA.	Items A.1 and 2: The MS4 permit and SWMP have been added to the Storm Drainage COA webpage. New items, such as the eNOI for the WBP, will be posted upond completion. The Storm Team, of which the COA is a member, hosts a webpage with agency documents and information regarding storm water quality and pollution prevention techniques. Storm Team members attended community events, including the Bernalillo County Wine Festival, in an outreach effort and distributed survey cards to obtain public feedback. The webpage analytic results and the survey card results are provided in Attachments A.1.a and A.1.b, respectively. Attachments A.1.a and A.1.b Include the Storm Team Website Analytics Report and the Survey Card Results, respectively The Stormwater Quality Ordinance has been drafted and is currently undergoing review and comment by various public agencies. Item A.3: The COA continues to include the Pueblos of Isleta and Sandia on it's distribution list for reports sent to the EPA.

DISCHARGES TO IMPAIRED WATERS – IMPLEMENTATION OF NEW BACTERIA TMDL

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. **Revision of Bacteria Target Values for Consistency with the New TMDL**. 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 *E. coli* waste load allocations as measurable goals for the SWMP. 1) Submit certification of completion of review and revisions.	The COA and will review and evaluate the current monitoring program for effectiveness. The COA believes that the program commenced in 2003 targeting fecal coliform is effective in meeting e-coli goals. This program, with a focus on education and outreach to raise awareness of the issues associated with pet waste contamination will be continued under the 2012 permit. In addition, the COA will work with the Water Utility Authority to correct cross connections, should any be reported. 1) The COA has submitted certification to the EPA of the completion of the review of the current bacterial monitoring program.	Submission of certification of review of program within 3 months of permit effective date.	Item A.1: The COA submitted certification of the revision of bacteria target values on June 1, 2012. A copy of the June 1, 2012 letter submittal is included in Attachment 13. Attachment 13: Bacterial Monitoring Program Certification, Letter Report submitted June 1, 2012.	Item A.1: Completed in 2012.	Item A.1: Completed in 2012.
B. **Revision of Monitoring Program** In consultation with NMED and EPA Region 6, revise the bacteria monitoring program as necessary for consistency with the new TMDL. The revised monitoring program must: 1) Use *E. coli* 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.	The COA has revised the bacteria program as necessary for consistency with the new E-coli TMDL. 1) E-coli rather than fecal coliform will be used as the indicator parameter. 2) Information on the 5 outfall locations (representing various watersheds in the MS4) will be used to calculate a WLA. 3) Certification of the completion of the review and revisions has been submitted by the COA.	Submission of the certification of completion of review and revisions within 3 months of effective permit date.	Item B.1, 2, and 3: The COA submitted certification of the review and revision of the monitoring program for consistency with the e-Coli TMDL on June 1, 2012. A copy of the monitoring program, conducted by the US Geological survey was included in the June 1 submittal. A local consultant prepared a Storm Water E-coli study (see Attachment 14). The resulting monthly statistical summary by outfall location was used to compute the WLA by the Albuquerque Metropolitan Area outfalls to the Middle Rio Grande. Attachment 14: Storm Water E-coli Loading Study	Items B.1,2, and 3: Completed in 2012.	Items B.1, 2, and 3: Completed in 2012.
C. **Implementation of Revised Monitoring Program** Commence monitoring under the replacement *E. coli* TMDL monitoring program.	The COA has commenced monitoring E-coli.	Submission of E-coli results in the Annual E-coli Loading Report and the Data Monitoring Reports (DMRs) .	Item C: Attachment 15 includes the excel spreadsheets used to compute the E-coli WLA's by the respective outfalls to the Rio Grande. A summary spreadsheet, "Total Load", shows the contribution by each of the 5 outfalls and compares the total value to the allowed allocation. As noted in the spreadsheets, no exceedances occurred during CY 2012. The largest contribution occurred on October 5 with a value of 1.7% of the allowed load. E-coli concentrations for each of the outfalls during the dry (Oct 1, 2011 to May 31, 2012) and wet (June 1, 2012 to Sept 30, 2012) are reported on the Data	Item C: Attachment C.1 contains the E-coli Loading Results for Water Year 2013 (September 30, 2012 through October 1, 2013). DMRs are reported under Wet Weather Screening, Item A.3.	Item C: Attachment C.1 contains the E-coli Loading Results for Water Year 2014 (September 30, 2013 through October 1, 2014). Attachment C.1 E-coli TMDL Report for Water Year 2014 DMRs are reported under Wet Weather Screening, Item A.3.

