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October 23, 2012

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

RE: National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4)
Permit No. NMS000101 – Storm Water Management Program (SWMP)

To Whom It May Concern:

This submittal by the University of New Mexico (UNM) includes an updated SWMP as required by Page 6, Part I, Subpart C, Item 1 of the NPDES MS4 Permit No. NMS000101.

If you need additional information or have questions, please contact Carla Domenici, Interim Director, Safety & Risk Services at (505) 277-9794 (e-mail cprando@salud.unm.edu).

CERTIFICATION STATEMENT

As required by Parts III.I and IV.H of the NPDES MS4 Permit No. NMS000101, the undersigned representative of UNM is certifying the preparation of an updated Storm Water Management Program (SWMP), in accordance with specifications listed within the permit.

“I, David W. Harris, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.”

David W. Harris, VP for Administration, CFO & COO, UNM

Date

Carla P. Domenici, Interim Director, Safety & Risk Services, UNM

Date

CY w/o enclosures:

Nelly Smith, Environmental Protection Agency
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**University of New Mexico
Storm Water Management Program (SWMP)
FOR NPDES Permit # NMS000101
Effective March 1, 2012**

Introduction

The University of New Mexico (UNM) 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 City of Albuquerque (CABQ), the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and the New Mexico Department of Transportation (DOT). That permit expired in November 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 is preparing an individual Storm Water Management Program (SWMP). This document is the plan for UNM. This SWMP has been prepared in accordance with the permit Part I; C.

Expiration Date

The current MS4 permit is scheduled to expire the earlier of ninety days following the effective date of a watershed-based permit for the regulated Middle Rio Grande MS4s in the Albuquerque area or at midnight on February 28, 2017. This SWMP will continue for the duration of the Phase I MS4 permit.

General Requirements

This SWMP is in compliance with Permit NMS000101 and with Section 402(p)(3)(B) of the Clean Water Act and the Storm Water regulations (40 CFR 122.26 and 122.34).

Legal Authority

UNM has the legal authority to set and enforce policy regarding discharges to its storm drainage system.

Shared Responsibility

The Albuquerque MS4 partners are preparing a Memorandum of Understanding that will define the various responsibilities that each partner has to the other. Generally, the responsibility for implementation of storm water controls is based on property ownership. For example, UNM is responsible for storm water controls on its campus, but not outside of its campus. AMAFCA and CABQ share a common responsibility for the operation of the flood control and storm water quality system as the areas of responsibility that have large areas of overlap. The Albuquerque MS4 is mapped with AMAFCA and CABQ having primary responsibility of different channels and arroyos.

UNM does not discharge directly into the Rio Grande River. Rather storm water runoff from the Albuquerque UNM Campuses discharges into CABQ and AMAFCA storm drain systems. Additionally, UNM has recently began to develop land west of University Blvd. NE, north of Lomas Blvd. NE, west of Interstate 40 and south of Indian School Road NE (a.k.a. "Lands West"). The outfall for Lands West is the Odelia Pond, a storm water detention facility owned, operated and maintained by CABQ.

Measurable Goals

This SWMP includes measurable goals as stated in Part I.C.5 “Control Measures” including interim milestones indicating the months and years when certain actions will take place.

Material changes to the SWMP, including changes to any BMP activities or identified measurable goal will be mentioned in annual reports to the EPA. Pending changes to UNM’s SWMP that impact other Phase 1 MS4 co-permittees will be discussed and negotiated with the EPA and with the co-permittees while UNM remains a Phase 1 MS4 co-permittee. The SWMP will be evaluated annually by UNM’s Safety & Risk Services (SRS) Department. The annual review will evaluate implementation status of SWMP components and the effectiveness when more effective approaches are discovered. Should this review indicate the need for revision, any significant revisions will be provided to the EPA for comment and will be identified in the Annual Report. Specifically, for the University, these changes may also include changes in roles and responsibilities of co-applicants, including interagency agreements developed for MS4 permitting purposes.