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
			Monitoring Reports (DMRs) (Attachment 16) Attachment 15: E-coli Loading Results for Water Year 2012 Attachment 16: Data Monitoring Reports (DMRs) for Water Year 2012		

TABLE II.B.2: Discharges to Impaired Waters – TMDL Waste Load Allocations (WLAs)[3] for *E. coli*: Rio Grande[1]

Rio Grande Assessment Unit	FLOW CONDITIONS & ASSOCIATED WLA (cfu/day)[4]				
	High	**Moist**	**Mid-Range**	**Dry**	**Low**
Isleta Pueblo boundary to Alameda Street Bridge (based on flow at USGS Station NM08330000)	3.36×10^{11}	8.41×10^{10}	5.66×10^{10}	2.09×10^{10}	4.67×10^{9}
	>3360 cfs	929-3360 cfs	664-929 cfs	319-664 cfs	<319 cfs
non-Pueblo Alameda Bridge to Angostura Diversion (based on flow at USGS Station NM08329928)	5.25×10^{10}	1.52×10^{10}	-	5.43×10^{9}	2.80×10^{9}
	>3670 cfs	922-3670 cfs	647-922 cfs	359-647 cfs	<359 cfs

Formula to Compare Actual Loadings to Target Values

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

C as cfu/100 ml * 1000 ml/1 L /0.264 gallons * Q = cfu/day

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

[2] 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.

[4] 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 T

COMPLIANCE WITH WATER QUALITY STANDARDS REQUIREMENT – DISSOLVED OXYGEN

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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 State and Tribal dissolved oxygen (DO) water quality standards in waters of the United States. Ensure the strategy complies with requirements in **Part I.B.1.d**.	The COA will continue to work with AMAFCA and its other MS4 partners to reduce the discharge of pollutants that contribute to exceedances of DO water quality standards. These strategies consist of the installation of structural controls, such as regarding of the embayment area, water quality features, and trash racks. Source reduction strategies, such as education and encouragement of LID, will also be employed.	Design and installation of 4 ported risers within the next 3 years (by 2015) to retain vegetative debris within detention basins of concern.	Item A: As discussed under "Pollution Prevention/Good Housekeeping for Municipal Operations", Item A.4 and "Control of Floatable Discharges", Item A.1, the COA has designed and installed ported risers in 4 detention basins. These outlet structures will collect or filter out a high percentage of the floating debris and sediment before releasing runoff from the pond. A design report and pictures of the structures are included in Attachment 6	Item A: Completed in 2012.	Item A: Completed in 2012.
B. Submit schedule for the following activities: 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 State and Tribal dissolved oxygen water quality standards in waters of the United States.	The COA and AMAFCA have identified pollutants contributing to DO reductions in the Rio Grande. These pollutants, typically oils, grease, vegetative matter, along with strategies for control, have been discussed in several reports: AMAFCA/Albuquerque MS4 Floatable & Gross Pollutant Study (ASCG, 2005); North Diversion Channel Illicit Discharge Investigation (DBS&A, 2009), and Investigation of Dissolved Oxygen in the North Diversion Channel, Embayment, and Rio Grande (DBS&A, 2009). The findings in the reports mentioned above have been submitted to EPA Region 6, the NMED and to the Tribes. AMAFCA has re-graded the Embayment Channel in an effort to mitigate anoxic conditions in the embayment that may lead to DO reductions. Five sondes have been deployed in the NDC area and Rio Grande. Monitoring services have been contracted with the USGS and results will be reported in updates and the Annual Report	Submission of initial report (due May 1) completed. Submission of monitoring information from sondes in annual reports. Submission of documentation regarding the design and installation of ported risers (e.g. specifications, plans, photos) along with data on debris retained.	Items B. 1 and 2: A letter report that discussed the initiation of DO Water Quality Requirements was submitted on May 1, 2012 and is included as Attachment 17. Attachment 17: Letter Report Re: Initiation of DO Water Quality Requirements submitted May 1, 2012.	Items B.1 and B.2: Completed in 2012.	Items B.1 and B.2: Completed in 2012.
C. Provide status reports to EPA. 1) Initial report to include; i. Findings regarding MS4 conveyed discharge contribution to exceedances of State and Tribal 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 State and Tribal dissolved oxygen water quality standards in waters of the United States. iv. Plan for stakeholder involvement.	The COA and its partners continue efforts in source reduction. Recent activities were submitted to the EPA Region 6, NMED, the Tribes and Fish and Wildlife Service in a letter report on June 1, 2013. Water quality information is available on the Bosque Environmental Monitoring Program webpage. The partners will include reports and pertinent data on the Keeptheriogrande.org website.	Submission of information regarding DO exceedances in status report.	Item C.1 See Attachment 17.	Item C.1: Initial status report completed in 2012.	Item C.1: Initial status report completed in 2012.
2) Subsequent progress reports to include; i. Adherence to schedule. ii. Activities undertaken to identify MS4 discharge contribution to exceedances of State and Tribal dissolved oxygen water quality standards in waters of the United States.	Progress reports will be submitted as specified.	See above.	Item C.2: A 6 month progress report was submitted to EPA on September 1, 2012 and is included as Attachment 18. Attachment 18: Letter Report Re: Six Month Progress Update on DO Compliance submitted September	Item C.2: Sonde data, including DO concentrations continue to be monitored along with additional paramters such as pH, water temperature, specific conductance, and turbidity. Plots (both annual and	Item C.2: Sonde data, including DO concentrations continue to be monitored at key locations in the Rio Grande and Embayment along with additional parameters such as pH, specific conductance,

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
iii. Conclusions drawn, including support for any determinations. iv. Activities undertaken to eliminate MS4 discharge contribution to exceedances of State and Tribal dissolved oxygen water quality standards in waters of the United States. v. Accounting of stakeholder involvement.			1, 2012. DO data collected from the sonde in the Embayment and the 4 sondes in the Rio Grande is provided in Attachment 19. Additonal data (pH, water temperature, specific conductance, and turbidity) is also included. Plots for each parameter are provided by sonde location. Excel spreadsheets that display all of the data are also included by sonde location. Note that the sonde in the Embayment area malfunctioned several times during the Summer of 2012 as a result of a lithium battery compartment leak and then because of fouling. Attachement 19: Dissolved Oxygen (DO) and Additonal Data (pH, Specific Conductance, Water Temperature, and Turbidity) Collected from Sondes in the Embayment (1) and Rio Grande (4) It is too early to draw any conclusions regarding from the sondes. Data has been limited due to sonde malfunction as well as a limited number of storm events during this period of extreme drought.	quarterly) of each parameter are provided for 2 locations in the Rio Grande: 1) near the Embayment and 2) at the Central Avenue Bridge. See Attachment C.2. Excel spreadsheets available upon request. Attachment C.2. Sonde Charts for Water Year 2013	water temperature, and turbidity. AMAFCA, partner of COA, can provide data from the sondes upon request.
D. Provide support for toxicity study as determined by co-permittees.	The COA does not believe that a toxicity study is necessary at this time.	Not Applicable.			

COMPLIANCE WITH WATER QUALITY STANDARDS – INVESTIGATION AND REDUCTION OF PCBS IN THE SAN JOSE DRAIN AND NORTH DIVERSION CHANNEL [5]

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. Address concerns regarding PCBs in North Diversion Channel (NDC) conveyed discharges by performing activities to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of State or Tribal water quality standards in waters of the United States. 1) For the initial progress report, permittees shall: i. Conduct an evaluation regarding controllable sources of PCBs in the North Diversion Channel.	AMAFACA and the COA have contracted with the USGS to collect soil samples from detention basins that drain to the NDC. These screening samples will be analyzed for PCBs. If PCBs are present in soils from any of the basins, locales further upstream shall be chosen in future sampling events to pinpoint a source.	An initial progress report was submitted per permit requirements on June 1, 2012.	Item A.1: An initial progress report was submitted to EPA Region 6 on June 1, 2012 and is included as Attachment 20 Attachment 20: Initial Progress Letter Report Re: PCBs, Submitted on June 1, 2012.	Item A.1i: Completed in 2012.	Item A.1i: Completed in 2012.
ii. Design and implement a monitoring study to evaluate presence and magnitude of PCB levels in stormwater discharges to and within the North Diversion Channel.	Storm water samples in the NDC shall continue to be monitored for PCBs by the NMED approved method. A contract with the USGS to sample in FY 2012-2013 has been approved.	Submission of PCB laboratory results in six month progress update. Submission of analysis of results in Spring 2013.	Item A.1: A six-month progress update was submitted to EPA Region 6 on September 1, 2012 and is included as Attachment 21. Attachment 21: Letter Report re: Six Month Progress Update on PCB Analysis	Item A.1.ii: Completed in 2012.	Item A.1.ii: Completed in 2012
iii. Report on results of the confirmation study to EPA, NMED, and the Pueblos of Isleta and Sandia. iv. Should results of the confirmation study confirm levels of PCBs in North Diversion Channel discharges contain levels of PCBs that would cause or contribute to exceedances of State or Tribal 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 State or Tribal water quality standards in waters of the United States.	PCB results shall continue to be submitted to the listed agencies. A screening study has commenced as indicated in the Proposed Plan to address Item A. Further screening studies shall be conducted should significant levels of PCBs be found.	Submission of report upon completion of sampling and analysis. Implementation of further screening plan should it be necessary.	Item A.1: A tech memo summarizing the soil screening analyses conducted in June 2012 and presented in the Six Month Update, the lab results, and sieve analyses from 5 locations are presented in Attachment 22. The "Aroclor" method, approved by the NMED and EPA for soil screening studies, was used for these analyses. Of the 20 analyses, 2 detections were found: 1) a value of 76/ug/Kg at the Grantline Channel (contributing to the NDC); and 2) an estimated value of 20 ug/Kg below the railroad tracks along the San Jose Drain. Contributing areas to these 2 locations will be screened in the future. Attachment 22: Technical Memorandum re: Summary of Soil Screening Results, Collected from 20 Locations, May and June 2012 Water samples continue to be analyzed by the more stringent PCB test method 1668. Two samples were collected north of the NDC in the Rio Grande. Additional samples have been collected from the 5 outfall locations during storm events. An excel spreadsheet summarizing the results from the 5 outfalls as well as analytical laboratory reports are provided in Attachment 23. Attachment 23: Results of PCB in Surface Water Analyses (Storm Water at Outfalls, Rio Grande North of the NDC) for 2011-2012	Items A.1iii and iv: Completed in 2012.	Items A.1iii and iv: Completed in 2012.
2) Initial progress report shall include: i. Findings regarding controllable sources of PCBs in the North Diversion Channel drainage area that cause or contribute to exceedances of State or Tribal 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 State or Tribal water	Following receipt of PCB lab results, a local consulting firm will perform an analysis and prepare a report. The report will be submitted to the required agencies and be posted to the MRGSWQT webpage, Keeptheriogrande.org.	An initial progress report was submitted on June 1. A final report will be submitted when the preliminary soil sample screening results have been obtained and analyzed. Future results will be reported in the Annual Report.	Item A.2 Addressed by Item A.1	Item s A.2i, ii, iii, and iv: Initial progress report completed and sent in 2012.	Item s A.2i, ii, iii, and iv: Initial progress report completed and sent in 2012.