CONSTRUCTION SITE STORMWATER RUNOFF CONTROLS

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.a, the permittee shall, in the construction Site Stormwater Runoff control Program , coordinate all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction activities within the permit area to ensure that the program controls or eliminates erosion and maintains sediment on site. The program shall address stormwater management during construction and include in the SWMP a description of the mechanism(s) utilized to comply with each of the following element:</p> <ol style="list-style-type: none"> 1) An ongoing program to assess, implement, and enforce the existing program to control stormwater discharges from construction activities that result in a land disturbance of greater than or equal to one (1) acre. 2) A procedure or system to review, update, and/or enact an ordinance(s) or other appropriate legal authority mechanism, that addresses stormwater runoff from constructions 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. 	<p>University of New Mexico (UNM) will coordinate all UNM departments who have a role in construction activities at UNM to ensure proper controls are in place to eliminate erosion and reduce the transport of sediment from construction projects that disturb more than 1-acre on campus.</p> <ul style="list-style-type: none"> • Inform UNM contractors of requirements and review necessary documents (i.e., erosion control plan, SWPP/eNOI application and fugitive dust permit) during the Construction Review Process. • UNM Safety & Risk Services Department (SRS) and its sister departments will continue to oversee UNM contractors to insure that they comply with federal law, municipal ordinance and contractual provisions implement a Stormwater Pollution Prevention Plan (SWPPP). • SRS and its sister departments will continue to review site plans and attend pre-construction review meetings to try to ensure consistency with applicable storm water quality requirements. The plan review must occur prior to construction and focus on construction and post-construction storm water quality measures that address likely impacts and public concerns. Site plan review must include evaluation of opportunities for incorporating green infrastructure (GI). • UNM will continue to comply with the Construction General Permit (CGP), including SWPPP preparation and eNOI application for all public projects greater than one acre. • The leadership of UNM's Office of Capital Projects (OCP) & the UNM Physical Plant Department (PPD) will be engaged by SRS in the development of UNM's SWMP. Once the SWMP is finalized, training on the SWMP and general storm water pollution prevention (P2) basics will be offered. • UNM will continue its procedures for construction project record-keeping, including, site reviews, inspections, inspection reports, any enforcement letters & documents. • UNM will continue to develop inspection procedures for exterior construction sites less than 1-acre. The new procedures will include: (1) determining who is responsible for conducting UNM construction site storm water quality inspections; determining who has authority to implement enforcement procedures 	<p>UNM will include in the Annual Report the number of opportunities to incorporate GI and the number of times GI has actually been incorporated.</p> <p>UNM will continue to participate in the revision/update of the local "NPDES Storm Water Management Guideline for Construction and Industrial Activities Handbook".</p> <p>UNM will include a list of training in the Annual Report.</p> <p>UNM will include a summary of regulated construction activities in the Annual Report.</p>

<ol style="list-style-type: none"> 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 provision to ensure proper construction, operation, maintenance, and repair. 6) A procedure for providing education and training for permittee personnel, developers, construction site operators, contractors and supporting personnel. 7) Procedures for keeping records of and tracking all regulated construction activities within the MS4, i.e. site reviews, inspections, inspection reports, warning letters and other enforcement documents. 8) Update the "NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook" to be consistent with promulgated construction and 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. 	<p>regarding construction storm water quality at UNM; developing a process for prioritizing sites for inspection and enforcement based on type of construction activity; inspecting all sites greater than 1-acre at least once per year and follow up on any deficiencies to ensure corrective action; inspecting sites once project team believes final site stabilization is complete; and describing enforcement procedures and any penalties for repeated non-compliance at a UNM construction site.</p>	
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POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND RE-DEVELOPMENT

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.b, the permittee shall, in the Post-Construction Stormwater management in New and Redevelopment Program, coordinate all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private new development and redevelopment projects/activities within the permit area to ensure the hydrology associated with new development and redeveloped sites mimic the pre-development hydrology of the previously undeveloped site. The program shall address post-construction stormwater management and include the following elements in the SWMP:</p> <ol style="list-style-type: none"> 1) Procedure or system to review and update, as necessary, the existing program to ensure that 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 (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 	<p>UNM will propose design review and construction punch-list procedures to assure that storm water quality controls are incorporated into all new development and re-development for projects disturbing more than 1-acre or for projects disturbing less than 1-acre that are part of the larger common plan for development of the campus.</p> <p>UNM will propose the development of contractual procedures to ensure implementation of the SWMP in UNM development and redevelopment projects.</p> <p>UNM will assess facility planning and design procedures to identify impediments for the incorporation of GI/LID approaches including infiltration, recharge, water harvesting, habitat improvement and/or hydrological management to improve post-construction storm water quality.</p> <p>UNM will work to develop and adopt policy and enforcement mechanisms for requiring capture of 90th percentile (0.44-inch) storm events.</p> <p>UNM will work to develop and adopt design standards, including methodology, to estimate water quality impacts and selection of controls.</p> <p>UNM will calculate and update an estimate of acreage of impervious areas (IA) and directly connected impervious areas (DCIA). In the first annual report in 2013, UNM will report the acreages of IA and DCIA in a tabular format to EPA and describe the methodology used to calculate the acreages.</p> <p>UNM will inventory and rank campus property and MS4 infrastructure that may have the potential to be retrofitted with control measures to improve storm water quality. Factors such as implementation cost, public safety, maintenance access, geology, depth to groundwater/aquifer, proximity to other infrastructure (e.g., sanitary sewer & septic systems), opportunities for public use and education should be considered in the priority ranking of potential retrofit projects. An annual report on what retrofitting work has been done will be made beginning in the 3rd (2015) Annual Report to the EPA, and such reporting will continue in each subsequent Annual Report to the EPA.</p> <p>UNM will work to develop watershed protection measures and propose their</p>	<p>Submit draft policies, procedures, guidelines, protocols regarding Storm Water Quality upon completion.</p> <p>Provide discussion of education and outreach activities geared toward LID implementation in the Annual Report.</p> <p>Submission of cumulative changes in UNM's Storm Water Management Program in the Annual Report.</p> <p>Estimation of campus IA and DCIA removed or added in the Annual Report.</p> <p>Discussion of maintenance and inspections of storm water control features in Annual Report.</p> <p>Submission of finalized policies, procedures, guidelines, protocols regarding Storm Water Quality upon completion of finalized draft.</p>