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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.					
B. Address concerns in San Jose drain conveyed discharges by performing activities to identify and eliminate controllable sources of PCBs that cause or contribute to exceedances of State or Tribal water quality standards in waters of the United States. 1) The initial progress report shall include: i) Findings regarding controllable sources of PCBs in the San Jose Drain drainage area that cause or contribute to exceedances of applicapbel water quality standards in waters of the US via discharge of municipal storm water. ii) Conclusions drawn, including support for determination. iii) Activities taken to eliminate controllable sources of PCBs in the San Jose Drain drainage areas. iv) Account of stakeholder involvement.	Storm water samples in the San Jose Drain shall continue to be monitored for PCBs by the NMED approved method. A contract with the USGS to sample in FY 2012-2013 has been approved.	An initial progress report was submitted per permit requirements on June 1, 2012.	Item B.1. Addressed by Item A.1	Items B.1i, ii, iii, and iv: Completed in 2012.	Items B.1i, ii, iii, and iv: Completed in 2012.
C. Subsequent progress reports to include: 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 State and Tribal water quality standards in waters of the United States via 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 and North Diversion Channel drainage areas that cause or contribute to exceedances of State or Tribal water quality standards in waters of the United States. iv. Accounting of stakeholder involvement.	See discussion to items A and B.	Submission of required reports upon completion of screening sampling and analysis currently underway. Future soil screening studies will be conducted dependent upon sample results. Storm water PCB analyses will continue per monitoring requirements. Storm water analyses will be submitted in the Annual Report.	Item C: Addressed by Item A.1	Item C.i, ii, iii, and iv: The source of PCB contamination in the San Jose drain was identified in the 2012 Report. It was determined that PCBs from the source are not reaching the Rio Grande. Soil screening for PCBs in ponds and channels that drain to the NDC continued in 2013. USGS personnel sampled at 5 locations in August of 2013. Detectable levels of Aroclor 1260 were found at 2 of the 5 locations: 1) inflow to the N. Camino Arroyo at a concentration of 12 micrograms per kilogram and 2) at the mouth of the Grantline Arroyo at a concentration of 220 micrograms per kilogram. Attachment C.iv provides the locations and corresponding sample analyses. Attachment C.iv: PCB Soil Screening Locations and Sample Analyses .	Item C.i, ii, iii, and iv: The source of PCB contamination in the San Jose drain was identified in the 2012 Report. It was determined that PCBs from the source are not reaching the Rio Grande. The COA hired a consultant to screen for PCBs in the Tijeras Arroyo following the detection of hits in stormwater samples at the Tijeras Arroyo in the Summer of 2014. A draft report summarizing the results (no detections were found in soil samples taken from upstream locations) is included in Attachment C.iv. Attachment C.iv: PCB Sediment Report Tijeras Arroyo

[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.