<p>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.</p> <ol style="list-style-type: none"> 5) Assessment of all existing codes, ordinances, planning documents and other applicable regulations, for impediments to the use of green infrastructure practices. 6) Estimation of the number of acres of impervious area (IA) and directly connected impervious area (DCIA). 7) Report of the assessment findings, which is to be used to provide information to the permittee, of the regulation changes necessary to remove impediments and allow implementation of green infrastructure practices. 8) Citations and descriptions of design standards for structural and nonstructural 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), tow-hour (2-hr) peak runoff in 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 underdeveloped site. 10) An inventory and priority ranking of MS4- 	<p>incorporation into UNM policy and planning documents as they come up for review for renewal. Such policy and planning documents will include a description of UNM's master planning and project planning procedures to control the discharge of pollutants into the MS4.</p> <ul style="list-style-type: none"> • Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within the campus by controlling the creation and expansion of such during development and re-development. • Identify any environmentally or ecologically sensitive areas that provides water quality benefits or serve critical watershed functions. Requirements may be needed to protect such if there is a technical basis to justify the actual existence of any such areas on campus. Inviting stakeholder input may be required for identifying sensitive areas. • No streams exist on campus. Should UNM acquire and develop stream-side property, then measures will be taken to disconnect direct discharge to the stream from impervious areas. • UNM intends to be a leader in the promotion of space-saving storm water infiltration best management practices (BMP) that can protect and enhance groundwater. UNM will seek to avoid hydro-modification of arroyos caused by campus development, including roads, etc. • UNM will develop and implement development policies to protect soils, prevent topsoil stripping and soil compaction. • SRS in conjunction with PPD will inspect campus storm water management and control systems to assure long-term operation, maintenance and repair of storm water management and control systems. SRS will propose policy that requires that construction project teams submit as-built plans for storm water management and control systems within 90 days of construction completion. The number of such inspections will be mentioned in UNM's Annual Reports to EPA. • UNM will participate and cooperate in local experts' combined efforts to refine and present storm water quality educational training for project developers. UNM staff (e.g., OCP, PPD, etc.), including plan reviewers, on construction project teams will receive such training. • UNM will continue to incorporate watershed protection elements into relevant policy and/or planning documents as they come up for regular review. 	<p>In each annual report to EPA, UNM will report any changes/revisions to UNM's Post-Construction Program.</p>
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<p>owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4.</p> <p>11) A summary and analysis of all maintenance, inspections and enforcement, and the number and frequency of inspection performed annually shall be included in each annual report.</p> <p>12) Report the tabulated results of the number of acres of IA and DCIA and its estimation methodology in the first annual report.</p> <p>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.</p> <p>14) A report on those MS4-owned properties and infrastructure that have been retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges shall be submitted beginning with the third year annual report and each subsequent annual report.</p> <p>15) A cumulative listing of the annual modifications made to the Post-Construction Storm Water Management Program during the permit term, and a cumulative listing of annual revisions to administrative procedures made or ordinance enacted during the permit term shall be included in each annual report.</p> <p>16) Incorporation of watershed protection elements into all relevant policy and/or planning documents as they come up for regular review, yet no more than five years from the permit effective date.</p>		
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POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Permit Activity	Proposed Plan	Measurable Goal
<p>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:</p> <p>1) Maintenance activities, schedules and long-term inspection procedures for measures to control pollutants from City facilities into the MS4.</p>	<p>UNM shall continue to implement, review and enhance pollution prevention practices. When possible, UNM will implement new source control procedures to limit the discharge of pollutants from the campus MS4.</p> <p>As required, PPD will implement a Storm Water Operations & Maintenance (O&M) Program by April 2013; b) grounds and landscaping maintenance; c) road and parking lot operation and maintenance; d) fleet and building maintenance; e) new construction and land disturbance training; f) utility systems maintenance; g) MS4 system maintenance.</p> <p>UNM's O&M Program will include: a) an updated list of storm water quality facilities by drainage basin, including location and description; b) a target number of 20 storm water quality facilities shall be inspected once every 3 months by PPD and cleaned if necessary (See Table 1); and c) continue PPD's leading source control program of street and hard-scaping sweep and daily (M-F) litter pickup on campus.</p> <p>UNM maintains a Spill Prevention, Countermeasure and Control Plan (SPCCP) to address the risks from oil tanks larger than 55 gallons. UNM takes measures to insure that parties responsible for a spill on campus take reasonable steps to control and minimize threats to human health and the environment.</p>	<p>Submission of annual progress included in Annual Report.</p>
<p>2) Measures to control or eliminate the discharge of pollutants from street, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage area, and salt and sand storage locations.</p>	<p>Potential discharges will be controlled through implementation of spill prevention practices, self-inspections, and employee training. UNM's O&M Program will also include measures to control the following storm water pollutants: a) de-icing salts; b) roadway debris and roadside vegetation management practices; leaked automotive fluids in equipment maintenance yards; c) debris on hard-scaping (roads, etc.) that can be reduced by modifying street sweeping strategies; and d) targeting problem areas on campus that may have greater pollution potential.</p>	<p>Submission of annual progress updates in Annual Report.</p>

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.	UNM's O&M program will identify waste disposal standard operating procedures (SOPs), including SOPs for motor vehicle fluids, toxic paints, solvents, fertilizers, pesticides, herbicides and any other hazmat. This will include a list of opportunities for recycling substances. Also standard operating procedures will address the removal of sediments, debris, floatables and litter including pet wastes.	Submission of annual progress updates in Annual Report.
4) Procedures to ensure that new flood m management projects are assessed for impacts on water quality and existing projects are re-assessed for incorporation of additional water quality protection features.	UNM will re-assess existing flood control infrastructure for the potential to retro-fit it with additional water quality enhancement features	Submission of annual progress updates in Annual Report.
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.	UNM's Integrated Pest Management (IPM) manual applies to UNM campus wide. UNM will review and revise the IPM, provide more IPM related training to employees, seek less toxic and equally less expensive new approaches. UNM will work to develop a database to monitor the use of pesticides, herbicides, and fertilizers.	Submission of annual progress updates in Annual Report.
6) Procedures to control industrial runoff from facilities owned or operated by the permittees which discharge to the MS4.	UNM does not have operations within our campus jurisdiction that would normally be categorized as industrial or that have the potential for high risk runoff.	
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.	The UNM's O&M program will include training for appropriate UNM staff on improving storm water quality. SRS also included storm water education in the mandatory Basic Annual Safety Training that all UNM employees are required to take.	UNM will continue training employees.

INDUSTRIAL AND HIGH RISK RUNOFF

Permit Activity	Proposed Plan	Measurable Goal
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 biannual reporting required in Part III.H.	UNM does not have operations within our campus jurisdiction that would normally be categorized as industrial or that have the potential for high risk runoff.	UNM will submit a certification to EPA to that effect.

ILLICIT DISCHARGES AND IMPROPER DISPOSAL

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.e, the permittee shall implement and enforce an illicit discharge detection and elimination (IDDE) program to systematically detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) entering the MS4, and to implement defined procedures to prevent illicit connections and illegal dumping into the MS4. The program shall include the following elements in the SWMP:</p> <ol style="list-style-type: none"> 1) Prohibition, through ordinance or other regulatory mechanism, of non-stormwater discharges into the 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 location. <p>B. As described in Part I.C.5.e(v), the permittee shall, in the IDDE Program:</p> <ol style="list-style-type: none"> 1.) Maintain adequate legal authority to implement the IDDE program to prohibit illicit discharges and investigate suspected illicit discharges. 	<p>UNM continues to implement efforts to detect and eliminate illicit discharges and improper disposal that may impact the quality of storm water discharged from the campus. IDDE efforts at UNM have historically identified and eliminated at least one non-storm water discharge to our MS4. SRS investigates IDDE problems within 48-hours of being reported. UNM then eliminates illicit discharges or improper disposal on campus within 30 days. If more time is needed then SRS develops an elimination schedule within six months.</p> <p>In addition, any newly discovered non-storm water discharges will be assessed for their potential impact to the Rio Grande. SRS will review compliance records to check for similar incidents and will prioritize preventing repeat issues by increased awareness. SRS will manage UNM's IDDE Program and maintain maps applicable to the campus.</p> <p>SRS will check both wet and dry storm water discharges. Initial assessments of storm water quality will occur by visual and olfactory methods. If suspicious water quality conditions are encountered visually, then water quality samples may be tested with field instrumentation, e.g., conductivity, pH, temperature and perhaps dissolved oxygen or turbidity.</p> <p>If visual and field instrumentation assessment is unsatisfactory and other contamination is suspected (e.g., heavier than normal oil sheen), then grab samples may be collected for potentially applicable lab analysis by EPA methods, e.g., TPH, BTEX, E. Coli, nitrates/nitrite, etc.</p> <p>UNM SRS will implement an Illicit Discharge Detection and Elimination (IDDE) program on a third of UNM's MS4 system by 3/1/15 and 100% of the UNM MS4 by 3/1/17. UNM will utilize staff and perhaps contractors, calibrated instrumentation, and qualified laboratories to implement the IDDE program. IDDE efforts may overlap with monitoring dry weather & wet weather discharges. If unusual levels of water quality contaminants are observed, UNM will analyze the above information to try to track back to the source on campus or where up-gradient contamination enters campus. UNM will notify up-gradient MS4 entities if we encounter contamination from their jurisdiction entering campus.</p>	<p>UNM will develop and submit a priority ranking of drainage basins on the campus by October 2013.</p> <p>UNM will implement an IDDE program on a third of UNM's MS4 system by October 2015 and 100% of the UNM's MS4 by October 2017.</p> <p>If the systematic IDDE process identifies a significant illicit discharge or improper disposal on campus, then that finding and a brief explanation of any potential hazard will be posted on a SRS website page to inform any interested members of the campus or local communities.</p> <p>SRS will incorporate that finding into storm water quality</p>