COMPLIANCE WITH WATER QUALITY STANDARDS REQUIREMENT – TEMPERATURE

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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 State and Tribal temperature water quality standards in waters of the United States. Ensure the strategy complies with requirements in **Part I.B.1.f**.	The COA disagrees that storm water contributes to exceedances of temperature water quality standards for the Rio Grande. Nonetheless, the USGS has installed temperature probes at the 5 outfall locations to record air and storm water temperatures.	Strategy was submitted on May 1, 2012.	Item A: The strategy was submitted to EPA Region 6 in a letter report dated May 1, 2012, included as Attachment 24. Attachment 24: Letter Report Re: Initiation of Temperature Water Quality Requirements submitted May 1, 2012.	Item A: Completed in 2012	Item A: Completed in 2012
B. Submit schedule for the following activities: 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 State and Tribal temperature water quality standards in waters of the United States. C. Provide status reports to EPA. 1) Initial report to include; v. Findings regarding Rio Grande conveyed discharge contribution to exceedances of State and Tribal temperature water quality standards in waters of the United States. vi. Conclusions drawn, including support for any determination. vii. Activities undertaken to reduce MS4 discharges contribution to exceedances of State and Tribal temperature water quality standards in waters of the United States. viii. Plan for stakeholder involvement.	See item A. Recorded air and storm water temperatures will be included in the Annual Report. Data will be posted on the Keeptheriogrand.org webpage.	Initial report including previous temperature data was submitted to EPA and other agencies as required on May 1, 2012.	Items B1 and B2 and C1: A six-month progress update was submitted to EPA Region 6 on September 1, 2012 and is included as Attachment 25. Attachment 25: Letter Report re: Six Month Progress Update on Temperature Analysis	Items B.1, B.2, and C.1: Completed in 2012.	Items B.1, B.2, and C.1: Completed in 2012.
2) Subsequent progress reports to include; vi. Adherence to schedule. vii. Activities undertaken to identify MS4 discharge contribution to exceedances of State and Tribal temperature water quality standards in waters of the United States. viii. Conclusions drawn, including support for any determinations. ix. Activities undertaken to reduce MS4 discharge contribution to exceedances of State and Tribal temperature water quality standards in waters of the United States. x. Accounting of stakeholder involvement.	See items A and B.	Data will be included in future Annual Reports.	Item C.2) Temperature data from June 2012 to February 2013 for the 5 outfall locations is included in Attachment 26. Three temperature exceedances (greater than 3.2. degrees C) occurred during this time period. Two exceedances took place at the NDC near Alameda: 1) June 9, beginning at 17:30 and lasting for 15 minutes; 2) August 6 beginning at 13:05 and lasting for 2 hrs, 55 minutes. The third exceedance occurred at the South Diversion Channel (SDC) on August 6 beginning at 11.45 and lasting for 7 hrs. Attachment 26: Temperature Analyses for 5 Outfall Locations from June 2012 to February 2013	Item C.2: Discharge temperatures along with the dates, duration, and daily mean flow rate during exceedances for 4 of the 5 outfalls: North Diversion Channel, South Diversion Channel, Tijeras Arroyo and the San Jose Drain is included in Attachment C.2. Temperature data at the Mariposa Diversion of the San Antonio Arroyo was recorded. However, due to a transcription error, the readings are not recoverable despite an attempt by the USGS to send the files to the manufacturer of the temperature probes and corresponding software. Attachment C.2: Discharge Temperature at 4 Outfall Locations	Item C.2. Temperature data is available for the 5 outfall locations upon request from the COA's Phase 1 partner, AMAFCA. A review of the data shows that a brief period (5 minutes) of an exceedance above 32.2 degrees C occurred on July 6, 2014, from 16:45 to 16:50 at the San Jose Drain (SJD), Tijeras Arroyo, and South Diversion Channel (SDC). Flow at the SDC (into which the Tijeras Arroyo flows) was 0.77 cubic feet per second (cfs), resulting in a discharge of 230 cubic feet. Flow at the SJD was 0.17 cfs resulting in a discharge of 51 cubic feet.

U.S. FISH AND WILDLIFE SERVICE BIOLOGICAL OPINION REQUIREMENTS

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
To ensure actions required by this permit are not likely to jeopardize the continued existence of any endangered or threatened speicies or adversely affect its critical habitat, permittees shall meet the following rerquirements, included in PART I.B.3. A. Conduct continuous monitoring of dissolved oxygen (DO) and temperature in the NDC Emabayment and at one (1) location in the Rio Grande downstream of the NDC within the action area 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. 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. C. Provide the FWS with the following information on all qualifying stormwater events: DO value in Embayment, DO value at downstream monitoring statation, flow rate in the NDC, daily flow rate in the Rio Grande, and sum of silvery minoows taken D. Describe, in annual reports all standard operating procedures (SOP), quality assurmance plans (QAPP), maintenance, and implementation schedules to assure that timely and accurate data are collected, summarized, evaluated, and reported. E. Provide FWS with electronic copies of all incidental take, interim, and annual reports required by this permit no later than March 31 for the preceding calendar year ending December 31 to nmesfo@fws.gov or by mail to the NM Ecological Services Field Office, 2105 Osuna Rd, NE, Albuquerque, NM 87113 F. Complete remedial action selected for the NDC Embayment	A) The COA and AMAFCA have contracted with the USGS to install, maintain, and collect the requested data from 5 sondes in the Embayment area as well as the Rio Grande. B) The COA and AMAFCA will participate in an annual meeting with the FWS and EPA. C) AMAFCA has agreed to provide FWS with the requested information ("Take Sheet") reqarding storm events. D) All SOPs, QAPPs, and maintenance and implementation schedules are the responsibility of the USGS and kept at their facility. These items are available upon request. E) Addressed by item C. F) Remedial action within the Embayment area has been completed and is discussed in the Initial and Six Month Progress Update on Dissolved Oxygen (see Attachments 17 and 18)	Submission of results in Annual Reports.	Item A: Discussed under "Compliance with Water Qualtiy Standards Requirements – Dissolved Oxygen" Item B: A conference call with FWS is being set up with AMAFCA for the week preceding March 31, 2013. Item C: A copy of the excel spreadsheet with the required information is included in Attachment 27. Additional data from the 5 sondes in the Embayment Area and the Rio Grande is provided in Attachment 19. Attachment 27: North Diversion Channel (NDC) Discharges to the Rio Grande and Number of Silvery Minnows Affected in CY 2012	Items A through F: AMAFCA has diligently monitored DO activity in the NDC and has provided the FWS to with required information throughout 2013. AMAFCA has documented activities in their annual report. The COA has contributed monetarily to monitoring activities in 2013.	Items A through F: AMAFCA has diligently monitored DO activity in the NDC and has provided the FWS to with required information throughout 2014. AMAFCA has documented activities in their annual report. The COA has contributed monetarily to monitoring activities in 2014.