<ol style="list-style-type: none"> 2.) Maintain a map of their portion of the MS4 identifying all discharge points into waters of the United States and into major drainage channels draining more than twenty (20) percent of the MS4 area. 3.) Delineate the MS4 into catchments or basins; assess the illicit discharge potential of all catchments or basin; 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, from 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 	<p>SRS will conduct at least visual IDDE assessment during at least one storm per month during the July-August monsoon season for rainfall occurring during normal 9am to 5pm business hours.</p> <p>SRS will conduct one other visual IDDE assessment during one rainstorm outside of the July-August monsoon season for rainfall occurring during normal 9am to 5pm business hours.</p> <p>SRS UNM will conduct one visual IDDE assessment of snow melt during at least one snowstorm occurring during normal 9am to 5pm business hours</p> <p>If the pending Watershed Based Permit (WBP) doesn't replace the Phase 1 MS4 permit, by 2015 UNM will begin utilizing procedures and methodologies (e.g., ORI and IMS) consistent with those described in "Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments," by the Center for Watershed Protection and R. Pitt, dated 2004.</p> <p>By the ORI and IMS procedures above, illicit discharges will begin to be systematically located. Any illicit discharges found will be submitted for project funding for correction in priority based on water quality impact potential.</p>	<p>training for the associated UNM staff that can best control the problem.</p> <p>As the next advancement in screening, a campus outfall reconnaissance inventory (ORI) will be completed on 1/3 of the campus MS4 outfalls (that do not involve a confined space entry) by March 2015. The remainder of such will be finished by March 2017. Outfalls from any problem catchments will be investigated first in order of priority.</p>
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<p>entering the MS4.</p> <p>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.”</p> <p>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.</p> <p>12.) Complete the IDDE activities implementation for Problem Catchments defined in Part I.C.5.e(v)(2) within three (3) years and for the remainder of the system with five (5) years from the effective date of the permit.</p>		
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CONTROL OF FLOATABLES DISCHARGES

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.f, the permittee shall:</p> <ol style="list-style-type: none"> 1) Synthesize finding 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. 	<ol style="list-style-type: none"> 1) UNM installed water quality inlets in new facilities on the campus to control floatables discharge. Additionally, UNM may have the most intensive litter removal and street and sidewalk sweeping program in the Albuquerque metro area that removes floatables from the campus grounds before they can come into contact with storm water. These activities are continuous. 2) UNM will implement floatable controls in new campus building projects that involve modification of storm water inlets or other MS4 system improvements. Floatable controls will be designed to capture the kinds of floatables present at UNM. 3) UNM will continue to track and report the estimated volume of floatables and trash removed from our control facilities. Beginning in October 2012, PPD will start characterizing the types of floatables removed from control facilities. See table 1 	<p>Schedule for implementation of controls developed as SRS becomes aware of construction projects and as funding is identified.</p> <p>Include discussion of volume and type of trash removed in Annual Reports.</p>

WASTE COLLECTION PROGRAMS

Permit Activity	Proposed Plan	Measurable Goal
<p>B. As described in Part I.C.5.g, the permittee shall enhance programs for collecting motor vehicle fluids and household hazardous waste materials by:</p> <ul style="list-style-type: none"> 8) Increasing the frequency of collection days hosted. 9) Expanding programs to include commercial fats, and oils and greases. 10) Coordinating program efforts between applicable permittee departments. 	<p>UNM carefully collects and disposes of all wastes that could be hazardous to storm water quality. For instance, the SRS Department picks up and properly disposes of UNM's hazardous wastes in compliance with RCRA requirements. SRS, PPD and other UNM departments properly manage and dispose of regulated universal wastes and other special wastes. UNM policy UBPP 7780 forbids automotive maintenance activities on campus outside of the fleet and equipment maintenance operations at the PPD Automotive Center. UNM is expanding its waste collection program to include fats, oils and greases. Furthermore, a couple of UNM's shuttle buses are fueled with bio-diesel made from such recycled fats, oils and greases. UNM continues to coordinate waste collection efforts amongst departments.</p>	<p>Incorporation of Household Hazardous Waste location/schedule information on Middle Rio Grande Storm Water Quality Team brochures.</p>

PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.i, the existing Public Education and Outreach Program shall be modified to include:</p> <ol style="list-style-type: none"> 1) A detailed description of the program and outreach activities, including methods for disseminating information; target audiences; target pollutants and sources addressed in the program; how target pollutants and sources were selected; estimation of people with whom you intend to communicate; and schedule and/or frequency of activities. 2) A plan to target outreach to stakeholders listed in Part I.C.5.i (v) (5). 3) The development and implementation of a program to promote publicize and facilitate the use of green infrastructure practices. 4) An examination of impediments to implementing an integrated public education program regarding litter reduction, recycling and proper disposal, and green infrastructure practices 5) A plan to leverage resources by combining outreach efforts with small MS4s in the Albuquerque Urbanized area. 	<p>UNM is actively involved in providing public education and outreach regarding storm water impacts in the Albuquerque area watershed. UNM's efforts are aimed to educate the public about storm water pollution and how citizens can control the impact of storm water pollution. Some activities that UNM is involved in include: (1) actively participating in the Middle Rio Grande Storm Water Quality Team (MRGSQT); (2) supporting TV programming such as the "Keep the Rio Grand" campaign; (3) posting storm water information on the SRS Department website; (4) publishing storm water information in the UNM Today, UNM New Minute or The Daily Lobo publications; (5) participating in new faculty orientation and new student orientation; and (6) providing training to UNM staff. The information that UNM provides includes the proper handling, disposal and recycling of used motor vehicle fluids, household hazardous wastes, grass clippings, car wash water, use of fertilizers, pesticides and herbicides, oil and toxics on roadways and the steps to report illicit discharges and improper disposal. Further, UNM educates pet owners about proper disposal of pet wastes.</p> <p>UNM's SRS Department works with PPD to maintain pet waste collection stations on its Main Campus. SRS also educates owners and operators of UNM-related facilities regarding their responsibility to control pollutants in storm water discharges from their property to the MS4 by including storm water pollution prevention training to UNM Building Coordinators and staff. SRS is also including storm water education in its 2013 Basic Annual Safety Training required to be taken annually by all UNM employees.</p>	<p>Outcomes report, prepared by local public relations firm hired by the MRGSWQT will be submitted in the Annual Reports. This report will list outreach method and estimated number of individuals reached.</p> <p>Discussion of additional education and outreach activities performed by UNM staff will be provided in the Annual Reports.</p> <p>Outreach efforts will continue to be summarized in the Annual Reports.</p>

PUBLIC INVOLVEMENT AND PARTICIPATION

Permit Activity	Proposed Plan	Measurable Goal
<p>A. As described in Part I.C.5.j, the permittee shall:</p> <ol style="list-style-type: none"> 1) Develop and implement a plan to encourage public involvement and provide opportunities for participation in the review, modification and implementation of the SWMP. 2) Develop and implement a process by which public comments to the plan are received and reviewed by person(s) responsible for the SWMP 3) Make the SWMP available to the public and to the operator of any MS4 or Tribal Authority receiving discharges from the MS4. 	<p>UNM continues to welcome public participation in its SWMP. The SRS Department continues involving other UNM departments, e.g., PPD, OCP, etc., as stakeholders in the development and revision of UNM's SWMP. UNM also participates in local ABQ area public forums where active public involvement occurs, e.g., Middle Rio Grande Water Quality Standards Work Group (MRGWQSWG) meetings.</p> <p>SRS Department regularly trains and updates other UNM Departments about storm water issues and solicits input and participation. SRS will provide a presentation at the upcoming SRS Construction Safety Task Force and at the upcoming Loss Prevention & Control Committee Meeting to insure that all UNM stakeholders are aware of the SWMP and its requirements.</p> <p>Further, UNM works with its MS4 co-permittees to conduct behavior change studies and assist with efforts to establish a process to encourage involvement by environmental groups and civic organizations interested in water quality-related issues. UNM also utilizes volunteers for storm water pollution prevention activities and awareness throughout the metropolitan area, e.g., promotion and participation in the local annual National River Clean Up Day on the Rio Grande River.</p>	<p>Discussion of public input and their comments will be provided in the Annual Report.</p>