FLOATABLES MONITORING

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
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 cu yds) at: 1) Albuqurque/AMAFCA – two (2) stations (one (1) station should be located in the NDC System above the Pueblo of Sandia and 2) NMDOT and UNM – one (1) station each	Item 1: Monitor the floatable material and report the amount collected two times per year.	Submission of volumes collected in Annual Report	Approximately 10 cu yd was collected from the Barelas Pump Station in May 2012. Another 10 cu yd was collected in Dec 2012.	Approximately 7 cubic yards of material was removed from the Barelas Pump Station in May 2013. Approximately 10 cubic yards was collected in Dec 2013.	Approximately 8 cubic yards of material was removed from the Barelas Pump Station in May 2014. Approximately 12 cubic yards was collected in Dec 2014.

TOXICITY MONITORING TO PROTECT LISTED THREATENED AND ENDANGERED (T&E) SPECIES – IMPLEMENTATION OF 4-YEAR TOXICITY TESTING

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. Toxicity monitoring shall be conducted to protect T&E species. Ensure that the monitoring program complies with requirements in **Part III.D**. B. Sampling Locations 1) Collect stormwater at North Diversion Channel where it enters the main channel of the Rio Grande. 2) Use laboratory synthetic water for the test controls. C. Sampling Frequency 1) At least one (1) storm event per year throughout the term of the permit. D. Sample Size 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. E. Sample Analysis 1) Perform chemical analysis of stormwater and river water samples.	The COA has conferred with the Fish and Wildlife Service. The F&WS biologist has stated that the acute test toxicity test that has been performed in the past is unnecessary. Therefore the COA does not plan to perform WET testing in the future.	NA	NA	NA	NA
F. Toxicity Testing 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 *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (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 (*Pimephales promalas*) and *Daphnia pulex* species for toxicity testing.	NA	NA	NA	NA	NA
G. Reporting 1) Provide annual testing results and sample analysis on DMR forms and in each annual report as required in **Part III.H**.	NA	NA		NA	NA
2) Notify EPA immediately (addresses provided in **Part III.G**) upon detection of any toxicity. Toxicity is defined as an LC50 of <100 percent effluent.	NA	NA		NA	NA
3) Compile a final report to be submitted to EPA. Include: 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.	NA	NA		NA	NA
H. Provide support for toxicity study as determined by co-permittees.	NA	NA		NA	NA

WET WEATHER SCREENING OF MS4

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part III.E**, the wet weather screening program shall: 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 BOD_5, 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) 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.	All discharges during a storm event are collected at outfall locations. Therefore, the wet weather screening program is a subset of the monitoring program referred to in Part 3, on Page 1 of this permit. The COA and its MS4 partners have hired the USGS to perform sample collection at 5 representative outfall locations. Samples will be analyzed for all of the parameters in Table X.A twice per year. Samples will no longer be sampled for the constituents in Table X.B with the exception of metals not already included in Table X.A. These parameters include BOD_5, sediment or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil and Grease, and nutrients. The causes of impairments, which include temperature, dissolved oxygen (D.O.), and polychlorinated biphenyls (PCBS), will also be monitored and reported. Composite samples are collected using an automated ISCO sampling device. Grab samples are collected by USGS personnel. Temperature probes continuously record air and water temperatures. Sondes are used to monitor D.O., water temperature, and conductivity.	Sample results shall be reported on Data Monitoring Reports (DMRs) in Annual Reports. Event Means and Annual Loads will also be reported.	Items A.1 to A.5) Wet weather screening is synonomous with storm water collection at the 5 representative outfalls during rain events. Field and chemical data from sample analysis during wet and dry seasons is provided in the DMRs (see Attachment 16). Event mean concentrations reported during the water year (October 1, 2011 to September 30, 2012) are summarized in Attachment 28. Seasonal (Dry: October 1, 2011 to May 31, 2012 and Wet: June 1, 2012 to September 30, 2012) Chemical Loads and the Annual Chemical Load for the water year are also provided in Attachment 28. Due to a period of prolonged drought in the region, seasonal and annual chemical loads are lower than those reported in 2009. Values for the Albuquerque Metropolitan Area are comparable to those for urban runoff in the arid southwest. Attachment 28: Chemical Loading Report for Water Year October 1, 2011 to September 30, 2012 Item 6: No unusual erosion was observed. Erosion of dry washes is typical in the arid southwest. The resulting sediment is generally contained in detention basins located downstream.	Items A.1 to A.3: Event Means and Annual Loads are included in Attachment A.2 DMRs for the 5 outfall locations are included in Attachment A.3 Data Monitoring Reports Attachment A.2 Event Means and Annual Loads Attachment A.3 Discharge Monitoring Reports Although PCBs were sampled at the 5 outfalls, some analyses have not yet been completed due to a change in laboratory contracts within the USGS. Prior to the contract change, analyses for 2 locations in the Rio Grande were obtained and are included in the discussion under Impaired Receiving Water. An analysis of the data from the outfalls and proposed screening plan will be submitted upon receipt of final laboratory analyses. The USGS continues to make progress on a comprehensive data analysis (Items A.4 and 5). This report will discuss sample and collection techniques, provide an analysis of trends in the data, and compare results to national stormwater databases. A draft report has been promised by July 2014. A copy will be sent to the EPA and stakeholders upon receipt. The USGS has prepared a brief summary of the data collected this year. See Attachment A.5 Attachment A.5 USGS Summary of 2013 Data Collection Item 6: Again no unusual erosion patterns were observed. Erosion of dry washes is typical in the arid southwest. The resulting sediment is generally containted in detention basins located downstream.	Items A.1 to A.3: Event Means and Annual Loads are included in Attachment A.2 DMRs for the 5 outfall locations are included in Attachment A.3 Data Monitoring Reports Attachment A.2 Event Means and Annual Loads 2014 Attachment A.3a Dry Season Discharge Monitoring Reports and A.3b Wet Season Discharge Monitoring Reports The USGS continues to make progress on a comprehensive data analysis (Items A.4 and 5). This report will discuss sample and collection techniques, provide an analysis of trends in the data, and compare results to national stormwater databases. A final report has been promised by Spring 2015. Item 6: Again no unusual erosion patterns were observed. Erosion of dry washes is typical in the arid southwest. The resulting sediment is generally containted in detention basins located downstream.

DRY WEATHER DISCHARGE SCREENING OF MS4

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part III.F**, the dry weather screening program shall: 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, BOD_5, 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) specify the sampling and non-sampling techniques to be used for initial screening and follow-up purposes.	There are no perennial streams in the Albuquerque Metropolitan area. As such, the dry weather screening program serves a dual purpose as an illicit discharge screening analysis. Seventeen locations, which screen 100% of the MS4 and target industrial areas, have been chosen. Should any discharge be present in a quantity sufficient for analysis, it will be screened for BOD_5, sediment or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil and Grease, and nutrients. Any discharge collected will be a grab sample.	Results will be provided in the Annual Report. Any unusual discharges will be tracked.	Items A.1 to A.4) See discussion under "Illicit Dicharges and Improper Disposal" Items 5 and 6. Dry weather screening or IDDE results included in Attachment 11.	Items A.1 to A.4: See discussion under Illicit Discharges and Improper Disposal (IDDE) Items 5 and 6. Dry Weather Screening Results are included in the IDDE section.	Items A.1 to A.4: See discussion under Illicit Discharges and Improper Disposal (IDDE) Items 5 and 6. Dry Weather Screening Results are included in the IDDE section.