DISCHARGES TO IMPAIRED WATERS – IMPLEMENTATION OF NEW BACTERIA TMDL

Permit Activity	Proposed Plan	Measurable Goal
<p>A. <u>Revision of Bacteria Target Values for Consistency with the New TMDL.</u> Review the current bacteria reduction program for consistency with new TMDL requirements and allocations. In consultation with NMED and EPA Region 6, revise target values included in the bacteria control plan, as necessary, based on the new TMDL. Adopt the new <i>E. coli</i> waste load allocation as measurable goals for the SWMP.</p> <p>1) Submit certification of completion of review and revisions.</p>	<p>UNM continues to implement practices that reduce bacterial contamination of storm water. Most of these practices have multi-purpose benefits in addition to storm water pollution prevention and bacterial reduction. These ongoing practices involve the structural best management practices (BMPs) in the operation of our facilities and grounds as well as our public education and outreach efforts. The following describes UNM's program to minimize bacterial contamination of storm water.</p> <p>UNM is aware of the bacterial source tracking study in the local Middle Rio Grande watershed which identified the various source animal enteric bacteria contributions. The study indicated that birds contributed the most at roughly a third of the bacteria loading. Dogs were the second largest source. Therefore, UNM's efforts have been focused on controlling bird and dog waste impacts on storm water.</p> <p>a) Dog Poop Stations - UNM's campus is open to the public and people do walk their dogs on campus. This activity is centered around the green spaces, e.g., the Duck Pond on the Central Campus and Golf Course on North Campus. PPD has installed and maintains dog poop disposal bag dispensers on the east and west sides of the Duck Pond area. The North Campus Neighborhood Association has been stocking shopping bags for similar purposes on the southeast corner of the North Golf Course where many folks begin on the perimeter jogging trail. This is also a notable example of public involvement with storm water pollution prevention on campus.</p> <p>b) Bird Controls - UNM continues bird control efforts, especially related to roosting pigeons on UNM buildings. Bird control efforts range from netting at Coronado dormitory trash storage area, equipment bird skirting at the Business Center and bird control wires on the Electrical Engineering & Computer Engineering building window sills. UNM also has an ongoing trapping program that captures hundreds of pigeons a year on many campus roof tops or wherever there may be a roosting problem.</p> <p>c) Street and Sidewalk Sweeping - UNM makes a great effort to keep the campus grounds beautiful. PPD efforts include regular street sweeping and sidewalk sweeping. UNM's street sweeping schedule may be among the most frequent in the metro area, and</p>	<p>Submission of certification of review of program within three months of permit effective date. This certification has been completed.</p>

	<p>this serves to protect storm water quality from contaminants, including bacteria laden animal wastes on hard-scaping.</p> <p>d) Trash & Litter Controls -The local bacterial tracking study also indicated that humans are one of the smaller sources of bacterial contamination to storm water. In addition to the homeless population in the metro area that may not be using bathrooms, it was recognized that leaking trash dumpsters and compactors may contribute to some of the human contamination. Therefore, lids are installed and kept closed on UNM's large trash dumpsters to keep storm water out. The multitude of small trash receptacles along campus sidewalks, at building entrances, etc. are also always lined with trash bags and usually topped with lids that allow trash in and keep it inside. Bagging and lids also prevent wind from blowing trash out of dumpsters and receptacles.</p> <p>e) Leaked Fluid-If trash compactors leak fluids, the standard practice at UNM is to absorb the leaked fluids and dispose of the absorbent with the other solid waste. Litter is picked up daily, Monday through Friday, all over campus and is disposed of properly with other solid wastes. Litter pickup includes scooping visible dog poop as well as floatables/litter. UNM notifies the COA about problems with pet wastes being left from occupants of neighboring apartment complexes who bring their dogs onto campus property to defecate.</p> <p>f) Storm water Retention Ponds - UNM has a few storm water retention ponds on the South Campus and on the North Campus. In addition to reducing peak flow into the local MS4, these ponds act to settle out suspended solids and expose bacteria to solar UV radiation. Solar UV disinfection and settling out suspended solids both help to reduce bacteria levels in storm water discharged from campus.</p> <p>g) Public Education and Outreach & Campus Training - Storm water pollution prevention training and test questions are part of UNM's Mandatory Basic Annual Safety Training (BAST) program for all UNM employees. Additionally, UNM's Safety & Risk Services (SRS) department conducts specialized storm water pollution prevention training to PPD employees. SRS's specialized training with Excal's "Storm Watch" and Cooney-Watson's "Keep the Rio Grand" videos includes an emphasis on pet waste pickup and measures to minimize bacterial contamination. UNM's portion of the "Keep the Rio Grand"</p>	
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	<p>video contains an emphasis on pet waste issues and the video was broadcast throughout the local area on PBS's KNME TV Channel 5 and COA's GOVTV on many occasions. At UNM's Welcome Back Days event at the beginning of each semester, SRS has had booths with handouts on storm water pollution prevention including pet wastes and measures to minimize bacterial contamination. SRS and the COA have hosted a booth that is very popular with grade school children at UNM's Sustainability Expo events on the mall outside the Student Union Building. SRS's website (http://shea.unm.edu/environmental-affairs/storm-water-pollution-prevention.pdf) also has information on storm water pollution prevention including pet wastes and measures to minimize bacterial contamination.</p> <p>h) MRGSQT- SRS has been financial sponsor and leader in the Middle Rio Grande Storm water Quality Team (MRGSQT). The MRGSQT continues to implement a "Scoop the Poop" media campaign to educate and reach out to the public on a community-wide basis. This campaign emphasizes the importance of responsible pet waste management to protect storm water quality and the Rio Grande. MRGSQT has financially supported the Bosque Environmental Monitoring Program (BEMP) which is a cooperative joint effort between the Bosque School and UNM's Biology Department. BEMP teaches elementary school students about river ecosystems and involves them in monitoring it. As a dual purpose benefit, BEMP has monitored coliform and E. coli bacteria levels the Rio Grande River at multiple locations in the ABQ metro area. As part of the MRGSQT, SRS has participated with AMAFCA with a storm water pollution prevention float in the New Mexico State Fair Parade in which thousands of "Scoop the Poop" bumper stickers and other fliers containing pet waste management information was distributed to the public at the Fair and along the parade route. SRS also participates in the National River Clean Up Day events on the Rio Grande and distributes "Scoop the Poop" stuff there.</p>	
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<p>B. <u>Revision of Monitoring Program.</u> In consultation with NMED and EPA Region 6, revise the bacteria monitoring program as necessary for consistency with the new TMDL.</p> <p>The revised monitoring program must:</p> <ol style="list-style-type: none"> 1) Use <i>E. coli</i> as the indicator parameter. 2) Provide information on discharges from all portions of the MS4 assigned a Waste Load Allocation (WLA) under the TMDL. The monitoring program may be a cooperative effort with other r 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 revision. 	<p>UNM continues to operate pursuant to the COA bacterial program as necessary for consistency with the new E-Coli TMDL. UNM, as a Phase 1 MS4 co-permittee with the COA, AMAFCA and New Mexico Department of Transportation continues to pay a share of the monitoring costs for the U.S. Geological Survey's bacteria level storm water monitoring work. UNM remains involved in the decisions and reports that the Phase 1 co-permittees generate until such time as the general Watershed Based Permit (WBP) replaces the Phase 1 and Phase 2 permits in the local watershed. UNM remains an involved stakeholder in the current WBP development.</p>	<p>Submission of certification of review of program within three months of permit effective date. This certification has been completed.</p>
<p>C. <u>Implementation of Revised Monitoring Program.</u> Commence monitoring under the replacement <i>E. coli</i> TMDL monitoring program.</p>	<p>The COA has commenced monitoring E-Coli.</p>	<p>Submission of E-Coli results in DMRs and Annual Reports. UNM relies upon the COA and USGS work pursuant to MOU Agreement.</p>

SPILL PREVENTION & RESPONSE

Permit Activity	Proposed Plan	Measurable Goal
<p>The permittee shall continue implementation of the program to prevent, contain and respond to spills that may discharge to the MS4, and enhance as necessary.</p> <p>Where discharge of material resulting from a spill is necessary to prevent loss of life, personal injury or severe property damage, the permittee(s) shall take, or insure the party responsible for the spill takes, all reasonable steps to control or prevent any adverse effects to human health or the environment.</p> <p>The spill response program may include a combination of spill response actions by the permittee(s) (and/or another public or private entity), and legal requirements for private entities within the permittee's municipal jurisdiction.</p>	<p>UNM will continue to take measures to pro-actively prevent and promptly respond to spills that would be harmful to stormwater quality and the Rio Grande River.</p> <p>UNM maintains a Spill Prevention, Countermeasure and Control Plan (SPCCP) to address the risks from oil tanks larger than 55 gallons.</p> <p>UNM will do what we can to ensure that the parties responsible for a spill on campus take reasonable steps to control and minimize threats to human health and the environment.</p>	<p>Continue to have no significant spill incidents on campus that could impact water quality in the Rio Grande River.</p> <p>Continue to implement spill prevention measures, e.g., stock spill response kits, where the potential for harmful spills is greatest.</p> <p>Practice a spill response, e.g., a table top or other exercise, to be better prepared for a potential spill on campus.</p>

Table 1

UNM Storm Drain Inlets for Quarterly Maintenance and Measurement Operations

<u>Inlet #</u>	<u>LOCATION</u>
1.	West of Centennial Engineering (Bldg. 122) in roadway along West Curb line
2.	West of Hibben Center (Bldg. 15) in bump out on West side of road (2-inlets)
3.	North of Zimmerman (Bldg. 53) in parking lot
4.	Walkway east of Zimmerman (Bldg. 53) and East of Collage of Education (Bldg. 57)
5.	SE of Hokona Zia (Bldg. 58) in Redondo Way
6.	NE of Simpson Hall (Bldg. 66) in Redondo Way
7.	South of Santa Clara (Bldg. 61) in Redondo Way
8.	North of SRC Commons (Bldg. 88)
9.	NE of Mesa Vista (Bldg. 56) at Area 3
10.	South side of Duck Pond
11.	SE side of Scholes Hall (Bldg. 10)
12.	SW of Chapel (Bldg. 25)
13.	East of Bandelier Hall East (Bldg. 8) at Rose Garden
14.	North side of EECE (Bldg. 46) in south end of parking lot
15.	NW of Ford Utilities (Bldg. 116) in parking lot
16.	SW corner of Novitski Hall (Bldg. 249) in SW corner of south parking lot
17.	South side Of HSSB (Bldg. 266) in walkway
18.	NW of HSSB (Bldg. 266) in lawn area
19.	NW of Novitski Hall (Bldg. 249) in SE corner of north parking lot (2-inlets)
20.	NW of Observatory (Bldg. 208) in NW corner of parking lot.

Created by PPD

Version Date: Sept. 1, 2012