IMPAIRED RECEIVING WATERS WET WEATHER ASSESSMENT OF POTENTIAL WATER QUALITY IMPACTS

Activity	Proposed Plan	Measurable Goal	Progress in 2012	Progress in 2013	Progress in 2014
A. As described in **Part III.G**, the receiving water assessment program shall: 1) perform in-stream wet weather monitoring at all locations tributary to impaired waters listed under CWA §303(d), plus one (1) location located upstream of the MS4; 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.	The monitoring performed as required by Part III of the permit (representative outfall locations) meets this condition as the channels/arroyos sampled are tributary to the Rio Grande. In addition one location upstream and one location downstream of the outfalls will be sampled per permit requirements. The monitoring parameters include BOD_5, sediment or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil and Grease, and nutrients. The causes of impairments, which include temperature, dissolved oxygen (D.O.), and polychlorinated biphenyls (PCBS), will also be monitored and reported.	Results will be submitted in Annual Report. In addition, the USGS will summarize the previous permit cycle monitoring results. An analysis of the results should be completed by January 1, 2013.	Items A.1 to A.5) As discussed in "Wet Weather Screening", tributaries in our metropoltation area only flow during storm events. Hence, monitoring at the representative outfall locations during storm events constitutes monitoring at tributaries to them. The USGS has been commissioned (2012-2013 Water Year Program) to sample upstream and downstream of the MS4. Sampling will likely occur prior to the end of the water year (June 30, 2013). Note that 4 of the 5 sondes maintained by the USGS are installed in the Middle Rio Grande. As discussed under "Compliance with Water Quality Requirements – DO", these sondes continuously monitor for 5 constituents (DO, Water Temperature, pH, Specific Conductance, and Turbidity). See Attachment 19. Item A.6 No unusual patterns of erosion have been observed.	Items A.1 and A.2: The USGS performed instream monitoring at 2 locations in the Rio Grande on June 18 and 19, respectively: 1) upstream of the North Floodway and 2) at Isleta Lakes. These locations are just upstream and downstream of the MS4. Analytical Results are included in Attachment A.1. PCB laboratory results for the in-stream sampling at the 2 locations in the Rio Grande are presented in pdf format within the laboratory report. Analyses in tabular format and a brief summary of the results will be submitted upon receipt of sample analyses that were collected from outfall locations in September. Due to a change in laboratory contracts, results from later sampling events have been delayed. Attachment A.1: Analytical Results Upstream and Downstream of the MS4 Attachment A.2: Laboratory Report of PCBs in Rio Grande Water and Sediment Item A.5: USGS is currently preparing a summary report of data collected from outfall locations. Tentative draft date is July 2014. Item A.6: No unusual patterns of erosion have been observed. Note that the Rio Grande is a braided stream and subject to areas of scour and sedimentation.	Items A.1 and A.2: The USGS performed instream monitoring at 2 locations in the Rio Grande on June 18 and 19, respectively: 1) upstream of the North Floodway and 2) at Isleta Lakes. These locations are just upstream and downstream of the MS4. Analytical Results are included in Attachment A.1. PCB laboratory results for the in-stream sampling at the 2 locations in the Rio Grande are presented in pdf format within the laboratory report. Analyses in tabular format and a brief summary of the results will be submitted upon receipt of sample analyses that were collected from outfall locations in September. Due to a change in laboratory contracts, results from later sampling events have been delayed. Attachment A.1: Analytical Results from 2014 including Upstream and Downstream of the MS4 Item A.5: USGS is currently preparing a summary report of data collected from outfall locations. The draft report was completed in mid April 2014. The final report is anticipated sometime in Spring 2015. Item A.6: No unusual patterns of erosion have been observed. Note that the Rio Grande is a braided stream and subject to areas of scour and sedimentation. Parks and Recreation Department prepared a Environmental Monitoring Plan and Baseline Data Report for a restoration project in the bosque. The report is included as Attachment A.6

TABLE X.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	
1. Dissolved Oxygen (DO) (mg/l)	Yes	Yes		Yes[11]		1 events/ wet season;1 event/ dry season[6]
2. Biochemical Oxygen Demand (BOD_5) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
3. Chemical Oxygen Demand (COD) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
4. Total Suspended Solids (TSS) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
5. Total Dissolved Solids (TDS) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
6. Total Nitrogen (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
7. Total Kjeldahl Nitrogen (TKN) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
8. Total Phosphorus (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
9. Dissolved Phosphorus (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
10. Total Cadmium (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
11. Dissolved Cadmium (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
12. Total Copper (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
13. Dissolved Copper (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
14. Total Lead (µg/l)		Yes	Yes		Yes	1 events/ 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	
15. Dissolved Lead (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
16. Total Zinc (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
17. Dissolved Zinc (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
18. Mercury (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
19. Chromium III (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
20. Chromium VI (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
21. Arsenic (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
22. Thallium (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
23. Chlorides (as Cl) (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
24. Nitrate (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
25. pH (S.U.)	Yes		Yes	Yes[11]		1 events/ wet season;1 event/ dry season[6]
26. Sulfates (mg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
27. Conductivity (micromho/cm)		Yes	Yes	Yes[11]		1 events/ wet season;1 event/ dry season[6]
29. *E coli* [9]		Yes	Yes	Yes[10]		1 events/ wet season[6]; 1 events/ quarter during dry season
30. Oil and Grease (mg/l)		Yes	Yes	Yes		1 events/ 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	
31. Total Phenols (µg/l)		Yes	Yes		Yes	1 events/ wet season;1 event/ dry season[6]
32. Hardness (as $CaCO_3$) (mg/l)	Yes	Yes	Yes	Yes		1 events/ wet season;1 event/ dry season[6]
33. Temperature (°C)	Yes	Yes	Yes	Yes[11]		1 events/ 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 ML1-5. Monitoring for Monitoring Locations ML1-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 X.B – Representative Monitoring Bi-Annual 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	Thalllium	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
Clorodibromomethane	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	MQL µg/l	POLLUTANTS	MQL 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-Chloronapthalene	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

(MQL's Revised November 1, 2007)

[12] Parameters included in Table X.B are to be monitored biannually (every other year). Seasonal monitoring periods are: Wet Season: June 1 thru September 30; Dry Season: October 1 through May 31. Monitoring Frequency: two (2) events/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 (MQL) 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 X.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	400B (obsolete) 330600	City of Albuquerque Lift Station #32 (Barelas) at Albuquerque (USGS Station No. 08330075) CHANGED TO TIJERAS ARROYO IN MAY 2011 – See Letter dated May 1, 2011.	Stations located at stormwater pumping stations. Combined drainage of 4 sq.mi. Land use is: 35% residential; 34% commercial; 12% open space; 10% industrial; 9% agricultural	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